



CITY GOVERNMENT OF DAVAO
**COMPREHENSIVE
LAND USE
PLAN**

2019-2028

VOLUME 4
CLIMATE AND DISASTER
RISK ASSESSMENT
Critical Point Facilities



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CRITICAL POINT FACILITIES

The extension of social services relies on facilities which are considered to be essential in the daily lives of people in the localities. This section will cover the information on critical point facilities, their vulnerability, and adaptive capacity for every exposure attribute.

The succeeding tables display the exposure of critical facilities such as barangay halls, barangay health stations, day care centers, elementary and secondary schools, police outposts, police sub-stations, and fire stations to flood, landslide, storm surge, and liquefaction.

The number and type of affected facilities vary for every exposure attribute. Of the four, the occurrence of liquefaction will affect the biggest number of facilities, at 405, in various barangays, followed by 385 facilities exposed to landslide, while 310 and 285 are exposed to storm surge and flood, respectively.

FLOOD

The data gathered show that 285 facilities are exposed to flood in varying degrees. The effect of the occurrence of flood will depend on the existing condition of the structures, thus, the gauge of the sensitivity of every structure may already be determined. Out of the total number of 285 facilities, two day care centers located in Calinan and El Rio, Barangay 19-B are in critical condition, and one day care in Lapu-Lapu, Agdao is already dilapidated. Commonly, day care centers are one-storey structures. As for the others, 13 structures are in poor condition, 81 need repair, 46 fair, and 142 structures are considered in good condition.

More than half, or 167 of facilities have employed hazard resistant design and the remaining 118 are still in need of retrofitting or other alternatives that can improve the resiliency of the structures

Table CP-1. Critical Point Facilities Exposure to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
1-A	Barangay Hall	1-A Brgy. Hall	2	87.28	N/A	mixed	fair	no
1-A	BHS	Brgy 1-A Health Center	1	54.40	N/A	Concrete	Fair	Yes
1-A	day care center	Brgy. 1-A Day Care Center	1	80	1 classroom	concrete	fair	no
1-A	Elementary School	Bolton ES	3	10500	29 classrooms	Mixed	Needs repair	Yes
2-A	Barangay Hall	2-A Brgy. Hall	2	100.00	N/A	concrete	fair	no
2-A	BHS	Brgy. 2-A Health Center	1	118.87	N/A	Mixed	Fair	No
2-A	day care center	Project Hope DCC, Brgy 2-A	2	16	1 classroom	concrete	fair	no
5-A	day care center	Bankerohan Project Hope DCC 1, Brgy 5-A	2	36	1 classroom	concrete	good	no
5-A	day care center	Bankerohan Project Hope DCC 2, Brgy 5-A	2	36	1 classroom	concrete	good	no
5-A	day care center	Bankerohan Project Hope DCC 3, Brgy 5-A	2	36	1 classroom	concrete	good	no
5-A	day care center	Bankerohan Project Hope DCC 4, Brgy 5-A	2	36	1 classroom	concrete	good	no
5-A	day care center	Bankerohan Project Hope DCC 5, Brgy 5-A	2	36	1 classroom	concrete	good	no
5-A	Elementary School	Dona Pilar Marfori ES	2	2600	35 classrooms	Mixed	Needs repair	Yes
8-A	day care center	Mother Ignacia DCC, Brgy 8-A	1	45	1 classroom	concrete	good	no
15-B	day care center	Brgy.15-B, DCC	1	50	1 classroom	mixed	good	no
19-B	day care center	El Rio DCC, Brgy 19-B	1	100	1 classroom	mixed	critical	no
19-B	day care center	Mineral Village DCC, Brgy 19-B	1	100	1 classroom	mixed	fair	no
19-B	Elementary School	Don Francisco S. Dizon Sr.	3	8781	26 classrooms	Mixed	Needs repair	Yes
19-B	RHU	EL Rio Vista Health Center (RHU)	2	367.83	N/A	Concrete	Good	Yes
22-C	BHS	Brgy 22-C Health Center	1	278.75	N/A	Mixed	Fair	No
23-C	BHS	New BHS / Isla Verde Purok 3B	1	51.85	N/A	Concrete	Good	Yes
23-C	day care center	Purok 4 b Home-Based I	1	80	1 classroom	mixed	fair	no
23-C	day care center	Badjao Home Based	1	60	1 classroom	concrete	fair	no
23-C	Elementary School	Zonta Elem. School	4	2681	17 classrooms	Mixed	Needs repair	Yes
24-C	BHS	Brgy 24-C Health Center	1	84.96	N/A	Concrete	Good	Yes
27-C	UHC	Sta. Ana Health Center	1	550	N/A	Concrete	Good	Yes
37-D	day care center	Brgy. 37-D DCC	1	60	1 classroom	concrete	fair	no
37-D	Secondary School	Erico Nograles NHS-A	4	1816	41 classrooms	Mixed	Needs repair	Yes

Table CP-1. Critical Point Facilities Exposure to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
39-D	Barangay Hall	39-D Brgy. Hall	1	93.98	N/A	concrete	fair	no
39-D	day care center	Brgy 39 D PHDCC	1	60	1 classroom	concrete	good	no
40-D	Barangay Hall	40-D Brgy. Hall	2	43.61	N/A	concrete	good	yes
AGDAO PROPER	Barangay Hall	Agdao Brgy. Hall	2	135.96	N/A	concrete	good	yes
AGDAO PROPER	day care center	San Isidro DCC	1	65	1 classroom	concrete	good	no
AGDAO PROPER	Elementary School	Agdao ES	2	1007	23 classrooms	Mixed	Needs repair	Yes
AGDAO PROPER	RHU	Agdao Health Center	2	535.93	N/A	Concrete	Good	Yes
W. AQUINO	Barangay Hall	W. Aquino Brgy. Hall	2	101.81	N/A	mixed	fair	no
W. AQUINO	BHS	Wilfredo Aquino Health Center	1	259.09	N/A	Concrete	Poor	No
W. AQUINO	day care center	W. Aquino 1	1	80	1 classroom	concrete	good	no
P. BANGOY	day care center	RGA DCC	1	80	1 classroom	mixed	good	no
P. BANGOY	day care center	Bagongbuhay DCC	1	80	1 classroom	mixed	good	no
P. BANGOY	Police Sub Station	Paciano Bangoy Police Sub Station	1	25	3 persons	wood	poor	no
R. CASTILLO	Barangay Hall	Ubalde Brgy. Hall	2	142.15	N/A	concrete	good	yes
UBALDE	Police Sub Station	Ubalde Police Sub Station	1	25	3 persons	wood	poor	no
CENTRO	Barangay Hall	Centro Brgy. Hall	2	144.23	N/A	concrete	good	yes
CENTRO	BHS	South San Juan Health Center	1	125.95	N/A	Concrete	Poor	No
CENTRO	day care center	South San Juan DCC	1	117	1 classroom	concrete	good	no
CENTRO	day care center	North San Juan DCC	1	100	1 classroom	concrete	good	no
CENTRO	day care center	San Miguel Centro DCC	1	100	1 classroom	concrete	good	no
CENTRO	day care center	New Fatima DCC	1	100	1 classroom	concrete	good	no
CENTRO	Elementary School	San Juan ES	3	2100	43 classrooms	Mixed	Needs repair	Yes
V. DUTERTE	day care center	Rotary Club DCC	1	100	1 classroom	concrete	good	no
L. GARCIA SR.	Barangay Hall	Leon Garcia Brgy. Hall	2	94.41	N/A	concrete	good	yes
L. GARCIA SR.	BHS	Leon Garcia Health Center	1	53.97	N/A	Concrete	Good	Yes
L. GARCIA SR.	day care center	Baybay DCC	1	55	1 classroom	mixed	good	no
L. GARCIA SR.	day care center	Gotamco DCC	1	80	1 classroom	concrete	good	no
L. GARCIA SR.	Elementary School	Manuel M. Garcia ES	2	1807		Mixed	Needs repair	Yes
L. GARCIA SR.	Secondary School	Leon Garcia Sr. NHS	2	1000	42 classrooms	Mixed	Needs repair	Yes

Table CP-1. Critical Point Facilities Exposure to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
L. GARCIA SR.	TFD Headquarters	Task Force Davao (Task Group Agila)	1	9990	7 facilities	mixed	good	no
L. GARCIA SR.	Police Sub Station	Leon Garcia Police Sub Station	1	25	3 persons	wood	poor	no
LAPU-LAPU	day care center	Seaside DCC	1	200	1 classroom	mixed	dilapidated	no
LAPU-LAPU	day care center	IKP DCC	1	84	1 classroom	mixed	good	no
LAPU-LAPU	Elementary School	Lapu-lapu ES	4	4400	40 classrooms	Mixed	Needs repair	Yes
T. MONTEVERDE	Barangay Hall	T. Monteverde Brgy. Hall	1	89.50	N/A	concrete	good	yes
T. MONTEVERDE	BHS	Tomas Monteverde Health Center	1	87.71	N/A	Concrete	Good	Yes
T. MONTEVERDE	day care center	KTM DCC	1	84	1 classroom	concrete	good	no
T. MONTEVERDE	Police Sub Station	Tomas Monteverde Police Sub Station	2	25	3 persons	wood	poor	no
GUMALANG	Barangay Hall	Gumalang Brgy. Hall	2	172.78	N/A	concrete	good	yes
GUMALANG	BHS	Gumalang Health Center	1	141.13	N/A	Mixed	Poor	No
GUMALANG	day care center	Gumalang Proper DCC	1	150	1 classroom	concrete	good	no
GUMALANG	Elementary School	Gumalang ES	3	2000	17 classrooms	Mixed	Needs repair	Yes
BUHANGIN	day care center	Sandawa Phase 2 DCC	1	150	1 classroom	concrete	good	no
MANDUG	day care center	DDF Village Mandug DCC	1	400	1 classroom	concrete	good	no
PAMPANGA	Barangay Hall	Pampanganga Brgy. Hall	2	198.22	N/A	concrete	good	yes
PAMPANGA	BHS	Pampanganga Health Center	1	171.56	N/A	Concrete	Good	Yes
PAMPANGA	BHS	New BHS	1	57.96	N/A	Concrete	Good	Yes
SASA	day care center	St. Martin Day Care Center	1	120	1 classroom	concrete	good	no
SASA	day care center	AHSAI Day Care Center	1	80	1 classroom	concrete	good	no
SASA	day care center	Sunbeam Day Care Center	1	200	1 classroom	concrete	good	no
SASA	Secondary School	F. Bangoy NHS	4	2849	86 classrooms	Mixed	Needs repair	Yes
SASA	Secondary School	F. Bangoy NHS - Annex	4	906		Mixed	Needs repair	Yes
SASA	Police Station	Police Station 4 (Sasa)	1	600	300 personnel	concrete	poor	no
TIGATTO	Barangay Hall	Tigatto Brgy. Hall	2	225.54	N/A	concrete	good	yes
TIGATTO	day care center	Uyanguren PHDCC 1	1	150	1 classroom	concrete	good	no
TIGATTO	day care center	Uyanguren PHDCC 2	1	150	1 classroom	concrete	good	no
TIGATTO	day care center	Jade Valley DCC	1	150	1 classroom	concrete	good	no
WAAN	day care center	Waan PHDCC	1	40	1 classroom	mixed	good	no

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Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
A. ANGLIONGTO	Barangay Hall	Angliongto Brgy. Hall	2	114.82	N/A	concrete	good	yes
V. HIZON	Barangay Hall	V. Hizon Brgy. Hall	2	293.67	N/A	concrete	good	yes
V. HIZON	Elementary School	V. Hizon Elem. Sch.	3	10001	63 classrooms	Mixed	Needs repair	Yes
V. HIZON	BHS	Hizon Health Center	1	107	N/A	Concrete	Good	Yes
BUNAWAN	day care center	DCPI 1&2 DCC	1	150	1 classroom	concrete	good	no
BUNAWAN	Elementary School	Bunawan Aplaya ES	1	3919	23 classrooms	Mixed	Needs repair	Yes
LASANG	day care center	Tambongon DCC	1	100	1 classroom	concrete	good	no
LASANG	day care center	Alfredo A. Aledia Day Care Center	1	110	1 classroom	concrete	good	no
LASANG	Elementary School	AL Navarro CES	3	21984	30 classrooms	Mixed	Needs repair	Yes
LASANG	Elementary School	Alfredo A. Aledia Elementary School	1	5000	9 classrooms	Mixed	Needs repair	Yes
LASANG	Elementary School	Tambongon ES	1	9000	7 classrooms	Mixed	Needs repair	Yes
PANACAN	Barangay Hall	Panacan Brgy. Hall	2	167.45	N/A	concrete	fair	no
PANACAN	Elementary School	Armed Forces of the Philippines Logistics Command Elementary School	2	3662980	45 classrooms	Mixed	Needs repair	Yes
TIBUNGCO	Barangay Hall	Tibungco Brgy. Hall	2	263.22	N/A	concrete	good	yes
BIAO JOAQUIN	Barangay Hall	Biao Joaquin Brgy. Hall	2	191.78	N/A	concrete	good	yes
BIAO JOAQUIN	BHS	Biao Joaquin Health Center	1	108.39	N/A	Concrete	Good	Yes
BIAO JOAQUIN	day care center	Biao Joaquin PHDCC	1	200	1 classroom	concrete	good	no
BIAO JOAQUIN	Elementary School	Joaquin ES	1	12000	14 classrooms	Mixed	Needs repair	Yes
CALINAN	Barangay Hall	Calinan Brgy. Hall	2	199.89	N/A	concrete	good	yes
CALINAN	BHS	Calinan Subcenter	1	342.65	N/A	Mixed	Poor	No
CALINAN	day care center	Sunflower PHDCC	1	180	1 classroom	concrete	fair	no
CALINAN	day care center	Waling-Waling PHDCC	1	150	1 classroom	concrete	good	no
CALINAN	day care center	Isaguirre DCC	1	300	1 classroom	light	critical	no
CALINAN	day care center	Narcon DCC	1	300	1 classroom	concrete	good	no
CALINAN	day care center	Anthurium PHDCC	1	200	1 classroom	concrete	good	no
CALINAN	day care center	Sampaguita PHDCC	1	160	1 classroom	mixed	fair	no
CALINAN	day care center	Balite / San Pedro PHDCC	1	100	1 classroom	mixed	fair	no
CALINAN	day care center	Pe'ñano St. PHDCC	1	60	1 classroom	mixed	fair	no

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Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
CALINAN	day care center	San Roque DCC (Bagobo Vill)	1	120	1 classroom	mixed	fair	no
CALINAN	Elementary School	Calinan CES	4	18075	65 classrooms	Mixed	Needs repair	Yes
CALINAN	Elementary School	Lt C Villafuerte ES	4	60882	51 classrooms	Mixed	Needs repair	Yes
CALINAN	RHU	Calinan Pob. Rurak Health Unit	2	124.06	N/A	Concrete	Good	Yes
CALINAN	Secondary School	Calinan NHS	4	6000	124 classrooms	Mixed	Needs repair	Yes
CALINAN	Fire Station	Calinan Fire Station	2	1000	15 personnel	concrete	fair	yes
CALINAN	Police Station	Police Station 10 (Calinan)	2	300	100 persons	concrete	good	yes
CALINAN	Police Sub Station	Calinan Police Sub Station	1	30	10 persons	concrete	good	yes
DACUDAO	Barangay Hall	Dacudao Brgy. Hall	2	194.16	N/A	concrete	good	yes
DACUDAO	BHS	Dacudao Health Center	1	136.67	N/A	Concrete	Good	Yes
DALAGDAG	Elementary School	Dalagdag ES	1	20000	7 classroom	Mixed	Needs repair	Yes
DOMINGA	Barangay Hall	Dominga Brgy. Hall	2	193.22	N/A	concrete	good	yes
DOMINGA	Elementary School	Dominga ES	3	20000	7 classrooms	Mixed	Needs repair	Yes
INAYANGAN	Elementary School	Popo ES	1	19900	7 classrooms	Mixed	Needs repair	Yes
LACSON	TFD Detachment	Task Group Falcon	1	500	5 facilities	mixed	good	no
LAMANAN	Elementary School	Lamanan ES	3	18000	14 classrooms	Mixed	Needs repair	Yes
LAMANAN	Secondary School	Lamanan NHS	3	18967	17 classrooms	Mixed	Needs repair	Yes
RIVERSIDE	Barangay Hall	Riverside Brgy. Hall	2	114.47	N/A	concrete	good	yes
RIVERSIDE	BHS	Riverside Health Center	1	173.34	N/A	Concrete	Fair	Yes
RIVERSIDE	Elementary School	Riverside ES	1	16041	16 classrooms	Mixed	Needs repair	Yes
SALOY	Barangay Hall	Saloy Brgy. Hall	2	177.97	N/A	concrete	good	yes
SALOY	BHS	Saloy Health Center	1	109.81	N/A	Concrete	Good	Yes
SALOY	Elementary School	Saloy ES	1	19241	10 classrooms	Mixed	Needs repair	Yes
SIRIB	Elementary School	Sirib ES	1	64470	11 classrooms	Mixed	Needs repair	Yes
SIRIB	Secondary School	Sirib NHS	3	69574	18 classrooms	Mixed	Needs repair	Yes
SUBASTA	Barangay Hall	Subasta Brgy.Hall	2	196.88	N/A	concrete	good	yes
SUBASTA	BHS	Subasta Health Center	1	233.63	N/A	Concrete	Good	Yes
TALOMO RIVER	Barangay Hall	Talomo River Brgy. Hall	2	118.10	N/A	concrete	good	yes
TALOMO RIVER	Elementary School	Quirino ES	3	9000	14 classrooms	Mixed	Needs repair	Yes

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Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
TAMUGAN	Barangay Hall	Tamugan Brgy. Hall	2	214.50	N/A	concrete	good	yes
TAMUGAN	BHS	Tamugan	1	75	N/A	Concrete	Good	Yes
TAMUGAN	Elementary School	Lower Tamugan ES	1	20000	26 classrooms	Mixed	Needs repair	Yes
TAMUGAN	Elementary School	Pagan Grande ES	3	2024	7 classrooms	Mixed	Needs repair	Yes
TAMUGAN	Elementary School	Siao ES	2	20000	7 classrooms	Mixed	Needs repair	Yes
TAMUGAN	Elementary School	Tagbaw ES	1	20000	7 classrooms	Mixed	Needs repair	Yes
TAMUGAN	Secondary School	Lower Tamugan NHS	4	20000	33 classrooms	Mixed	Needs repair	Yes
COLOSAS	Elementary School	Apalili ES	1	6000	7 classrooms	Mixed	Needs repair	Yes
SUMIMAO	Elementary School	Sumimao ES	1	18990	6 classrooms	Mixed	Needs repair	Yes
SUMIMAO	Secondary School	Sumimao NHS	3	10000	14 classrooms	Mixed	Needs repair	Yes
BAGO APLAYA	Barangay Hall	Bago Aplaya Brgy. Hall	2	426.69	N/A	concrete	good	yes
BAGO APLAYA	BHS	Bago Aplaya Health Center	1	51.2	N/A	Concrete	Good	Yes
BAGO APLAYA	day care center	BLISS PHDCC	1	70	1 classroom	concrete	good	no
BAGO APLAYA	day care center	Sea side PHDCC	1	42	1 classroom	concrete	good	no
BAGO APLAYA	Elementary School	RC Quimpo ES	3	6000	17 classrooms	Mixed	Needs repair	Yes
BAGO GALLERA	BHS	Bago Gallera Health Center	1	51.2	N/A	Concrete	Good	Yes
BAGO GALLERA	day care center	Bago Gallera De Oro Home Based	1	52	1 classroom	concrete	good	no
BAGO GALLERA	day care center	San Lorenzo PHDCC	1	48	1 classroom	concrete	good	no
BAGO GALLERA	Elementary School	San Lorenzo ES	3	3108	19 classrooms	Mixed	Needs repair	Yes
BALIOK	BHS	Purok 6, Ramonena	1	51.2	N/A	Concrete	Good	Yes
BUCANA	Barangay Hall	Bucana Brgy. Hall	2	169.80	N/A	concrete	good	yes
BUCANA	BHS	St. John Health Center	1	92.49	N/A	Concrete	Good	Yes
BUCANA	BHS	Kabacan Health Center I	1	51.2	N/A	Concrete	Good	Yes
BUCANA	day care center	Prk 7 PHDCC	1	148	1 classroom	concrete	fair	no
BUCANA	day care center	Prk 6 PHDCC	1	120	1 classroom	concrete	fair	no
BUCANA	day care center	Bilusa PHDCC	1	100	1 classroom	concrete	fair	no
BUCANA	day care center	Kasilak PHDCC	1	150	1 classroom	concrete	fair	no
BUCANA	day care center	Rosas DCC	1	100	1 classroom	concrete	fair	no
BUCANA	day care center	St. John PHDCC II	1	85	1 classroom	mixed	fair	no

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Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
BUCANA	day care center	Prk 2 Bucana DCC	1	150	1 classroom	concrete	fair	no
BUCANA	day care center	Pebsa PHDCC	1	100	1 classroom	mixed	fair	no
BUCANA	day care center	Isla Suerte PHDCC 2/SIR Phase ! PHDCC 1	1	150	1 classroom	concrete	fair	no
BUCANA	Elementary School	SIR ES	2	23215	classroom	Mixed	Needs repair	Yes
BUCANA	Secondary School	Vicenta C. Nograles NHS	4	1200		Mixed	Needs repair	Yes
BUCANA	TC	Teen Center	1	51.2	N/A	Concrete	Good	Yes
BUCANA	Fire Station	SIR Fire Station	2	155	12 personnel	mixed	poor	no
BUCANA	Police Outpost	Sandawa Mc Arthur Police Outpost	1	8	6 persons	concrete	fair	no
CATALUNAN GRANDE	day care center	Bagahai DCC	1	56	1 classroom	concrete	good	no
CATALUNAN PEQUEÑO	Barangay Hall	Catalunan Pequeno Brgy. Hall	2	149.12	N/A	concrete	good	yes
CATALUNAN PEQUEÑO	BHS	Catalunan Pequeño Health Center	1	133.19	N/A	Mixed	Poor	No
CATALUNAN PEQUEÑO	Secondary School	Catalunan Pequeño NHS	4	27389	48 classrooms	Mixed	Needs repair	Yes
MA-A	day care center	Don Julian PHDCC	1	56	1 classroom	concrete	good	no
MA-A	day care center	Prk 38 NHA PHDCC	1	250	1 classroom	concrete	good	no
MA-A	Elementary School	JL Escoda ES	4	2500	33 classrooms	Mixed	Needs repair	Yes
MA-A	Jail Facility	Main City Jail	1	750	44 Cells, 400 Bed Capacity, 400 Inmate Capacity	mixed	good	yes
MA-A	Jail Facility	Female City Jail	1	400	20 Cottage, 200 bed capacity, 200 Inmate Capacity	mixed	good	yes
MA-A	Jail Facility	Annex City Jail	1	198	15 Cells, 116 Bed Capacity, 116 Inmate Capacity	mixed	good	yes
MA-A	Police Outpost	UM Matina Police Outpost	1	6	4 persons	mixed	fair	no

Table CP-1. Critical Point Facilities Exposure to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
MA-A	Police Sub Station	Maa Police Sub Station	1	20	8 persons	mixed	fair	no
MATINA APLAYA	Barangay Hall	Matina Aplaya Brgy. Hall	2	258.72	N/A	concrete	good	yes
MATINA APLAYA	BHS	Matina Aplaya Health Center(RHU)	1	109	N/A	Concrete	Good	Yes
MATINA APLAYA	day care center	Dumalag PHDCC	1	200	1 classroom	mixed	good	no
MATINA APLAYA	day care center	Malinawon DCC	1	40	1 classroom	concrete	good	no
MATINA APLAYA	day care center	Shanghai PHDCC	1	75	1 classroom	concrete	poor	no
MATINA APLAYA	day care center	Dumalag PHDCC 3	1	40	1 classroom	concrete	good	no
MATINA APLAYA	day care center	Teachers Village PHDCC	1	40	1 classroom	concrete	fair	no
MATINA APLAYA	Elementary School	Diego Silang ES	1	620	7 classroom	Mixed	Needs repair	Yes
MATINA APLAYA	Elementary School	Matina Aplaya ES	2	8474	37 classrooms	Mixed	Needs repair	Yes
MATINA APLAYA	Police Sub Station	Matina Aplaya Police Sub Station	1	8	4 persons	concrete	fair	no
MATINA APLAYA	Police Outpost	Bogser Police Outpost	1	16	6 persons	concrete	fair	no
MATINA CROSS-ING	Barangay Hall	Matina Crossing Brgy. Hall	4	404.94	N/A	concrete	good	yes
MATINA CROSS-ING	BHS	Gravahan Health Center	1	21	N/A	Mixed	Poor	No
MATINA CROSS-ING	BHS	Matina Crossing Health Center	1	410.69	N/A	Concrete	Good	Yes
MATINA CROSS-ING	Elementary School	Matina CES	4	10737	98	Mixed	Needs repair	Yes
MATINA CROSS-ING	Elementary School	New Matina ES	2	450	18 classrooms	Mixed	Needs repair	Yes
MATINA CROSS-ING	Secondary School	Daniel R. Aguinaldo NHS	4	665881	129 classrooms	Mixed	Needs repair	Yes
MATINA CROSS-ING	Police Station	Police Station 3 (Talomo)	2	200	300 personnel	concrete	good	no
MATINA PANGI	Barangay Hall	Matina Pangi Brgy. Hall	3	107.73	N/A	concrete	fair	no
MATINA PANGI	BHS	Pangi Health Center	1	63	N/A	Concrete	Good	Yes
MATINA PANGI	day care center	Km.8 Matina Pangi PHDCC	1	50	1 classroom	concrete	good	no
MATINA PANGI	Elementary School	Matina Pangi ES	4	5000	27	Mixed	Needs repair	Yes

Table CP-1. Critical Point Facilities Exposure to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
TALOMO	Barangay Hall	Talomo Brgy. Hall	3	334.32	N/A	concrete	good	yes
TALOMO	BHS	NHA Relocation Health Center	1	57.59	N/A	Concrete	Good	Yes
TALOMO	BHS	Royal Valley Health Center	1	63	N/A	Concrete	Good	Yes
TALOMO	day care center	Kadayawan PHDCC	1	200	1 classroom	concrete	good	no
TALOMO	day care center	San Juan PHDCC	1	120	1 classroom	concrete	good	no
TALOMO	day care center	Christian Village, PHDCC	1	50	1 classroom	concrete	good	no
TALOMO	day care center	Taal Central Park PHDCC	1	40	1 classroom	concrete	good	no
TALOMO	day care center	NHA Relocation PHDCC	1	120	1 classroom	mixed	good	no
TALOMO	day care center	Talomo PHDCC	1	80	1 classroom	concrete	good	no
TALOMO	day care center	Talomo Barangay Hall 1	1	40	1 classroom	concrete	good	no
TALOMO	day care center	Kalambuan Home-based	1	30	1 classroom	mixed	good	no
TALOMO	Elementary School	A. Bonifacio Elem. School	1	10500	25 classrooms	Mixed	Needs repair	Yes
TALOMO	Elementary School	Doña Soledad Dolor ES	1	15228	24 classrooms	Mixed	Needs repair	Yes
TALOMO	Elementary School	Leon A. Garcia Sr. ES	3	2051	22 classrooms	Mixed	Needs repair	Yes
TALOMO	Elementary School	Talomo CES	4	10500	62 classrooms	Mixed	Needs repair	Yes
TALOMO	RHU	Puan Health Center	2	437.58	N/A	Concrete	Good	Yes
TALOMO	Secondary School	Governor V. Duterte NHS	4	4490	29 classrooms	Mixed	Needs repair	Yes
TALOMO	Secondary School	Talomo NHS	4	1200	50 classrooms	Mixed	Needs repair	Yes
TALOMO	UHC	Talomo Urban Health Center	1	510	N/A	Concrete	Good	Yes
TALOMO	Police Outpost	Talomo Police Outpost	1	12	6 persons	concrete	fair	no
TALOMO	Police Sub Station	Ulas Police Sub Station	2	50	20 persons	mixed	fair	no
BANGKAS HEIGHTS	Elementary School	Batolusa ES	4	2275	19 classrooms	Mixed	Needs repair	Yes
BINUGAO	Barangay Hall	Binugao Brgy Hall	2	303.10	N/A	concrete	good	yes
BINUGAO	BHS	Binugao	1	198.71	N/A	Concrete	Good	Yes
BINUGAO	Elementary School	Binugao CES	1	26267	23 classrooms	Mixed	Needs repair	Yes
BINUGAO	Secondary School	Binugao NHS	3	10000	26 classrooms	Mixed	Needs repair	Yes
DALIAO	Elementary School	V.S. Bangoy ES	3	4437	22 classrooms	Mixed	Needs repair	Yes
LUBOGAN	BHS	Lubogan	1	147.19	N/A	Concrete	Good	Yes

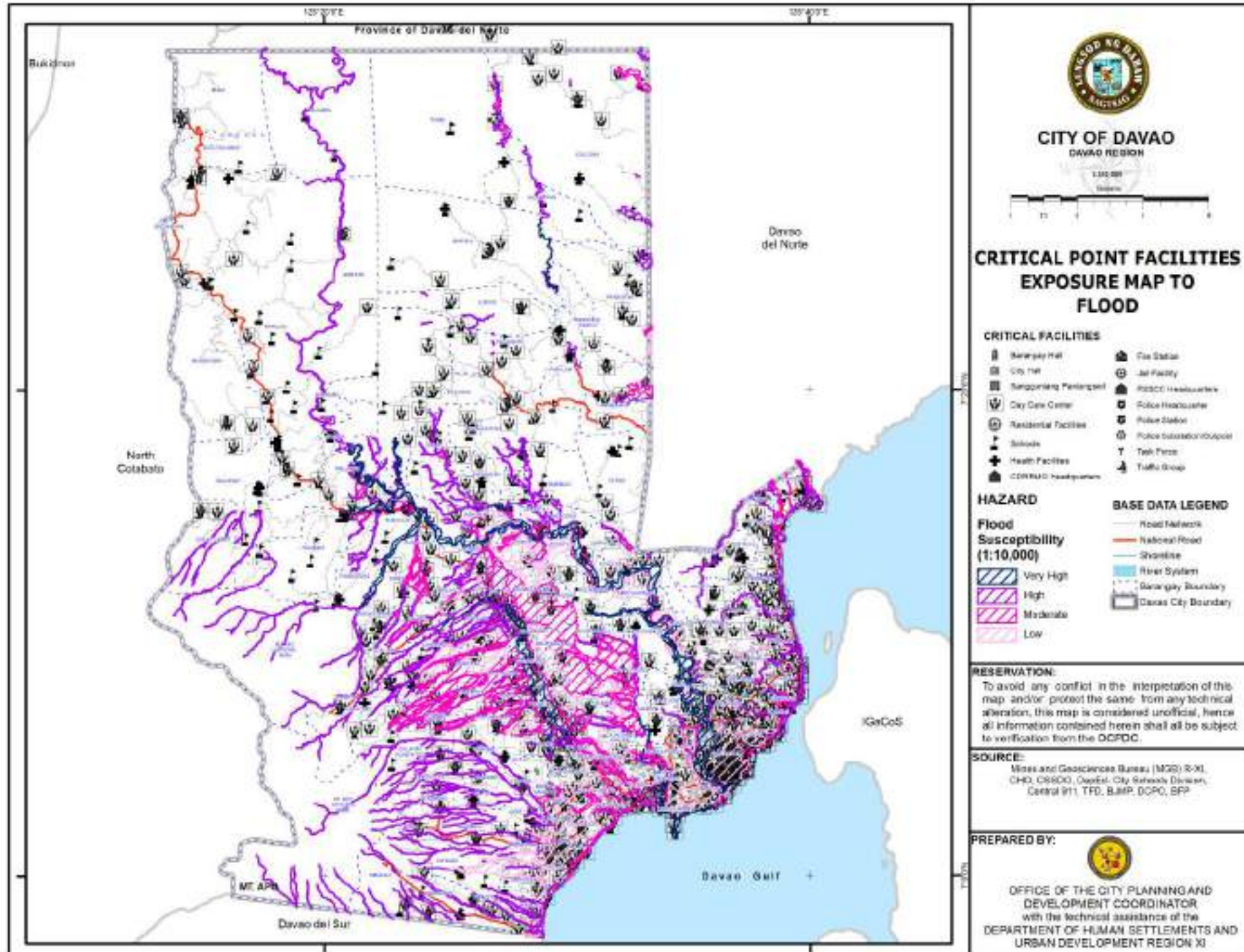
Table CP-1. Critical Point Facilities Exposure to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
LUBOGAN	Elementary School	San Miguel Integrated School	3	19998	21 classrooms	Mixed	Needs repair	Yes
LUBOGAN	Police Outpost	Lubogan Police Outpost	1	5	5 persons	wood	good	no
MARAPANGI	Barangay Hall	Marapangi Brgy. Hall	2	186.88	N/A	concrete	good	yes
MARAPANGI	BHS	Marapangi	1	111.56	N/A	Mixed	Fair	No
MARAPANGI	Elementary School	C.B. Bangoy ES	3	10000	14 classrooms	Mixed	Needs repair	Yes
SIRAWAN	Elementary School	Sirawan Beach ES	1	40000	14 classrooms	Mixed	Needs repair	Yes
SIRAWAN	Secondary School	Sirawan NHS(Toril NHS)	2	40867	20 classrooms	Mixed	Needs repair	Yes
TORIL	Elementary School	Don Juan Dela Cruz CES	1	14985	112 classrooms	Mixed	Needs repair	Yes
ANGALAN	Barangay Hall	Angalan Brgy. Hall	2	230.70	N/A	concrete	good	yes
ANGALAN	BHS	Angalan Health Center	1	117.05	N/A	Concrete	Fair	No
ANGALAN	Elementary School	A. Barbarona ES	1	10000	13 classrooms	Mixed	Needs repair	Yes
BALENGAENG	Barangay Hall	Balengaeng Brgy. Hall	2	153.15	N/A	concrete	good	yes
BALENGAENG	BHS	Balingaeng	1	63.08	N/A	Concrete	Fair	No
BALENGAENG	Elementary School	Balengaeng ES	1	20000	9 classrooms	Mixed	Needs repair	Yes
BIAO GUIANGA	Barangay Hall	Biao Guianga Brgy.Hall	2	179.93	N/A	concrete	good	yes
BIAO GUIANGA	BHS	Biao Guianga	1	72.74	N/A	Concrete	Fair	No
BIAO GUIANGA	Elementary School	Biao Guianga ES	1	10000	15 classrooms	Mixed	Needs repair	Yes
MATINA BIAO	Barangay Hall	Matina Biao Brgy. Hall	2	199.64	N/A	concrete	good	yes
MATINA BIAO	BHS	Matina Biao	1	150.60	N/A	Concrete	Fair	No
MATINA BIAO	Elementary School	Matina Biao ES	2	88508	8 classrooms	Mixed	Needs repair	Yes
LOS AMIGOS	Barangay Hall	Los Amigos Brgy. Hall	2	120.27	N/A	concrete	good	yes
LOS AMIGOS	BHS	Los Amigos	1	112.13	N/A	Concrete	Good	Yes
LOS AMIGOS	Elementary School	Los Amigos ES	4	15000	26 classrooms	Mixed	Needs repair	Yes
LOS AMIGOS	Secondary School	Los Amigos NHS	4	8240	57 classrooms	Mixed	Needs repair	Yes
LOS AMIGOS	UHC	Los Amigos New Urban Health Center	1	367.23	N/A	Concrete	Good	Yes
LOS AMIGOS	Police Sub Station	Los Amigos Police Sub Station	1	30	10 persons	concrete	good	yes
MANUEL GUI-ANGA	Elementary School	Vinzons ES	2	30037	21 classrooms	Mixed	Needs repair	Yes
MINTAL	Barangay Hall	Mintal Brgy. Hall	2	183.89	N/A	concrete	good	yes

Table CP-1. Critical Point Facilities Exposure to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
MINTAL	BHS	Mintal	1	169.96	N/A	Concrete	Good	Yes
MINTAL	Elementary School	Mintal Central ES	4	3167	81 classrooms	Mixed	Needs repair	Yes
MINTAL	Secondary School	Mintal Comprehensive NHS	4	4500	72 classrooms	Mixed	Needs repair	Yes
MINTAL	Fire Station	Mintal Fire Station	2	450	15 personnel	concrete	fair	yes
NEW VALENCIA	Elementary School	Luman ES	1	1000	7 classrooms	Mixed	Needs repair	Yes
TACUNAN	Police Sub Station	Tacunan Police Sub Station	1	30	10 persons	concrete	good	yes
TAGAKPAN	Barangay Hall	Tagakpan Brgy. Hall	2	183.06	N/A	concrete	good	yes
TAGAKPAN	BHS	Tagakpan	1	114.39	N/A	Concrete	Good	Yes
TAGAKPAN	Elementary School	Tagakpan ES	2	67786	15 classrooms	Mixed	Needs repair	Yes
TAGAKPAN	Secondary School	Tagakpan NHS	3	33371	26 classrooms	Mixed	Needs repair	Yes
TUGBOK	Barangay Hall	Tugbok Brgy Hall	2	180.65	N/A	concrete	good	yes
TUGBOK	Elementary School	Tugbok Central ES SPED Center	4	44019	45 classrooms	Mixed	Needs repair	Yes
TUGBOK	RHU	Tugbok District Health Center	2	107.94	N/A	Concrete	Good	Yes
TUGBOK	Secondary School	Tugbok NHS	3	17000	37 classrooms	Mixed	Needs repair	Yes
MINTAL	Police Station	Police Station 9 (Tugbok)	2	1000	100 persons	concrete	good	yes

Map 3.1 Critical Point Facilities Exposure Map to Flood, Davao City



STORM SURGE

There are 310 critical point facilities which have been determined to be exposed to the occurrence of storm surge. The table below presents the details of the type of facilities exposed, their existing condition, among others. The data show that there are four (4) facilities in critical condition, namely: two (2) daycare centers in Barangay 15-B, Poblacion, and Matina Aplaya; and two-storey fire station in Paciano Bangoy and Matina Crossing. There are 153 facilities determined to be in good condition, while 68 are considered to be in fair condition, 25 in poor condition, and 57 need to be repaired.

There are 214 structures that are to be reinforced with hazard resistant design while the remaining 96 have already been employed with hazard resistant design.

Table CP-2. Critical Point Facilities Exposure to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
1-A	Barangay Hall	1-A Brgy. Hall	2	87.277	N/A	mixed	fair	no
2-A	Barangay Hall	2-A Brgy. Hall	2	100.004	N/A	concrete	good	yes
3-A	Barangay Hall	3-A Brgy. Hall	1	64.248	N/A	concrete	good	yes
4-A	Barangay Hall	4-A Brgy. Hall	2	96.764	N/A	concrete	good	yes
5-A	Barangay Hall	5-A Brgy. Hall	3	172.16	N/A	concrete	good	yes
7-A	Barangay Hall	7-A Brgy. Hall	3	149.037	N/A	concrete	good	yes
9-A	Barangay Hall	9-A Brgy. Hall	2	115.481	N/A	concrete	good	yes
11-B	Barangay Hall	11-B Brgy. Hall	2	58.64	N/A	concrete	poor	no
12-B	Barangay Hall	12-B Brgy. Hall	2	101.626	N/A	concrete	good	yes
13-B	Barangay Hall	13-B Brgy. Hall	*	*	N/A	*	*	*
14-B	Barangay Hall	14-B Brgy. Hall	2	33.552	N/A	concrete	good	yes
15-B	Barangay Hall	15-B Brgy. Hall	1	100.004	N/A	mixed	fair	no
16-B	Barangay Hall	16-B Brgy. Hall	*	*	N/A	*	*	*
17-B	Barangay Hall	17-B Brgy. Hall	1	51.376	N/A	wood	poor	no
18-B	Barangay Hall	18-B Brgy. Hall	2	122.104	N/A	concrete	good	yes
20-B	Barangay Hall	20-B Brgy. Hall	2	141.156	N/A	concrete	good	yes
21-C	Barangay Hall	21-C Brgy. Hall	1	45.417	N/A	concrete	fair	no
22-C	Barangay Hall	22-C Brgy. Hall	3	270.716	N/A	concrete	good	yes
23-C	Barangay Hall	23-C Brgy. Hall	2	134.647	N/A	concrete	good	yes
24-C	Barangay Hall	24-C Brgy. Hall	4	84.686	N/A	concrete	good	yes
25-C	Barangay Hall	25-C Brgy. Hall	2	25.847	N/A	concrete	good	yes

Table CP-2. Critical Point Facilities Exposure to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
26-C	Barangay Hall	26-C Brgy. Hall	2	116.913	N/A	concrete	good	yes
27-C	Barangay Hall	27-C Brgy. Hall	2	42.076	N/A	concrete	good	yes
28-C	Barangay Hall	28-C Brgy. Hall	2	107.563	N/A	concrete	good	yes
29-C	Barangay Hall	29-C Brgy. Hall	3	42.076	N/A	concrete	good	yes
30-C	Barangay Hall	30-C Brgy. Hall	2	118.664	N/A	concrete	good	yes
31-D	Barangay Hall	31-D Brgy. Hall	2	81.604	N/A	concrete	good	yes
32-D	Barangay Hall	32-D Brgy. Hall	2	40.166	N/A	mixed	fair	no
33-D	Barangay Hall	33-D Brgy. Hall	2	77.389	N/A	concrete	good	yes
34-D	Barangay Hall	34-D Brgy. Hall	*	*	N/A	*	*	*
35-D	Barangay Hall	35-D Brgy. Hall	1	89.74	N/A	concrete	good	yes
36-D	Barangay Hall	36-D Brgy. Hall	2	109.071	N/A	concrete	good	yes
37-D	Barangay Hall	37-D Brgy. Hall	2	128.702	N/A	concrete	good	yes
38-D	Barangay Hall	38-D Brgy. Hall	2	100.004	N/A	mixed	fair	no
39-D	Barangay Hall	39-D Brgy. Hall	1	93.977	N/A	concrete	fair	no
40-D	Barangay Hall	40-D Brgy. Hall	2	43.605	N/A	concrete	good	yes
AGDAO PROPER	Barangay Hall	Agdao Brgy. Hall	2	135.957	N/A	concrete	good	yes
W. Aquino	Barangay Hall	W. Aquino Brgy. Hall	2	101.806	N/A	mixed	fair	no
PACIANO BANGOY	Barangay Hall	P. Bangoy Brgy. Hall	2	165.226	N/A	concrete	fair	no
RAFAEL CASTILLO	Barangay Hall	R. Castillo Brgy. Hall	2	142.147	N/A	concrete	good	yes
CENTRO	Barangay Hall	Centro Brgy. Hall	2	144.227	N/A	concrete	good	yes
VICENTE DUTERTE	Barangay Hall	V. Duterte Brgy. Hall	2	400.243	N/A	concrete	good	yes
LEON GARCIA SR.	Barangay Hall	Leon Garcia Brgy. Hall	2	94.406	N/A	concrete	good	yes
LAPU - LAPU	Barangay Hall	Lapu-Lapu Brgy. Hall	2	202.495	N/A	concrete	good	yes
TOMAS MONTEVERDE	Barangay Hall	T. Monteverde Brgy. Hall	1	89.501	N/A	concrete	good	yes
SAN ANTONIO	Barangay Hall	San Antonio Brgy. Hall	1	121.555	N/A	concrete	good	yes
UBALDE	Barangay Hall	Ubalde Brgy. Hall	2	152.268	N/A	concrete	good	yes
SASA	Barangay Hall	Sasa Brgy. Hall	2	359.48	N/A	concrete	fair	no
V. HIZON	Barangay Hall	V. Hizon Brgy. Hall	2	293.665	N/A	concrete	good	yes
BUNAWAN	Barangay Hall	Bunawan Brgy. Hall	2	199.517	N/A	concrete	good	yes
ILANG	Barangay Hall	Ilang Brgy. Hall	2	214.066	N/A	concrete	good	yes
PANACAN	Barangay Hall	Panacan Brgy. Hall	2	167.449	N/A	concrete	fair	no
BAGO APLAYA	Barangay Hall	Bago Aplaya Brgy. Hall	2	426.687	N/A	concrete	good	yes

Table CP-2. Critical Point Facilities Exposure to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
BUCANA	Barangay Hall	Bucana Brgy. Hall	2	98.661	N/A	concrete	good	yes
BUCANA	Barangay Hall	Bucana Brgy. Hall	2	169.8	N/A	mixed	fair	no
MATINA APLAYA	Barangay Hall	Matina Aplaya Brgy. Hall	2	258.723	N/A	concrete	good	yes
TALOMO	Barangay Hall	Talomo Brgy. Hall	3	334.318	N/A	concrete	good	yes
DALIAO	Barangay Hall	Daliao Brgy Hall	2	188.398	N/A	concrete	good	yes
1-A	BHS	Brgy 1-A Health Center	1	54.40	N/A	Mixed	Fair	Yes
1-A	BHS	City Health Office	3		N/A	Concrete	Good	Yes
2-A	BHS	Brgy. 2-A Health Center	1	118.87	N/A	Concrete	Fair	No
4-A	BHS	Tomas Claudio Health Center	1	481.02	N/A	Concrete	Good	Yes
4-A	BHS	Teen Center	1	120	N/A	Concrete	Good	Yes
5-A	BHS	Bankerohan Health Center	1	68.04	N/A	Concrete	Good	Yes
9-a	BHS	Brgy.9-A Health Center	1	51.2	N/A	Concrete	Good	Yes
12-B	BHS	Brgy. 12-B Health Center	1	41.83	N/A	Concrete	Fair	No
14-B	BHS	Brgy.14-B Health Center	1	11.04	N/A	Mixed	Fair	No
15-B	BHS	Brgy. 15-B Health Center	1	6.02	N/A	Mixed	Poor	No
18-B	BHS	Brgy.18-B Health Center	1	39.44	N/A	Mixed	Poor	No
20-B	BHS	Brgy.20-B Health Center	1	46.02	N/A	Concrete	Good	Yes
21-C	BHS	Brgy.21-C Piapi Health Center	1	30	N/A	Concrete	Good	Yes
22-C	BHS	Brgy 22-C Health Center	1	278.75	N/A	Concrete	Good	Yes
23-C	BHS	Brgy 23-C Mini Forest Health Center	1	361.65	N/A	Concrete	Good	Yes
23-C	BHS	New BHS / Isla Verde Purok 3B	1	51.85	N/A	Concrete	Good	Yes
24-C	BHS	Brgy 24-C Health Center	1	84.96	N/A	Concrete	Good	Yes
25-C	BHS	Brgy.25-C Health Center	1	12.93	N/A	Concrete	Fair	No
26-C	BHS	Brgy.26-C Health Center	1	141.38	N/A	Concrete	Good	No
27-C	BHS	Brgy.27-C Health Center	1	21.66	N/A	Concrete	Good	Yes
27-C	BHS	Sta. Ana Health Center	1	550	N/A	Concrete	Good	Yes
28-C	BHS	Brgy.28-C Health Center	1	29.04	N/A	Concrete	Good	Yes
29-C	BHS	Brgy. 29-C Health Center	1	22.04	N/A	Concrete	Good	No
30-C	BHS	Brgy.30-C Health Center	1	31.32	N/A	Concrete	Good	No
31-D	BHS	Brgy. 31-D Health Center	1	38.71	N/A	Concrete	Good	Yes

Table CP-2. Critical Point Facilities Exposure to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
32-D	BHS	Brgy. 32-D Health Center	1	249.12	N/A	Concrete	Good	Yes
32-D	BHS	Reproductive Health and Wellness Center	1	485.48	N/A	Concrete	Good	Yes
35-D	BHS	Brgy. 35-D Health Center	1	11	N/A	Mixed	Poor	No
36-D	BHS	Brgy. 36-D Health Center	1	38.88	N/A	Concrete	Good	Yes
37-D	BHS	Brgy. 37-D Health Center	1	94.12	N/A	Concrete	Good	Yes
38-D	BHS	Brgy. 38-D Health Center	1	38.94	N/A	Concrete	Good	Yes
39-D	BHS	Brgy. 39-D Health Center	1	50.80	N/A	Mixed	Poor	No
Wilfredo Aquino	BHS	Wilfredo Aquino Health Center	1	259.09	N/A	Concrete	Poor	No
Paciano Bangoy	BHS	Paciano Bangoy Health Center	1	153.09	N/A	Concrete	Poor	No
R. Castillo	BHS	R.Castillo Health Center	1	144.59	N/A	Concrete	Fair	No
Centro Agdao	BHS	New BHS	1	119.62	N/A	Concrete	Fair	No
Centro Agdao	BHS	South San Juan Health Center	1	125.95	N/A	Concrete	Good	Yes
Vicente Duterte	BHS	Vicente Duterte Health Center	1	345.27	N/A	Concrete	Good	No
Leon Garcia	BHS	Leon Garcia Health Center	1	68.74	N/A	Concrete	Good	Yes
Lapu-Lapu	BHS	Lapu-Lapu Health Center	1	142.88	N/A	Concrete	Fair	No
Tomas Monteverde	BHS	Tomas Monteverde Health Center	1	87.71	N/A	Concrete	Fair	No
San Antonio	BHS	San Antonio Health Center	1	113.82	N/A	Concrete	Poor	No
Ubalde	BHS	Ubalde Health Center	1	86.17	N/A	Concrete	Poor	No
Sasa	BHS	Km.11 Sasa Subcenter	1	418.01	N/A	Concrete	Good	Yes
Sasa	BHS	Landmark Sub Center	1	57.41	N/A	Concrete	Fair	No
Sasa	BHS	Beach Club Sub Center	1	622.27	N/A	Concrete	Fair	No
V. Hizon	BHS	Hizon Health Center	1	107	N/A	Concrete	Fair	Yes
Lasang	BHS	Lasang Health Center	1	193.93	N/A	Concrete	Good	No
Panacan	BHS	Panacan Proper Health Center	1	89.77	N/A	Concrete	Good	Yes
Panacan	BHS	Panacan 13 Health Center	1	100.00	N/A	Concrete	Fair	No
San Isidro	BHS	Kabacan Health Center II	1	51.2	N/A	Concrete	Good	Yes
Baliok Proper	BHS	Baliok Health Center	1	53.86	N/A	Concrete	Good	Yes
Bucana	BHS	Teen Center	1	51.2	N/A	Concrete	Good	Yes
Bucana	BHS	Bucana Health Center	1	47.89	N/A	Concrete	Fair	No

Table CP-2. Critical Point Facilities Exposure to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Bucana	BHS	St. John Health Center	1	92.49	N/A	Concrete	Good	Yes
Bucana	BHS	Talomo North Health Center RHU	1	338.47	N/A	Concrete	Good	Yes
Bucana	BHS	SIR Phase 2 Health Center	1	41.08	N/A	Concrete	Good	Yes
Bucana	BHS	Times Beach Health Center	1	50.23	N/A	Concrete	Good	Yes
Bucana	BHS	Kabacan Health Center I	1	51.2	N/A	Concrete	Good	Yes
Bago Aplaya	BHS	Bago Aplaya Health Center	1	51.2	N/A	Concrete	Good	Yes
Bago Aplaya	BHS	Gulf View Health Center	1	51.2	N/A	Concrete	Good	Yes
Matina Aplaya	BHS	Matina Aplaya Health Center	1	109	N/A	Concrete	Good	Yes
Matina Crossing	BHS	Gravahan Health Center	1	21	N/A	Concrete	Fair	No
Talomo Proper	BHS	NHA Relocation Health Center	1	57.59	N/A	Concrete	Good	Yes
Talomo Proper	BHS	Talomo Cemento Health Center	1	56.21	N/A	Concrete	Good	Yes
Daliao	BHS	Daliao Health Center	1	111.38	N/A	Concrete	Fair	No
bucana	CDRRMO Headquarters	City Disaster Risk Reduction and Management Office	2	60	N/A	mixed	poor	no
2-A	City Hall	City Hall (Main)	4	1951.641	N/A	concrete	good	yes
2-A	City Hall	Sangguniang Panlungsod	4	3249.636	N/A	concrete	good	yes
2-A	City Hall	City Hall Annex	5	391.441	N/A	concrete	good	yes
1-A	day care center	Bolton DCC	1	80	1 classroom	concrete	fair	no
2-A	day care center	Magallanes DCC	1	16	1 classroom	concrete	fair	no
4-A	day care center	Brgy 4-A DCC	1	36	1 classroom	concrete	good	no
5-A	day care center	Brgy 5-A DCC I	2	36	1 classroom	concrete	good	no
5-A	day care center	Brgy 5-A DCC II	2	36	1 classroom	concrete	good	no
5-A	day care center	Brgy 5-A DCC III	2	36	1 classroom	concrete	good	no
5-A	day care center	Brgy 5-A DCC IV	2	36	1 classroom	concrete	good	no
5-A	day care center	Brgy 5-A DCC V	2	36	1 classroom	concrete	good	no
9-a	day care center	Camus DCC (Barangay 9-A)	1	60	1 classroom	concrete	good	no
12-B	day care center	V. Mapa DCC	1	120	1 classroom	concrete	good	no
15-B	day care center	Brgy 15 B PHDCC	1	50	1 classroom	mixed	critical	no
18-B	day care center	Brgy. 18 DCC Little Angels DCC	1	120	1 classroom	concrete	good	no
20-B	day care center	Regina Comp. DCC	1	60	1 classroom	concrete	good	no

Table CP-2. Critical Point Facilities Exposure to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
21-C	day care center	Barangay 21-C PHDCC	1	150	1 classroom	concrete	good	no
22-C	day care center	Brgy 22-C DCC	1	100	1 classroom	concrete	good	no
23-C	day care center	Mini-Forest DCC	1	60	1 classroom	concrete	fair	no
26-C	day care center	Silangan PHDCC	1	85	1 classroom	concrete	good	no
27-C	day care center	China Town DCC	1	100	1 classroom	concrete	good	no
27-C	day care center	Brgy. 27-C PHDCC	1	40	1 classroom	concrete	good	no
28-C	day care center	Brgay 28 -C PHDCC	1	40	1 classroom	concrete	fair	no
28-C	day care center	Rizal Day Care Center	1	100	1 classroom	concrete	good	no
30-C	day care center	St. Anne DCC	1	33	1 classroom	concrete	good	no
31-D	day care center	Roxas 1 DCC	1	100	1 classroom	mixed	good	no
31-D	day care center	Roxas 2 DCC	1	100	1 classroom	mixed	good	no
32-D	day care center	Jacinto DCC	1	100	1 classroom	concrete	good	no
33-D	day care center	Mabini DCC	1	120	1 classroom	concrete	good	no
35-D	day care center	Brgy 35 D PHDCC	1	120	1 classroom	concrete	good	no
36-D	day care center	Brgy 36 Day Care Center	1	20	1 classroom	concrete	good	no
37-D	day care center	Brgy. 37-D DCC?	1	60	1 classroom	concrete	fair	no
38-D	day care center	Brgy 38 D PHDCC	1	60	1 classroom	concrete	good	no
39-D	day care center	Brgy 39 D PHDCC	1	60	1 classroom	concrete	good	no
40-D	day care center	Brgy 40 D PHDCC	1	80	1 classroom	concrete	fair	no
Bunawan (Pob.)	day care center	Rhema DCC	1	75	1 classroom	concrete	good	no
Bunawan (Pob.)	day care center	DCPI 1 & 2 DCC	1	150	1 classroom	concrete	good	no
Bunawan (Pob.)	day care center	Damiana DCC	1	100	1 classroom	concrete	good	no
Bunawan (Pob.)	day care center	Tesorero DCC	1	60	1 classroom	concrete	good	no
Bunawan (Pob.)	day care center	Bunawan Aplaya DCC	1	60	1 classroom	mixed	fair	no
Ilang	day care center	Sto. Niño Homebase	1	80	1 classroom	concrete	good	no
Ilang	day care center	Amparo Homes DCC	1	100	1 classroom	mixed	good	no
Ilang	day care center	Ilang DCC Sampaguita Section	1	75	1 classroom	light	fair	no
Ilang	day care center	Ilang Riverview	1	75	1 classroom	light	fair	no
Panacan	day care center	St. John DCC	1	70	1 classroom	concrete	good	no

Table CP-2. Critical Point Facilities Exposure to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Panacan	day care center	F.L. Apostol DCC	1	150	1 classroom	concrete	good	no
Panacan	day care center	Panacan Trece DCC	1	120	1 classroom	mixed	fair	no
Panacan	day care center	Lopez HB	1	70	1 classroom	concrete	good	no
Panacan	day care center	Benjamin Hills DCC	1	70	1 classroom	concrete	good	no
Panacan	day care center	Doña Mercedes DCC	1	100	1 classroom	light	poor	no
Tibungco	day care center	Deles Perez DCC	1	100	1 classroom	concrete	good	no
Tibungco	day care center	San Juan DCC		60	1 classroom	concrete	good	no
Bucana	day care center	Prk 7 PHDCC	1	148	1 classroom	concrete	fair	no
Bucana	day care center	Prk 6 PHDCC	1	120	1 classroom	concrete	fair	no
Bucana	day care center	Bilusa PHDCC	1	100	1 classroom	concrete	fair	no
Bucana	day care center	Kasilak PHDCC	1	150	1 classroom	concrete	fair	no
Bucana	day care center	Rosas DCC	1	100	1 classroom	concrete	fair	no
Bucana	day care center	St. John PHDCC II	1	85	1 classroom	mixed	fair	no
Bucana	day care center	Prk 2 Bucana DCC	1	150	1 classroom	concrete	fair	no
Bucana	day care center	Pebsa PHDCC	1	100	1 classroom	concrete	fair	no
Bucana	day care center	Kabacan Times Beach DCC	1	100	1 classroom	concrete	fair	no
Bucana	day care center	P 32 Holy Trinity DCC	1	100	1 classroom	concrete	fair	no
Bucana	day care center	S.I.R Phase 2 PHDCC 3	1	100	1 classroom	concrete	fair	no
Bucana	day care center	Sabroso Village PHDCC	1	100	1 classroom	mixed	fair	no
Bucana	day care center	Kalubihan DCC	1	100	1 classroom	mixed	fair	no
Bucana	day care center	Savina DCC	1	100	1 classroom	mixed	fair	no
Bucana	day care center	SIR Phase 2 DCC 1	1	100	1 classroom	mixed	fair	no
Bucana	day care center	SIR Phase 2 DCC 2	1	100	1 classroom	concrete	fair	no
Bago Aplaya	day care center	D'Garden PHDCC	1	46	1 classroom	concrete	good	no
Bago Aplaya	day care center	Gulf View Subd. PHDCC	1	42	1 classroom	concrete	good	no
Bago Aplaya	day care center	BLISS PHDCC	1	70	1 classroom	concrete	fair	no
Bago Aplaya	day care center	Sea side PHDCC	1	42	1 classroom	concrete	good	no
Matina Aplaya	day care center	Dumalag PHDCC	1	200	1 classroom	mixed	critical	no
Matina Aplaya	day care center	Cristina Village PHDCC	1	90	1 classroom	concrete	good	no

Table CP-2. Critical Point Facilities Exposure to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Matina Aplaya	day care center	Malinawon DCC	1	40	1 classroom	concrete	good	no
Matina Aplaya	day care center	Shanghai PHDCC	1	75	1 classroom	concrete	good	no
Matina Aplaya	day care center	Dumalag PHDCC 3	1	40	1 classroom	concrete	good	no
Matina Aplaya	day care center	Seaside II PHDCC	1	54	1 classroom	concrete	fair	no
Matina Aplaya	day care center	Teacher's Village PHDCC	1	40	1 classroom	concrete	good	no
Bago Aplaya	day care center	BALAI, PHDCC	1	75	1 classroom	mixed	good	no
Talomo (Pob.)	day care center	Kadayawan PHDCC	1	200	1 classroom	concrete	good	no
Talomo (Pob.)	day care center	San Juan PHDCC	1	120	1 classroom	concrete	good	no
Talomo (Pob.)	day care center	Christian Village, PHDCC	1	50	1 classroom	concrete	good	no
Talomo (Pob.)	day care center	Taal Central Park PHDCC	1	40	1 classroom	mixed	good	no
Talomo (Pob.)	day care center	NHA Relocation PHDCC	1	120	1 classroom	light	fair	no
39-D	day care center	Child Minding Center	1	300	1 classroom	mixed	poor	no
23-C	Day care center (homebased)	Purok 2 Home-Based	1	50	1 classroom	light	poor	no
23-C	Day care center (homebased)	Purok 4 A Home-Based	1	50	1 classroom	light	poor	no
23-C	Day care center (homebased)	Kabingaag Home Based	1	80	1 classroom	light	poor	no
23-C	Day care center (homebased)	Purok 4 b Home-Based I	1	80	1 classroom	mixed	fair	no
23-C	Day care center (homebased)	Purok 4 b Home-Based II	1	50	1 classroom	light	poor	no
23-C	Day care center (homebased)	Badjao Home Based	1	60	1 classroom	concrete	fair	no
1-A	Elementary School	Bolton ES	3	10500	29	Mixed	Needs repair	No
1-A	Elementary School	Magallanes ES	4	18943	124	Mixed	Needs repair	No
4-A	Elementary School	Kapt. T. Monteverde Sr. CES	2	18870	101	Mixed	Needs repair	No
9-a	Elementary School	T. Palma Gil Elem. Sch.	3	6202	29	Mixed	Needs repair	No
12-B	Elementary School	JP Laurel ES	2	807	7	Mixed	Needs repair	No
20-B	Elementary School	E. Quirino ES	3	3500	19	Mixed	Needs repair	No
20-B	Elementary School	San Roque CES	3	10500	65	Mixed	Needs repair	No
23-C	Elementary School	Zonta Elem. School	3	2681	17	Mixed	Needs repair	No

Table CP-2. Critical Point Facilities Exposure to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
28-C	Elementary School	Jose Rizal ES	1	9468	23	Mixed	Needs repair	No
28-C	Elementary School	M. Quezon ES	1	9000	34	Mixed	Needs repair	No
28-C	Elementary School	Manuel Roxas ES	4	3397	29	Mixed	Needs repair	No
28-C	Elementary School	Sta. Ana CES	3	15013	73	Mixed	Needs repair	No
Agdao Proper	Elementary School	Agdao ES	4	1007	23	Mixed	Needs repair	No
Wilfredo Aquino	Elementary School	J. Porras ES	3	5000	54	Mixed	Needs repair	No
Centro	Elementary School	San Juan ES	3	2100	43	Mixed	Needs repair	No
Vicente Duterte	Elementary School	Don Julian Rodriguez ES	2	1500	48	Mixed	Needs repair	No
Leon Garcia	Elementary School	Manuel M. Garcia ES	2	1807		Mixed	Needs repair	No
Lapu-Lapu	Elementary School	Lapu-lapu ES	3	4400	40	Mixed	Needs repair	No
Ubalde	Elementary School	Ubalde Elem. School	2	540	19	Mixed	Needs repair	No
Sasa	Elementary School	F. Bangoy CES SPED Center	2	5000	39	Mixed	Needs repair	No
Sasa	Elementary School	Osmena ES	1	3851	55	Mixed	Needs repair	No
V. Hizon	Elementary School	V. Hizon Elem. Sch.	4	10001	63	Mixed	Needs repair	No
Bunawan	Elementary School	Bunawan Aplaya ES	1	3919	23	Mixed	Needs repair	No
Bunawan	Elementary School	Daniel M. Perez ES	3	19445	50	Mixed	Needs repair	No
Lasang	Elementary School	AL Navarro CES	2	21984	30	Mixed	Needs repair	No
Lasang	Elementary School	Alfredo A. Aledia Elementary School	1	5000	9	Mixed	Needs repair	No
Lasang	Elementary School	Tambongon ES	1	9000	7	Mixed	Needs repair	No
Bago Aplaya	Elementary School	Dr. Jovito Francisco ES(Camilo Osias ES)	1	2037	13	Mixed	Needs repair	No
Bago Aplaya	Elementary School	Generoso ES	1	5198	14	Mixed	Needs repair	No
Bago Aplaya	Elementary School	RC Quimpo ES	3	6000	17	Mixed	Needs repair	No
Bucana	Elementary School	Cesario Villa Abrille ES	4	4788	69	Mixed	Needs repair	No
Bucana	Elementary School	Kabacan ES	3	1000	46	Mixed	Needs repair	No
Bucana	Elementary School	SIR ES	2	23215	41	Mixed	Needs repair	No
Matina Aplaya	Elementary School	Diego Silang ES	1	620	7	Mixed	Needs repair	No
Matina Aplaya	Elementary School	Matina Aplaya ES	1	8474	37	Mixed	Needs repair	No
Matina Crossing	Elementary School	Don Manuel Gutierrez ES	3	13920	52	Mixed	Needs repair	No
Matina Crossing	Elementary School	New Matina ES	2	450	18	Mixed	Needs repair	No

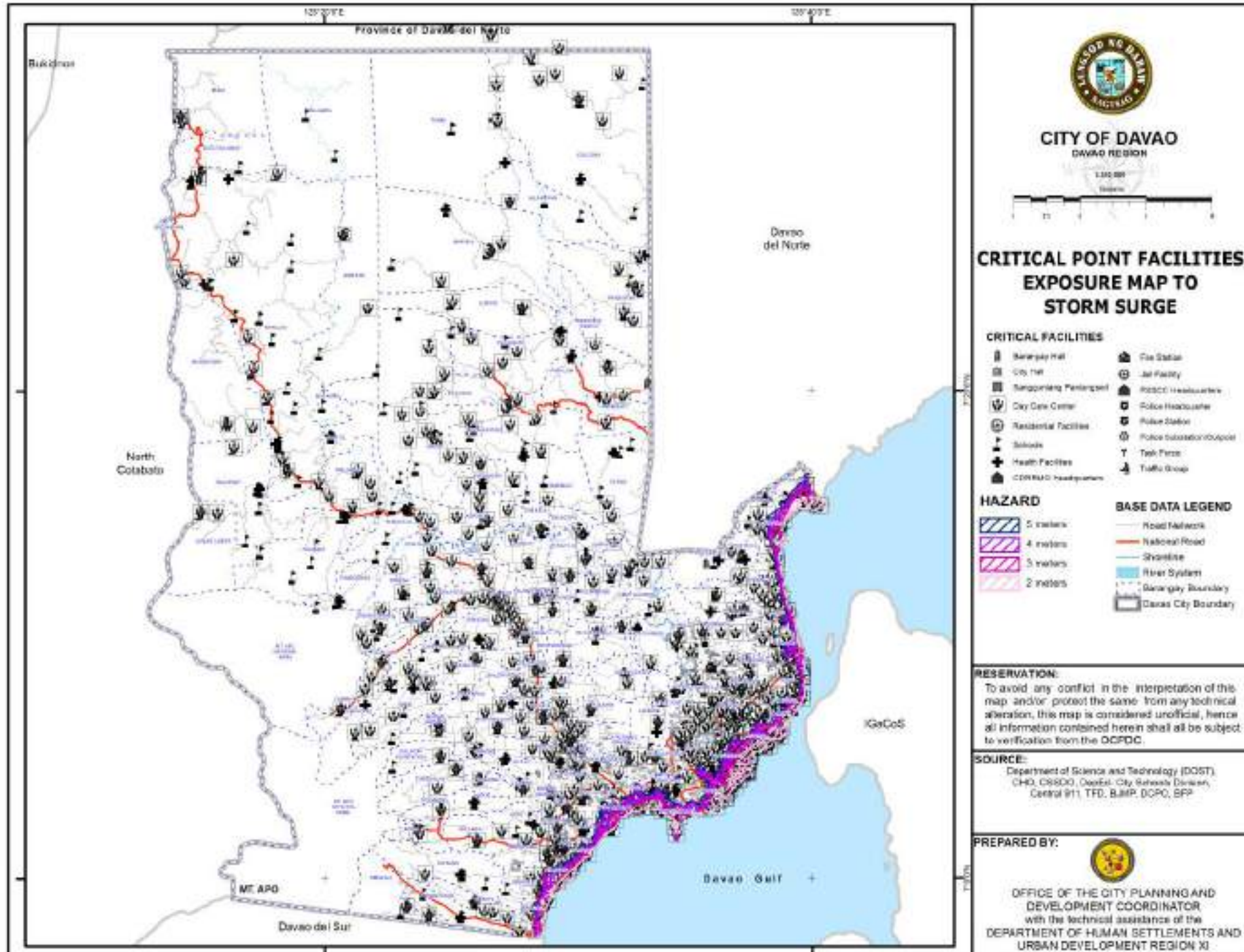
Table CP-2. Critical Point Facilities Exposure to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Talomo Poblacion	Elementary School	Leon A. Garcia Sr. ES	3	2051	22	Mixed	Needs repair	No
Talomo Proper	Elementary School	A. Bonifacio Elem. School	1	10500	25	Mixed	Needs repair	No
Talomo Proper	Elementary School	Doña Soledad Dolor ES	3	15228	24	Mixed	Needs repair	No
Talomo Proper	Elementary School	Talomo CES	4	10500	62	Mixed	Needs repair	No
Daliao	Elementary School	V.S. Bangoy ES	4	4437	22	Mixed	Needs repair	No
Lizada	Elementary School	JV Ferriols ES	3	8000	23	Mixed	Needs repair	No
Sirawan	Elementary School	Sirawan Beach ES	1	40000	14	Mixed	Needs repair	No
Paciano Bangoy	Fire Station	Bangoy Fire Station	2	580	20 persons	wood	critical	no
Tomas Monte-verde	Fire Station	Central Fire Station	3	1587	92 persons	mixed	fair	yes
Sasa	Fire Station	Lanang Fire Station	2	500	12 persons	concrete	fair	yes
Bunawan	Fire Station	Bunawan Fire Station	1	300	14 persons	mixed	poor	no
Panacan	Fire Station	Panacan Fire Station	2	155	14 persons	concrete	poor	no
bucana	Fire Station	SIR Fire Station	2	155	12 persons	mixed	poor	no
Matina Crossing	Fire Station	Talomo Fire Station	2	300	15 persons	mixed	critical	no
38-D	Police Headquarters	Camp Captain Domingo E. Leonor	2	59629	14 facilities	mixed	fair	no
Aliongto	Police Outpost	Damosa Police Outpost	1	5	5 persons	wood	good	no
bucana	Police Outpost	Sandawa Mc Arthur Police Outpost	1	8	6 persons	concrete	fair	no
Matina Aplaya	Police Outpost	Bogser Police Outpost	1	16	6 persons	concrete	fair	no
Matina Crossing	Police Outpost	UM Matina Police Outpost	1	6	4 persons	mixed	fair	no
Talomo	Police Outpost	Talomo Police Outpost	1	12	6 persons	concrete	fair	no
23-C	Police Station	Police Station 1 (Sta. Ana)	3	300	200 persons	concrete	good	yes
Buhangin	Police Station	Police Station 5 (Buhangin)	1	400	150 persons	concrete	good	no
Bunawan	Police Station	Police Station 6 (Bunawan)	1	300	12 persons	concrete	good	no
23-c	Police Sub Station	23-C Police Sub Station	1	25	3 persons	wood	poor	no
31-D	Police Sub Station	31-D Police Sub Station	1	100	10 persons	concrete	good	no
Agdao	Police Sub Station	Agdao Proper Police Sub Station	1	50	10 persons	concrete	good	yes
Leon Garcia	Police Sub Station	Leon Garcia Police Sub Station	1	25	3 persons	wood	poor	no
Tomas Monte-verde	Police Sub Station	Tomas Monteverde Police Sub Station	2	25	3 persons	wood	poor	no

Table CP-2. Critical Point Facilities Exposure to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Ubalde Agdao	Police Sub Station	Ubalde Police Sub Station	1	25	3 persons	wood	poor	no
Ilang	Police Sub Station	Ilang Sub Police Station	1	80	3 persons	concrete	good	no
Lasang	Police Sub Station	Lasang Police Sub Station	2	100	3 persons	concrete	good	no
bucana	Police Sub Station	Sandawa Police Sub Station	1	15	8 persons	concrete	fair	no
MATINA APLAYA	Police Sub Station	Matina Aplaya Police Sub Station	1	8	4 persons	concrete	fair	no
Talomo	Police Sub Station	Ulas Police Sub Station	2	50	20 persons	mixed	fair	no
bucana	PSSCC Headquarters	Public Safety and Security Services	3	8138	N/A	mixed	poor	no
38-D	residential facility	Paginhawaan Drop-In Center	2	300	1 classroom	concrete	good	yes
38-D	residential facility	Quick Response Team for Children's Concern / Kean Gabriel	2	300	1 classroom	concrete	good	yes
Agdao	RHU	Agdao Health Center	2	278.11	N/A	Concrete	Good	No
Sasa	RHU	Sasa Health Center	2	250	N/A	Concrete	Good	Yes
Bunawan	RHU	Bunawan Rural Health Unit	2	373.84	N/A	Concrete	Good	Yes
10-A	Secondary School	Davao City NHS	4	6222	256	Mixed	Needs repair	No
28-C	Secondary School	Sta. Ana NHS	4	14023	72	Mixed	Needs repair	No
28-C	Secondary School	Sta. Ana SHS-Annex	4	1224	72	Mixed	Needs repair	No
Leon Garcia	Secondary School	Leon Garcia Sr. NHS	2	1000	42	Mixed	Needs repair	No
Sasa	Secondary School	F. Bangoy NHS	4	2849	86	Mixed	Needs repair	No
Sasa	Secondary School	F. Bangoy NHS - Annex	4	906		Mixed	Needs repair	No
Lasang	Secondary School	AL Navarro NHS	4	21984	71	Mixed	Needs repair	No
Bucana	Secondary School	Vicenta C. Nograles NHS	4	1200		Mixed	Needs repair	No
Bago Aplaya	Secondary School	Erico Nograles NHS-B	3	2456		Mixed	Needs repair	No
Talomo Proper	Secondary School	Gov. V. Duterte NHS	4	4490	129	Mixed	Needs repair	No
Talomo Proper	Secondary School	Talomo NHS	4	1200	50	Mixed	Needs repair	No
Lizada	Secondary School	JV Ferriols NHS	3	4689	23	Mixed	Needs repair	No
Sirawan	Secondary School	Sirawan NHS(Toril NHS)	3	40867	20	Mixed	Needs repair	No
Sasa	Teen Center	Sasa Health Center		499.4		Concrete	Good	Yes
Lasang	TFD Detachment	Task Group Lawin	1	2256	5 facilities	mixed	good	no
Leon Garcia	TFD Headquarters	Task Force Davao (Task Group Agila)	1	9990	7 facilities	mixed	good	no

Map 3.2 Critical Point Facilities Exposure Map to Storm Surge, Davao City



LANDSLIDE

Critical point facilities exposed to landslide total to 358 wherein 214 have not been fitted with hazard resistant design. Sixty-four (64) are already retrofitted or employed designs that reinforced the design of the structure to increase its adaptive capacity in the occurrence of landslides.

Most of the facilities or 160 are found to be in good condition, 135 facilities need repair, 39 in fair condition, and 20 are in poor condition, thus susceptible to landslides in the areas where the structures are located.

Table CP-3. Critical Point Facilities Exposure to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
TAMBOBONG	Barangay Hall	Tambobong Brgy. Hall	2	184.667	N/A	concrete	good	yes
ACACIA	Barangay Hall	Acacia Brgy. Hall	2	111.403	N/A	concrete	good	yes
GATUNGAN	Barangay Hall	Gatungan Brgy. Hall	2	198.003	N/A	concrete	fair	no
MUDIANG	Barangay Hall	Mudiang Brgy. Hall	2	143.224	N/A	concrete	good	yes
INAYANGAN	Barangay Hall	Inayangan Brgy. Hall	2	167.876	N/A	concrete	good	yes
LAMPIANAOS	Barangay Hall	Lampianao Brgy. Hall	2	56.607	N/A	concrete	good	yes
MEGKAWAYAN	Barangay Hall	Megkawayan Brgy. Hall	2	183.715	N/A	concrete	good	yes
BAGANIHAN	Barangay Hall	Baganihan Brgy. Hall	2	200.835	N/A	concrete	good	yes
BANTOL	Barangay Hall	Bantol Brgy. Hall	2	193.175	N/A	concrete	good	yes
BUDA	Barangay Hall	Buda Brgy. Hall	2	196.615	N/A	concrete	good	yes
DALAG LUMOT	Barangay Hall	Dalag Lumot Brgy. Hall	2	198.44	N/A	concrete	good	yes
DATU SALUMAY	Barangay Hall	Datu Salumay Brgy. Hall	2	201.775	N/A	concrete	good	yes
MAGSAYSAY	Barangay Hall	Magsaysay Brgy. Hall	2	154.502	N/A	concrete	good	yes
MALAMBA	Barangay Hall	Malamba Brgy. Hall	2	224.093	N/A	concrete	good	yes
MARILOG	Barangay Hall	Marilog Brgy. Hall	2	81.587	N/A	concrete	good	yes
SALAYSAY	Barangay Hall	Salaysay Brgy. Hall	2	180.932	N/A	concrete	good	yes
COLOSAS	Barangay Hall	Colosas Brgy. Hall	1	100.007	N/A	concrete	good	yes
FATIMA	Barangay Hall	Fatima Brgy Hall	2	100.762	N/A	concrete	fair	no
LUMIAD	Barangay Hall	Lumiad Brgy Hall	2	100.008	N/A	mixed	fair	no
MABUHAY	Barangay Hall	MABUHAY Barangay Hall	2	153.091	N/A	concrete	good	yes
MALABOG	Barangay Hall	Malabog Brgy. Hall	2	101.466	N/A	concrete	good	yes

Table CP-3. Critical Point Facilities Exposure to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Fatima	Elementary School	Binowang ES		27048	14	Mixed	Needs repair	No
Fatima	Secondary School	Binowang NHS		15000	18	Mixed	Needs repair	No
Buda	Secondary	Buda NHS		18000	20	Mixed	Needs repair	No
Tibungco	Elementary School	Buhisan ES		20831	29	Mixed	Needs repair	No
Tapak	Elementary School	Butay ES		60000	7	Mixed	Needs repair	No
Suawan	Elementary School	Cabagbahangan ES		40000	7	Mixed	Needs repair	No
Dominga	Elementary School	Cabagtukan ES		20000	7	Mixed	Needs repair	No
Cabantian	Elementary School	Cabantian ES		2,000	40	Mixed	Needs repair	No
Malabog	Elementary School	Cabonbon ES		14400	7	Mixed	Needs repair	No
Malabog	Secondary	Cabonbon NHS		235	7	Mixed	Needs repair	No
New Carmen	Elementary School	Carmen ES		15085	9	Mixed	Needs repair	No
Matina Crossing	Elementary School	Ciriaco Mariano ES		1000	8	Mixed	Needs repair	No
Colosas	Elementary School	Colosas ES		20000	7	Mixed	Needs repair	No
Buda	Elementary School	Columbus ES		1000	11	Mixed	Needs repair	No
Mapula	Elementary School	Damilag PS		4000	11	Mixed	Needs repair	No
Dalag Lumot	Elementary School	Datu Duyan ES		2000	9	Mixed	Needs repair	No
Colosas	Elementary School	Datu Libayao ES		36000	14	Mixed	Needs repair	No
Marilog Proper	Elementary School	Datu Lompipi ES		35703	7	Mixed	Needs repair	No
Salapawan	Elementary School	Datu Manlangan ES		20000	7	Mixed	Needs repair	No
Datu Salumay	Elementary School	Datu Salumay ES		55000	8	Mixed	Needs repair	No
Malabog	Elementary School	Don Mariano Marcos ES		1750	7	Mixed	Needs repair	No
Gumitan	Elementary School	Dumalogdog ES		20000	7	Mixed	Needs repair	No
Eden	Secondary School	Elias Lopez Memorial NHS		10000	23	Mixed	Needs repair	No
Malamba	Secondary School	G Astila SNCM HS		10000	15	Mixed	Needs repair	No
Colosas	Elementary School	Galacia ES		36000	7	Mixed	Needs repair	No
Mandug	Elementary School	Galon ES		2865	7	Mixed	Needs repair	No
Gatungan	Elementary School	Gatungan ES		6623	7	Mixed	Needs repair	No
Matina Crossing	Elementary School	GSIS Heights ES		20000	14	Mixed	Needs repair	No
Inayangan	Elementary School	Inayangan ES		11880	17	Mixed	Needs repair	No
Inayangan	Secondary School	Inayangan NHS		11200	6	Mixed	Needs repair	No
Tamugan	Elementary School	Kanacan ES		2467	7	Mixed	Needs repair	No

Table CP-3. Critical Point Facilities Exposure to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Fatima	Elementary School	Binowang ES		27048	14	Mixed	Needs repair	No
Fatima	Secondary School	Binowang NHS		15000	18	Mixed	Needs repair	No
Marilog Proper	Elementary School	Kibalang ES		40012	13	Mixed	Needs repair	No
Malamba	Elementary School	Kibangay ES		30316	9	Mixed	Needs repair	No
Tambobong	Elementary School	Kidali ES		500	7	Mixed	Needs repair	No
Tapak	Elementary School	Labo ES		60000	7	Mixed	Needs repair	No
Tapak	Secondary School	Labo NHS		410	0	Mixed	Needs repair	No
Marilog Proper	Elementary School	Ladian ES		11600	7	Mixed	Needs repair	No
Marilog Proper	Elementary School	Laho ES		1500	7	Mixed	Needs repair	No
Lampianao	Elementary School	Lampianao ES		20000	7	Mixed	Needs repair	No
Marilog Proper	Elementary School	Lapinig ES		326	7	Mixed	Needs repair	No
Pandaitan	Secondary School	Lorenzo Latawan NHS		10000		Mixed	Needs repair	No
Dalag Lumot	Elementary School	Lumatag ES		10000	7	Mixed	Needs repair	No
Lumiad	Elementary School	Lumiad ES		50000	7	Mixed	Needs repair	No
Marilog Proper	Elementary School	Lumondao ES		5000	7	Mixed	Needs repair	No
Malabog	Elementary School	M. Guloman IS(Binaton ES)		30000	7	Mixed	Needs repair	No
Marilog Proper	Elementary School	Mabuhay ES		40000	7	Mixed	Needs repair	No
Magsaysay	Elementary School	Magsaysay ES		43056	8	Mixed	Needs repair	No
Malabog	Elementary School	Malabog CES		24740	18	Mixed	Needs repair	No
Malabog	Secondary School	Malabog NHS		10000	20	Mixed	Needs repair	No
Malabog	Secondary School	Malabog NHS-Annex		292		Mixed	Needs repair	No
Bantol	Elementary School	Malakeba ES		20000	7	Mixed	Needs repair	No
Malamba	Elementary School	Malamba ES		12000	7	Mixed	Needs repair	No
Malabog	Elementary School	Malamboon Integrated School		20850	7	Mixed	Needs repair	No
Marilog Proper	Elementary School	Malikongkong ES		40000	11	Mixed	Needs repair	No
Marilog Proper	Elementary School	Maluan ES		2500	7	Mixed	Needs repair	No
Salaysay	Elementary School	Manaong ES		5000	7	Mixed	Needs repair	No
Tapak	Elementary School	Mangani ES		50000	7	Mixed	Needs repair	No
Tambobong	Elementary School	Mangas-as ES		20000	7	Mixed	Needs repair	No
Malabog	Elementary School	Mangmang & Canoy IS(Crossing Malabog ES)		3000	7	Mixed	Needs repair	No

Table CP-3. Critical Point Facilities Exposure to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Mapula	Elementary School	Mapula ES		20000	11	Mixed	Needs repair	No
Marilog Proper	Secondary School	Marahan NHS		25890	21	Mixed	Needs repair	No
Marilog Proper	Elementary School	Marahan West ES		60000	10	Mixed	Needs repair	No
Marilog Proper	Elementary School	Marilog CES		40000	15	Mixed	Needs repair	No
Datu Salumay	Secondary School	Marilog HS of Agr'l		55000	11	Mixed	Needs repair	No
Marilog Proper	Secondary School	Marilog NHS		21300	11	Mixed	Needs repair	No
Salaysay	Elementary School	Masawang ES		12500	8	Mixed	Needs repair	No
Suawan	Elementary School	Masicampo ES		20000	7	Mixed	Needs repair	No
Megkawayan	Elementary School	Megkawayan ES		2580	15	Mixed	Needs repair	No
Datu Salumay	Elementary School	Misuhumey ES		745	7	Mixed	Needs repair	No
Sibulan	Elementary School	Mt. Apo ES		20214	7	Mixed	Needs repair	No
Sibulan	Secondary School	Mt. Apo NHS		3218		Mixed	Needs repair	No
Mudiang	Elementary School	Mudiang ES		10000	10	Mixed	Needs repair	No
Marilog Proper	Elementary School	Namnam ES		14000	7	Mixed	Needs repair	No
Datu Salumay	Elementary School	Nangalid ES		60000	7	Mixed	Needs repair	No
Marilog Proper	Elementary School	New Sabang ES		10000	7	Mixed	Needs repair	No
Inayangan	Elementary School	Pablo Sebulan ES		10000	7	Mixed	Needs repair	No
Malabog	Elementary School	Pamantawan ES		15540	7	Mixed	Needs repair	No
Marilog Proper	Elementary School	Pamuhatan ES		10000	7	Mixed	Needs repair	No
Colosas	Secondary School	Panaga NHS		17000	16	Mixed	Needs repair	No
Pañalum	Elementary School	Panalum ES		10000	7	Mixed	Needs repair	No
Pandaitan	Elementary School	Pandaitan ES		2000	10	Mixed	Needs repair	No
Pangyan	Elementary School	Pangyan ES		25000	6	Mixed	Needs repair	No
Tamugan	Elementary School	Pangyan ES		25000	6	Mixed	Needs repair	No
Marilog Proper	Elementary School	Panipasan ES		10590	7	Mixed	Needs repair	No
Malabog	Elementary School	Panulawan ES		28682	7	Mixed	Needs repair	No
Paradise Embac	Elementary School	Paradise Embac ES		25191	15	Mixed	Needs repair	No
Paradise Embac	Secondary School	Paradise Embac NHS		1028	19	Mixed	Needs repair	No
Marilog Proper	Elementary School	Patag ES		17000	8	Mixed	Needs repair	No
Tamayong	Elementary School	Pedro P Rodriguez ES (Upper Tamayong ES)		20000	13	Mixed	Needs repair	No
Pandaitan	Elementary School	Pegdalahan ES		40000	7	Mixed	Needs repair	No

Table CP-3. Critical Point Facilities Exposure to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Lamanan	Elementary School	Polocon ES		25000	7	Mixed	Needs repair	No
Inayangan	Elementary School	Popo ES		19900	7	Mixed	Needs repair	No
Daliaon Plantation	Elementary School	Quezon ES		227882000	7	Mixed	Needs repair	No
Dominga	Elementary School	Quibaton ES		20000	4	Mixed	Needs repair	No
Baracatan	Elementary School	Rizal ES		5000	7	Mixed	Needs repair	No
Salapawan	Elementary School	Salapawan ES		10000	7	Mixed	Needs repair	No
Salaysay	Elementary School	Salaysay ES		19994	11	Mixed	Needs repair	No
Salaysay	Secondary School	Salaysay NHS		10000		Mixed	Needs repair	No
Eden	Elementary School	San Jose ES		20000	13	Mixed	Needs repair	No
Marilog Proper	Elementary School	San Jose ES		2000	7	Mixed	Needs repair	No
Fatima	Elementary School	San Pablo ES		10000	7	Mixed	Needs repair	No
Tamugan	Elementary School	Siao ES		20000	7	Mixed	Needs repair	No
Buhangin Proper	Elementary School	St. Jude ES		8881	19	Mixed	Needs repair	No
Fatima	Elementary School	Sta. Maria ES		13000	7	Mixed	Needs repair	No
Marilog Proper	Elementary School	Sto. Niño ES		3500	7	Mixed	Needs repair	No
Marilog Proper	Elementary School	Sumilop ES		20000	7	Mixed	Needs repair	No
Sumimao	Elementary School	Sumimao ES		18990	6	Mixed	Needs repair	No
Sumimao	Secondary School	Sumimao NHS		10000	14	Mixed	Needs repair	No
Colosas	Elementary School	Surayan ES		11946	7	Mixed	Needs repair	No
Megkawayan	Secondary School	T. Singson NHS		10000	21	Mixed	Needs repair	No
Malamba	Elementary School	Taga-ibo ES		20000	7	Mixed	Needs repair	No
Tambobong	Elementary School	Tambobong ES		2000	20	Mixed	Needs repair	No
Tambobong	Secondary School	Tambobong NHS		10000	12	Mixed	Needs repair	No
Tapak	Elementary School	Tapak ES		9000	11	Mixed	Needs repair	No
Tapak	Secondary School	Tapak NHS		488	11	Mixed	Needs repair	No
Tibuloy	Elementary School	Tibuloy ES		21115	10	Mixed	Needs repair	No
Malamba	Elementary School	Titogop ES		77730	7	Mixed	Needs repair	No
Marilog Proper	Elementary School	Upian ES		30000	7	Mixed	Needs repair	No
Salaysay	Elementary School	Upper Masawang ES		24000	7	Mixed	Needs repair	No
Malabog	Elementary School	V. Bontilao Sr. IS (Kapihan ES)		30000	7	Mixed	Needs repair	No
Acacia	BHS	Acacia Health Center	1	35.00	N/A	Concrete	Fair	No

Table CP-3. Critical Point Facilities Exposure to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Atan-Awe	BHS	Atan-Awe	1	81.34	N/A	Concrete	Good	Yes
Bantol	BHS	Bantol	1	136.09	N/A	Concrete	Good	Yes
Catigan	BHS	Catigan	1	34.23	N/A	Concrete	Good	Yes
Dalag Lumot	BHS	Dalag Lumot Health Center	1	171.88	N/A	Concrete	Good	Yes
Daliaon Plantation	BHS	Daliaon Plantation	1	101.58	N/A	Concrete	Fair	No
Mapula	BHS	Damilag BHS	1	100.00	N/A	Concrete	Good	Yes
Eden	BHS	Eden	1	62.54	N/A	Concrete	Good	Yes
Fatima	BHS	Fatima Health Center	1	118.85	N/A	Concrete	Good	Yes
Gatungan	BHS	Gatungan, Health Center	1	349.23	N/A	Concrete	Fair	No
Inayagan	BHS	Inayagan Health Center	1	59.15	N/A	Concrete	Good	Yes
Salapawan	BHS	Kinse-kinse Health Center	1	123.69	N/A	Concrete	Good	Yes
Langub	BHS	Langub Health Center	1	299.10	N/A	Concrete	Fair	No
Lumiad	BHS	Lumiad Health Center	1	77.14	N/A	Concrete	Fair	No
Magsaysay	BHS	Magsaysay	1	72.03	N/A	Concrete	Poor	No
Magtuod	BHS	Magtuod Health Center	1	137.54	N/A	Concrete	Good	Yes
Mahayag	BHS	Mahayag Health Center	1	76.60	N/A	Concrete	Good	Yes
Malabog	Birthing Home	Malabog Lying-In and RHU	1	81.72	N/A	Concrete	Good	Yes
Malamba	BHS	Malamba	1	55.83	N/A	Concrete	Good	Yes
Mapula	BHS	Mapula Health Center	1	63.58	N/A	Concrete	Good	Yes
Marilog	RHU	Marahan RHU with Birthing	2	266.79	N/A	Concrete	Good	Yes
Marilog	Primary Hospital	Marilog District Infirmary	1	1472.64	N/A	Concrete	Good	Yes
Marilog	BHS	Marilog Proper	1	143.36	N/A	Concrete	Fair	No
Marilog	UHC	Marilog Urban Health Center	1	137.99	N/A	Concrete	Good	Yes
Megkawayan	BHS	Megkawayan Health Center	1	75.61	N/A	Concrete	Good	Yes
Langub	BHS	Mojon BHS	1	51.20	N/A	Concrete	Good	Yes
Mudiang	BHS	Mudiang Health Center	1	103.84	N/A	Concrete	Fair	No
New Carmen	BHS	New Carmen	1	36.71	N/A	Concrete	Fair	No
Colosas	BHS	Panaga Health Center	1	390.86	N/A	Concrete	Good	Yes
Pañalum	RHU	Pañalum Health Center	1	279.49	N/A	Concrete	Good	Yes
Pandaitan	BHS	Pandaitan Health Center	1	76.09	N/A	Concrete	Poor	No
Pangyan	BHS	Pangyan Health Center	1	75.40	N/A	Concrete	Good	Yes

Table CP-3. Critical Point Facilities Exposure to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Paradise Embak	BHS	Paradise Embac Health Center	1	202.97	N/A	Concrete	Good	Yes
Salapawan	BHS	Salapawan Health Center	1	41.58	N/A	Concrete	Good	Yes
Salaysay	BHS	Salaysay	1	192.04	N/A	Concrete	Good	Yes
Sibulan	BHS	Sibulan	1	51.79	N/A	Concrete	Good	Yes
Datu Salumay	BHS	Sitio Tagumpay BHS	1	535.95	N/A	Concrete	Good	Yes
Sumimao	BHS	Sumimao Health Center	1	189.08	N/A	Concrete	Good	Yes
Tambobong	BHS	Tambobong Health Center	1	138.64	N/A	Mixed	Poor	No
TIBULOY	BHS	Tibuloy	1	56.46	N/A	Concrete	Fair	No
Tibungco	Birthing Home	Tibungco Lying-In	1	60.00	N/A	Concrete	Good	Yes
Cabantian	Fire Station	Cabantian Fire Station	1	598.00	10 personnel	concrete	fair	Yes
Malabog	Police Station	Police Station 7 (Paquibato)	1	5621.00	100 personnels	concrete	good	Yes
Marilog	Police Station	Police Station 12 (Marilog)	1	600	80 persons	concrete	good	No
Indangan	Police Sub Station	North Town Sub Station	1	120	20 persons	concrete	good	no
Brgy. 19-B	day care center	19-B	1	100	1 classroom	concrete	good	No
Langub	day care center	Langub PHDCC	1	200	1 classroom	concrete	good	No
Ma-a	day care center	GASAI PHDCC	1	85	1 classroom	concrete	good	No
Ma-a	day care center	Nacilla PHDCC	1	200	1 classroom	concrete	fair	No
Magtuod	day care center	Magtuod PHDCC	1	150	1 classroom	light	poor	No
Acacia	day care center	Acacia PHDCC	1	200	1 classroom	concrete	good	No
Acacia	day care center	Upper Sta. Cruz	1	50	1 classroom	mixed	fair	No
Buhangin (Pob.)	day care center	Buhangin Hills DCC	1	242	1 classroom	concrete	good	No
Cabantian	day care center	Greenland 2 DCC	1	130	1 classroom	concrete	good	No
Cabantian	day care center	Green Orchard Village DCC	1	150	1 classroom	concrete	good	No
Cabantian	residential facility	Balay Dangupan Crisis Intervention Center	2	2684	30 beds	concrete	good	Yes
Callawa	day care center	P14 Callawa DCC	1	85	1 classroom	concrete	good	No
Callawa	day care center	Manaklay DCC	1	90	1 classroom	mixed	fair	No
Callawa	day care center	P15 Callawa-IP HB	1	85	1 classroom	concrete	good	No
Tigatto	day care center	Pilar Rodriguez PHDCC	1	80	1 classroom	concrete	fair	No
Mahayag	day care center	Liloan DCC	1	100	1 classroom	concrete	good	No
Mahayag	day care center	Mahayag DCC	1	150	1 classroom	concrete	good	No
Colosas	day care center	Galacia DCC	1	100	1 classroom	concrete	good	No

Table CP-3. Critical Point Facilities Exposure to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Colosas	day care center	Panaga DCC	1	200	1 classroom	light	good	No
Colosas	day care center	Surayan Day Care Center	1	84	1 classroom	light	poor	No
Colosas	day care center	Surayan Day Care Center	1	84	1 classroom	mixed	good	No
Colosas	day care center	Colosas Proper DCC	1	100	1 classroom	concrete	good	No
Fatima (Benawang)	day care center	Fatima DCC	1	120	1 classroom	mixed	good	No
Fatima (Benawang)	day care center	San Pablo DCC	1	84	1 classroom	concrete	good	No
Lumiad	day care center	Lumiad DCC	1	110	1 classroom	concrete	good	No
Mabuhay	day care center	Mabuhay DCC	1	100	1 classroom	concrete	good	No
Mabuhay	day care center	Lawis DCC	1	120	1 classroom	mixed	good	No
Malabog	day care center	Malambo-on DCC	1	110	1 classroom	light	good	No
Malabog	day care center	Taloytoy HB	1	100	1 classroom	mixed	good	No
Malabog	day care center	Quarry DCC	1	95	1 classroom	mixed	good	No
Malabog	day care center	Crossing Malabog DCC	1	84	1 classroom	concrete	good	No
Malabog	day care center	Binaton DCC	1	84	1 classroom	concrete	good	No
Malabog	day care center	Bal-ong Day Care Center	1	84	1 classroom	concrete	good	No
Malabog	day care center	Panulawan DCC	1	112	1 classroom	concrete	good	No
Malabog	day care center	Malabog DCC	1	84	1 classroom	concrete	good	No
Malabog	day care center	Malabog Project Hope DCC	1	110	1 classroom	light	good	No
Malabog	day care center	Cabonbon DCC	1	90	1 classroom	concrete	good	No
Malabog	day care center	Balugo Day Care Center	1	100	1 classroom	light	poor	No
Mapula	day care center	Lower Mapula DCC	1	111	1 classroom	concrete	good	No
Mapula	day care center	Upper Mapula DCC	1	100	1 classroom	mixed	good	No
Pandaitan	day care center	Pegdalahan DCC	1	150	1 classroom	concrete	good	No
Pañalum	day care center	Pañalum DCC	1	200	1 classroom	concrete	good	No
Paquibato	day care center	Alfredo Degamo DCC	1	190	1 classroom	concrete	fair	No
Paradise Embak	day care center	Paradise Embak DCC	1	130	1 classroom	concrete	good	No
Paradise Embak	day care center	Dela Cerna DCC	1	130	1 classroom	mixed	good	No
Salapawan	day care center	Balite DCC	1	110	1 classroom	concrete	poor	No
Sumimao	day care center	Sumimao Day Care Center	1	160	1 classroom	concrete	good	No
Sumimao	day care center	Marcos T. Vistal DCC	1	100	1 classroom	concrete	fair	No

Table CP-3. Critical Point Facilities Exposure to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Malabog	day care center	KTC DCC	1	40	1 classroom	light	poor	No
Malabog	day care center	Pamantawan Day Care Center	1	50	1 classroom	mixed	poor	No
Dominga	day care center	Sitio Quiabaton HB	1	192	1 classroom	light	poor	No
Inayangan	day care center	Inayangan Proper PHDCC	1	400	1 classroom	mixed	good	No
Inayangan	day care center	Sinagmacan PHDCC	1	150	1 classroom	concrete	good	No
Inayangan	day care center	Sitio Galao PHDCC	1	150	1 classroom	mixed	good	No
Inayangan	day care center	Pablo Sebulan PHDCC	1	400	1 classroom	concrete	good	No
Inayangan	day care center	Popo PHDCC	1	600	1 classroom	mixed	good	No
Lacson	day care center	Lacson Riverside PHDCC	1	150	1 classroom	concrete	good	No
Lamanan	day care center	Colabol / Darila PHDCC	1	400	1 classroom	concrete	good	No
Lamanan	day care center	Libongan PHDCC	1	600	1 classroom	concrete	good	No
Lamanan	day care center	Polokon PHDCC	1	200	1 classroom	mixed	good	No
Lamanan	day care center	Upper Libongan HB	1	32	1 classroom	light	fair	No
Megkawayan	day care center	Megkawayan PHDCC	1	250	1 classroom	light	poor	No
Megkawayan	day care center	Purok Mahayag Home Based	1	80	1 classroom	light	poor	No
Pangyan	day care center	Pangyan DCC	1	60	1 classroom	light	poor	No
Saloy	day care center	Purok Salome PHDCC	1	300	1 classroom	concrete	good	No
Saloy	day care center	Sitio Ulas HB	1	48	1 classroom	concrete	good	No
Saloy	day care center	P- Masaya HB	1	40	1 classroom	light	poor	No
Saloy	day care center	P-Bagong Silang HB	1	40	1 classroom	light	poor	No
Tamayong	day care center	Upper Tamayong PHDCC	1	100	1 classroom	mixed	fair	No
Dalag	day care center	Dalag DCC	1	150	1 classroom	light	fair	No
Dalag	day care center	Purok 3 Dalag HB (Dalag Lumot HB)	1	150	1 classroom	mixed	fair	No
Gumitan	day care center	Kapatagan DCC (Kapatagan HB?)	1	300	1 classroom	concrete	good	No
Magsaysay	day care center	Magsaysay DCC	1	350	1 classroom	mixed	fair	No
Magsaysay	day care center	Sitio Imboy HB	1	255	1 classroom	light	fair	No
Magsaysay	day care center	Sitio Lanao HB	1	100	1 classroom	concrete	good	No
Malamba	day care center	Titugop DCC	1	400	1 classroom	concrete	good	No
Malamba	day care center	Malamba DCC	1	100	1 classroom	concrete	good	No
Malamba	day care center	Lanitum DCC	1	500	1 classroom	concrete	good	No

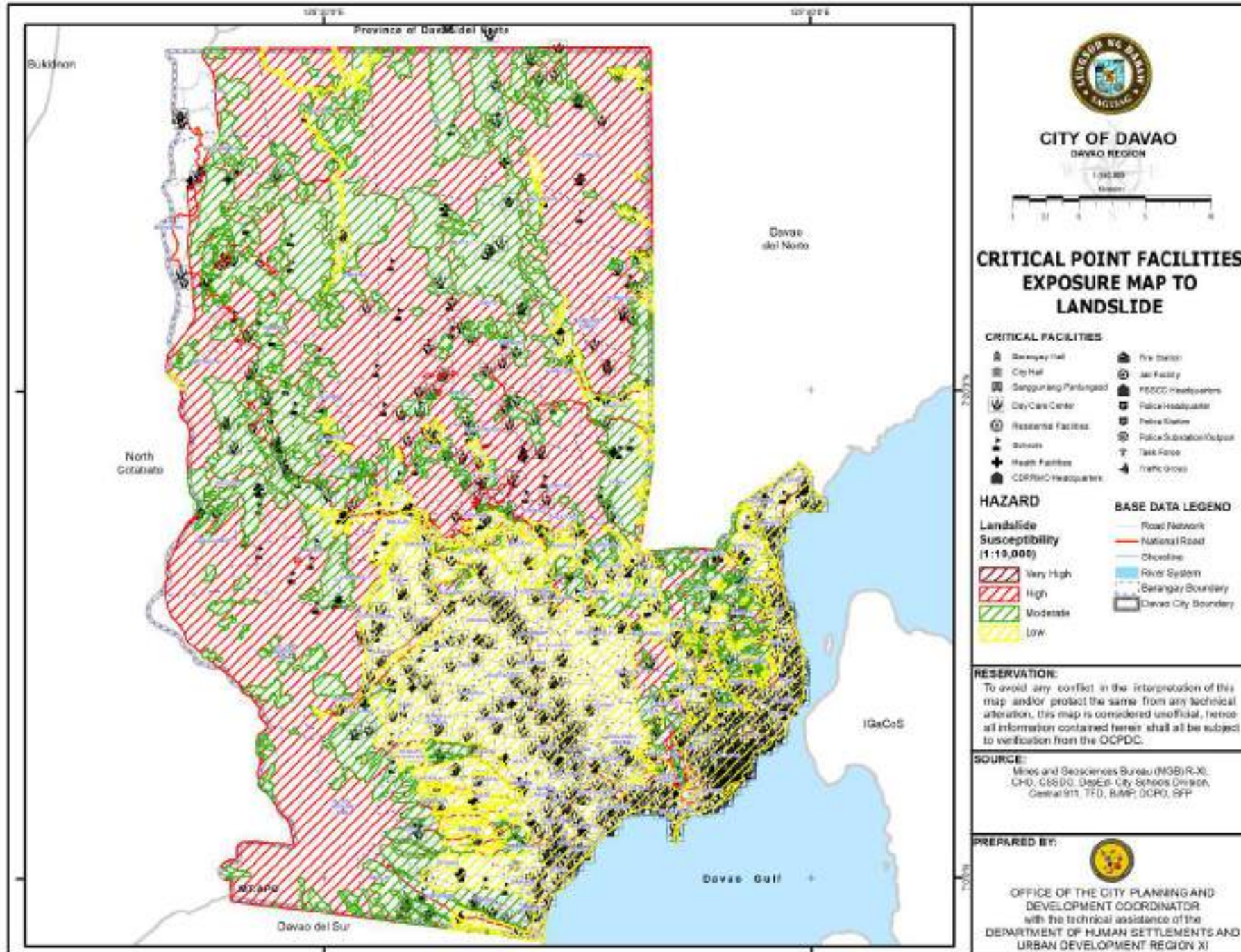
Table CP-3. Critical Point Facilities Exposure to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Malamba	day care center	Sambunotan (AWID) DCC	1	600	1 classroom	mixed	good	No
Malamba	day care center	Lower Malungon HB	1	40	1 classroom	concrete	good	No
Marilog	day care center	Upper Kibalang DCC	1	500	1 classroom	concrete	good	No
Marilog	day care center	Balite DCC	1	200	1 classroom	mixed	good	No
Marilog	day care center	OSCC DCC, Kibalang	1	150	1 classroom	concrete	good	No
Marilog	day care center	Lomondao DCC	1	400	1 classroom	concrete	good	No
Marilog	day care center	Sto. Niño DCC	1	100	1 classroom	concrete	good	No
Marilog	day care center	Malikongkong HB	1	150	1 classroom	mixed	fair	No
Marilog	day care center	Pataga Adonai HB	1	40	1 classroom	light	good	No
Marilog	day care center	East Marahan HB	1	100	1 classroom	light	good	No
Marilog	day care center	Namnam HB	1	150	1 classroom	light	fair	No
Marilog	day care center	Mundo Hill HB	1	400	1 classroom	light	fair	No
Marilog	day care center	Mabuhay HB	1	500	1 classroom	light	good	No
Marilog	day care center	Campo Santos HB	1	60	1 classroom	mixed	good	No
Marilog	day care center	Marilog Proper HB	1	120	1 classroom	mixed	good	No
Marilog	day care center	Panipasan HB	1	300	1 classroom	light	fair	No
Marilog	day care center	Matigsalog HB	1	500	1 classroom	light	good	No
Marilog	day care center	Quimasog DCC	1	288	1 classroom	concrete	good	No
Marilog	day care center	Upian DCC	1	300	1 classroom	light	good	No
Marilog	day care center	Magwawa DCC	1	340	1 classroom	light	fair	No
Marilog	day care center	Sumilop DCC	1	168	1 classroom	concrete	good	No
Marilog	day care center	CSSDO Marilog District Office	1	300	1 classroom	concrete	good	No
Salaysay	day care center	Salaysay DCC	1	300	1 classroom	mixed	fair	No
Salaysay	day care center	Sitio Ballah HB	1	300	1 classroom	concrete	good	No
Salaysay	day care center	Masawang DCC	1	300	1 classroom	concrete	good	No
Salaysay	day care center	Cantimon DCCC	1	80	1 classroom	light	poor	No
Salaysay	day care center	Mahalyang HB	1	96	1 classroom	concrete	good	No
Suawan (Tuli)	day care center	Unapan DCC	1	300	1 classroom	concrete	good	No
Suawan (Tuli)	day care center	Suawan DCC	1	300	1 classroom	light	needsrepair	No
Suawan (Tuli)	day care center	Quirorom DCC (Quirorom HB?)	1	150	1 classroom	mixed	good	No
Suawan (Tuli)	day care center	Lower Happy Valley DCC	1	100	1 classroom	light	fair	No
Suawan (Tuli)	day care center	Balite HB	1	144	1 classroom	light	fair	No

Table CP-3. Critical Point Facilities Exposure to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Suawan (Tuli)	day care center	Masicampo HB	1	200	1 classroom	mixed	good	No
Tamugan	day care center	Lower Tamugan DCC	1	800	1 classroom	mixed	good	No
Tamugan	day care center	Kanacan DCC	1	200	1 classroom	light	poor	No
Tamugan	day care center	Bagobo Village HB	1	100	1 classroom	light	good	No
Tamugan	day care center	Pangyan DCC (Pangyan HB?)	1	360	1 classroom	concrete	good	No
Tamugan	day care center	Siao DCC	1	70	1 classroom	mixed	good	No
Tamugan	day care center	Lower Patag DCC	1	88	1 classroom	mixed	poor	No
Tamugan	day care center	Acacia HB	1	40	1 classroom	concrete	fair	No
Tamugan	day care center	Sabang HB	1	40	1 classroom	light	fair	No
Tamugan	day care center	Tagbao HB	1	300	1 classroom	light	fair	No
Tamugan	day care center	Sualon HB	1	100	1 classroom	mixed	good	No
Tamugan	day care center	Centro Tamugan DCC	1	100	1 classroom	mixed	fair	No
Tamugan	day care center	Sto. Niño DCC	1	150	1 classroom	concrete	fair	No
Atan-awe	day care center	Atan-awe DCC	1	100	1 classroom	concrete	good	No
Binugao	day care center	Binugao PHDCC	1	250	1 classroom	concrete	good	No
Camansi	day care center	Camansi DCC	1	100	1 classroom	concrete	good	No
Catigan	day care center	Acacia DCC	1	150	1 classroom	concrete	good	No
Daliaon Plantation	day care center	Daliaon Plantation DCC I	1	180	1 classroom	concrete	good	No
Eden	day care center	Eden PHDCC I	1	150	2 classroom	concrete	good	No
Ilang	day care center	Liloan DCC	1	100	1 classroom	mixed	good	No
Mahayag	day care center	Mahayag DCC	1	150	1 classroom	concrete	good	No
Mahayag	day care center	Mahayag Riverside DCC	1	150	1 classroom	concrete	good	No
Bunawan	day care center	Mudiang DCC	1	100	1 classroom	concrete	good	No
Bunawan	day care center	K-4 DCC	1	100	1 classroom	concrete	good	No
Lumiad	day care center	Lumiad DCC	1	110	1 classroom	concrete	good	No
Tapak	day care center	Tapak DCC	1	100	1 classroom	concrete	good	No
Tapak	day care center	Tipakis HB	1	84	1 classroom	concrete	good	No
Tapak	day care center	Butay DCC	1	95	1 classroom	concrete	good	No
Tapak	day care center	Labo DCC	1	85	1 classroom	mixed	good	No
Tapak	day care center	Paraiso DCC	1	84	1 classroom	light	poor	No
Tapak	day care center	Mangani Day Care HB	1	90	1 classroom	light	poor	No
Tapak	day care center	Napus-okan DCC	1	90	1 classroom	light	poor	No
Tapak	day care center	Mirol-o HB	1	70	1 classroom	light	poor	No

Map 3.3 Critical Point Facilities Exposure Map to Landslide, Davao City



LIQUEFACTION

The total number of critical point facilities susceptible to liquefaction reach 405 and of the total number, three (3) are in critical condition namely: a day care center in Barangay 15-B, Poblacion, another day care center in Matina Aplaya, and a 2-storey fire station in Paciano Bangoy. A big number of 227 facilities are in good condition while 80 structures need repair. The rest, or 67, are in fair condition, and 28 are in poor condition.

There are 293 structures that are not designed employing hazard resistant means, while 112 facilities have been retrofitted or have adopted other alternatives to improve its condition and degree of susceptibility.

Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
1-A	Barangay Hall	1-A Brgy. Hall	2	87.28	N/A	mixed	fair	no
1-A	BHS	Brgy 1-A Health Center	1	54.40	N/A	Mixed	Fair	Yes
1-A	day care center	Bolton DCC	1	80.00	1 classroom	concrete	fair	No
1-A	Elementary School	Magallanes ES	4	18943.00	124 classrooms	Mixed	Needs repair	No
2-A	Barangay Hall	2-A Brgy. Hall	2	100.00	N/A	concrete	good	yes
2-A	BHS	Brgy. 2-A Health Center	1	118.87	N/A	Concrete	Fair	No
2-A	City Hall	City Hall (Main)	4	1951.64	N/A	concrete	good	yes
2-A	City Hall	Sangguniang Panlungsod	4	3249.64	N/A	concrete	good	yes
2-A	City Hall	City Hall Annex	5	391.44	N/A	concrete	good	yes
2-A	day care center	Magallanes DCC	1	16.00	1 classroom	concrete	fair	No
2-A	Elementary School	Bolton ES	3	10500.00	29 classrooms	Mixed	Needs repair	No
3-A	Barangay Hall	3-A Brgy. Hall	1	64.25	N/A	concrete	good	yes
4-A	Barangay Hall	4-A Brgy. Hall	2	96.76	N/A	concrete	good	yes
4-A	BHS	Teen Center	1	120.00	N/A	Concrete	Good	Yes
4-A	day care center	Brgy 4-A DCC	1	36.00	1 classroom	concrete	good	No
4-A	Elementary School	Kapt. T. Monteverde Sr. CES	3	18870.00	101 classrooms	Mixed	Needs repair	No
4-A	RHU	Tomas Claudio Health Center	2	481.02	N/A	Concrete	Good	Yes

Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
5-A	Barangay Hall	5-A Brgy. Hall	3	172.16	N/A	concrete	good	yes
5-A	BHS	Bankerohan Health Center	1	68.04	N/A	Concrete	Good	Yes
5-A	day care center	Brgy 5-A DCC I	1	36.00	1 classroom	concrete	good	No
5-A	day care center	Brgy 5-A DCC II	1	36.00	1 classroom	concrete	good	No
5-A	day care center	Brgy 5-A DCC III	1	36.00	1 classroom	concrete	good	No
5-A	day care center	Brgy 5-A DCC IV	1	36.00	1 classroom	concrete	good	No
5-A	day care center	Brgy 5-A DCC V	1	36.00	1 classroom	concrete	good	No
5-A	Elementary School	Dona Pilar Marfori ES	4	2600.00	35 classrooms	Mixed	Needs repair	No
7-A	Barangay Hall	7-A Brgy. Hall	3	149.04	N/A	concrete	good	yes
7-A	day care center	Malvar DCC	1	40.00	1 classroom	concrete	fair	No
9-A	Barangay Hall	9-A Brgy. Hall	2	115.48	N/A	concrete	good	yes
9-A	BHS	Brgy.9-A Health Center	1	51.20	N/A	Concrete	Good	Yes
9-A	day care center	Camus DCC (Barangay 9-A)	1	60.00	1 classroom	concrete	good	No
9-A	day care center	San Rafael Day Care Center	1	100.00	1 classroom	mixed	fair	
9-A	day care center	DUHA DCC	1	80.00	1 classroom	light	poor	
9-A	Elementary School	T. Palma Gil Elem. Sch.	1	6202.00	29 classrooms	Mixed	Needs repair	No
11-B	Barangay Hall	11-B Brgy. Hall	2	58.64	N/A	concrete	poor	no
12-B	Barangay Hall	12-B Brgy. Hall	2	101.63	N/A	concrete	good	yes
12-B	BHS	Brgy. 12-B Health Center	1	41.83	N/A	Concrete	Fair	No
12-B	day care center	V. Mapa DCC	1	120.00	1 classroom	concrete	good	No
13-B	Barangay Hall	13-B Brgy. Hall	*	*	N/A	*	*	*
14-B	Barangay Hall	14-B Brgy. Hall	2	33.55	N/A	concrete	good	yes
14-B	BHS	Brgy.14-B Health Center	1	11.04	N/A	Concrete	Fair	No
15-B	Barangay Hall	15-B Brgy. Hall	1	100.00	N/A	mixed	fair	no
15-B	BHS	Brgy. 15-B Health Center	1	6.02	N/A	Concrete	Fair	No
15-B	day care center	Brgy 15 B PHDCC	1	50.00	1 classroom	mixed	critical	No
16-B	Barangay Hall	16-B Brgy. Hall	*	*	N/A	*	*	*
17-B	Barangay Hall	17-B Brgy. Hall	1	51.38	N/A	wood	poor	no
18-B	Barangay Hall	18-B Brgy. Hall	2	122.10	N/A	concrete	good	yes
18-B	BHS	Brgy.18-B Health Center	1	39.44	N/A	Concrete	Fair	No
18-B	day care center	Brgy. 18 DCC Little Angels DCC	1	120.00	1 classroom	concrete	good	No

Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
19-B	day care center	El Rio Vista DCC	1	150.00	1 classroom	concrete	fair	No
19-B	RHU	El Rio Vista Health Center	2	46.02	N/A	Concrete	Good	Yes
20-B	Barangay Hall	20-B Brgy. Hall	2	141.16	N/A	concrete	good	yes
20-B	BHS	Brgy.20-B Health Center	1	46.02	N/A	Concrete	Good	Yes
20-B	day care center	Regina Comp. DCC	1	60.00	1 classroom	concrete	good	No
20-B	Elementary School	E. Quirino ES	2	3500.00	19 classrooms	Mixed	Needs repair	No
20-B	Elementary School	San Roque CES	3	10500.00	65 classrooms	Mixed	Needs repair	No
21-C	Barangay Hall	21-C Brgy. Hall	1	45.42	N/A	concrete	fair	no
21-C	BHS	Brgy.21-C Piapi Health Center	1	30.00	N/A	Concrete	Good	Yes
21-C	day care center	Barangay 21-C PHDCC	1	150.00	1 classroom	concrete	good	
22-C	Barangay Hall	22-C Brgy. Hall	3	270.72	N/A	concrete	good	yes
22-C	BHS	Brgy 22-C Health Center	1	278.75	N/A	Concrete	Fair	No
22-C	day care center	Brgy 22-C DCC	1	100.00	1 classroom	concrete	good	
23-C	Barangay Hall	23-C Brgy. Hall	2	134.65	N/A	concrete	good	yes
23-C	BHS	New BHS / Isla Verde Purok 3B	1	51.85	N/A	Concrete	Good	Yes
23-C	day care center	Mini-Forest DCC	1	60.00	1 classroom	concrete	fair	No
23-C	Day care center (homebased)	Purok 2 Home-Based	1	50.00	1 classroom	light	poor	No
23-C	Day care center (homebased)	Purok 4 A Home-Based	1	50.00	1 classroom	light	poor	No
23-C	Day care center (homebased)	Kabingaag Home Based	1	80.00	1 classroom	light	poor	No
23-C	Day care center (homebased)	Purok 4 b Home-Based I	1	80.00	1 classroom	mixed	fair	No
23-C	Day care center (homebased)	Badjao Home Based	1	60.00	1 classroom	concrete	fair	No
23-C	Elementary School	Zonta Elem. School	3	2681.00	17 classrooms	Mixed	Needs repair	No
23-C	Police Station	Police Station 1 (Sta. Ana)	3	300.00	200 persons	concrete	good	yes
23-C	Police Sub Station	23-C Police Sub Station	1	25.00	3 persons	wood	poor	no
23-C	RHU	Brgy 23-C Mini Forest Health Center	2	361.65	N/A	Concrete	Good	Yes

Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
24-C	Barangay Hall	24-C Brgy. Hall	4	84.69	N/A	concrete	good	yes
24-C	BHS	Brgy 24-C Health Center	1	84.96	N/A	Concrete	Good	Yes
25-C	Barangay Hall	25-C Brgy. Hall	2	25.85	N/A	concrete	good	yes
25-C	BHS	Brgy.25-C Health Center	1	12.93	N/A	Mixed	Poor	No
26-C	Barangay Hall	26-C Brgy. Hall	2	116.91	N/A	concrete	good	yes
26-C	BHS	Brgy.26-C Health Center	1	141.38	N/A	Concrete	Good	No
26-C	day care center	Silangan PHDCC	1	85.00	1 classroom	concrete	good	No
27-C	Barangay Hall	27-C Brgy. Hall	2	42.08	N/A	concrete	good	yes
27-C	BHS	Brgy.27-C Health Center	1	167.03	N/A	Concrete	Good	Yes
27-C	day care center	China Town DCC	1	100.00	1 classroom	concrete	good	
27-C	day care center	Brgy. 27-C PHDCC	1	40.00	1 classroom	concrete	good	No
27-C	UHC	Sta. Ana Health Center	1	550.00	N/A	Concrete	Good	Yes
28-C	Barangay Hall	28-C Brgy. Hall	2	107.56	N/A	concrete	good	yes
28-C	BHS	Brgy.28-C Health Center	1	29.04	N/A	Concrete	Good	Yes
28-C	day care center	Brgay 28 -C PHDCC	1	40.00	1 classroom	concrete	fair	No
28-C	day care center	Rizal Day Care Center	1	100.00	1 classroom	concrete	good	
28-C	Elementary School	Jose Rizal ES	3	9468.00	23 classrooms	Mixed	Needs repair	No
28-C	Elementary School	M. Quezon ES	2	9000.00	34 classrooms	Mixed	Needs repair	No
28-C	Elementary School	Sta. Ana CES	3	15013.00	73 classrooms	Mixed	Needs repair	No
28-C	Elementary School	Manuel Roxas ES	3	3397.00	29 classrooms	Mixed	Needs repair	No
28-C	Secondary School	Sta. Ana NHS	4	14023.00	72 classrooms	Mixed	Needs repair	No
28-C	Secondary School	Sta. Ana SHS-Annex	4	1224.00	72 classrooms	Mixed	Needs repair	No
29-C	Barangay Hall	29-C Brgy. Hall	*	*	N/A	concrete	good	yes
29-C	BHS	Brgy. 29-C Health Center	1	22.04	N/A	Concrete	Good	Yes
30-C	Barangay Hall	30-C Brgy. Hall	2	118.66	N/A	concrete	good	yes
30-C	BHS	Brgy.30-C Health Center	1	31.32	N/A	Concrete	Good	Yes
30-C	day care center	St. Anne DCC	1	33.00	1 classroom	concrete	good	No
31-D	Barangay Hall	31-D Brgy. Hall	2	81.60	N/A	concrete	good	yes
31-D	BHS	Brgy. 31-D Health Center	1	38.71	N/A	Concrete	Good	Yes
31-D	day care center	Roxas 1 DCC	1	100.00	1 classroom	mixed	good	No

Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
31-D	day care center	Roxas 2 DCC	1	100.00	1 classroom	mixed	good	No
31-D	Police Sub Station	31-D Police Sub Station	1	100.00	10 persons	concrete	good	no
32-D	Barangay Hall	32-D Brgy. Hall	2	40.17	N/A	mixed	fair	no
32-D	BHS	Reproductive Health and Wellness Center	1	485.48	N/A	Concrete	Good	Yes
32-D	day care center	Jacinto DCC	1	100.00	1 classroom	concrete	good	No
32-D	RHU	Brgy. 32-D Health Center	2	249.12	N/A	Concrete	Good	Yes
33-D	Barangay Hall	33-D Brgy. Hall	2	77.39	N/A	concrete	good	yes
33-D	day care center	Mabini DCC	1	120.00	1 classroom	concrete	good	No
34-D	Barangay Hall	34-D Brgy. Hall	*	*	N/A	*	*	*
35-D	Barangay Hall	35-D Brgy. Hall	1	89.74	N/A	concrete	good	yes
35-D	BHS	Brgy. 35-D Health Center	1	11.00	N/A	Mixed	Poor	No
35-D	day care center	Brgy 35 D PHDCC	1	120.00	1 classroom	concrete	good	No
36-D	Barangay Hall	36-D Brgy. Hall	2	109.07	N/A	concrete	good	yes
36-D	BHS	Brgy. 36-D Health Center	1	38.88	N/A	Concrete	Good	Yes
36-D	day care center	Brgy 36 Day Care Center	1	20.00	1 classroom	concrete	good	No
37-D	Barangay Hall	37-D Brgy. Hall	2	128.70	N/A	concrete	good	yes
37-D	BHS	Brgy. 37-D Health Center	1	94.12	N/A	Concrete	Good	Yes
37-D	day care center	Brgy. 37-D DCC	1	60.00	1 classroom	concrete	fair	No
38-D	Barangay Hall	38-D Brgy. Hall	2	100.00	N/A	concrete	good	yes
38-D	BHS	Brgy. 38-D Health Center	1	38.94	N/A	Concrete	Good	Yes
38-D	day care center	Brgy 38 D PHDCC	1	60.00	1 classroom	concrete	good	No
38-D	Police Headquarters	Camp Captain Domingo E. Leonor	2	59629.00	14 facilities	mixed	fair	no
38-D	Police Station	Police Station 2 (San Pedro)	1	640.00	100 persons	concrete	good	no
38-D	residential facility	Paginhawaan Drop-In Center	2	200.00	140 persons	concrete	good	Yes
38-D	residential facility	Quick Response Team for Children's Concern / Kean Gabriel	2	200.00	140 persons	concrete	good	Yes
39-D	Barangay Hall	39-D Brgy. Hall	1	93.98	N/A	concrete	fair	no
39-D	BHS	Brgy. 39-D Health Center	1	50.80	N/A	Mixed	Poor	No
39-D	day care center	Brgy 39 D PHDCC	1	60.00	1 classroom	concrete	good	No

Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
39-D	day care center	Child-Minding Center	2	200.00	1 classroom	concrete	good	Yes
40-D	Barangay Hall	40-D Brgy. Hall	2	43.61	N/A	concrete	good	yes
40-D	day care center	Brgy 40 D PHDCC	1	60.00	1 classroom	concrete	good	No
AGDAO PROPER	Barangay Hall	Agdao Brgy. Hall	2	135.96	N/A	concrete	good	yes
Agdao Proper	day care center	San Miguel DCC	1	68.00	1 classroom	concrete	needs repair	No
Agdao Proper	day care center	Sta. Cruz DCC	1	35.00	1 classroom	mixed	needs repair	No
Agdao Proper	day care center	San Isidro DCC	1	65.00	1 classroom	concrete	good	No
Agdao Proper	Elementary School	Agdao ES	2	1007.00	23 classrooms	Mixed	Needs repair	No
Agdao	RHU	Agdao Health Center	2	278.11	N/A	Concrete	Good	Yes
W. Aquino	BHS	Vicente Duterte Health Center	1	345.27	N/A	Concrete	Good	No
Wilfredo Aquino	BHS	Wilfredo Aquino Health Center	1	259.09	N/A	Concrete	Poor	No
Wilfredo Aquino	day care center	Waan PHDCC	1	40.00	1 classroom	mixed	good	No
PACIANO BANGOY	Barangay Hall	P. Bangoy Brgy. Hall	2	165.23	N/A	concrete	fair	no
Paciano Bangoy	BHS	Paciano Bangoy Health Center	1	153.09	N/A	Concrete	Poor	No
Paciano Bangoy	day care center	Cory Village DCC	1	45.00	1 classroom	cocrete	good	No
Paciano Bangoy	day care center	RGA DCC	1	80.00	1 classroom	mixed	good	No
Paciano Bangoy	day care center	Bagong Buhay DCC	1	30.00	1 classroom	mixed	needs repair	No
Wilfredo Aquino	day care center	W. Aquino DCC I	1	80.00	1 classroom	concrete	good	No
Wilfredo Aquino	Elementary School	J. Porras ES	1	5000.00	54 classrooms	Mixed	Needs repair	No
Paciano Bangoy	Fire Station	Bangoy Fire Station	2	580.00	20 persons	wood	critical	no
Agdao Proper	Police Sub Station	Agdao Proper Police Sub Station	1	50.00	10 persons	concrete	good	yes
R. Castillo	Barangay Hall	R. Castillo Brgy. Hall	2	142.15	N/A	concrete	good	yes
R. Castillo	BHS	R.Castillo Health Center	1	144.59	N/A	Concrete	Fair	No
Rafael Castillo	day care center	R. Castillo DCC	1	100.00	1 classroom	concrete	good	No
Centro	Barangay Hall	Centro Brgy. Hall	2	144.23	N/A	concrete	good	yes
Centro	BHS	North San Juan Health Center	1	384.46	N/A	Concrete	Fair	No
Centro	BHS	New BHS	1	119.62	N/A	Concrete	Good	Yes
Centro	BHS	South San Juan Health Center	1	125.95	N/A	Concrete	Poor	No

Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Centro	day care center	Sto. Niño Pelayo DCC	1	72.00	1 classroom	concrete	good	No
Centro	day care center	South San Juan DCC	1	117.00	1 classroom	concrete	good	No
Centro	day care center	North San Juan DCC	1	100.00	1 classroom	concrete	good	No
Centro	day care center	San Miguel DCC	1	100.00	1 classroom	concrete	good	No
Centro	day care center	Sta. Lucia DCC	1	35.00	1 classroom	concrete	needs repair	No
Centro	day care center	New Fatima DCC	1	150.00	1 classroom	concrete	good	No
Centro	Elementary School	San Juan ES	1	2100.00	43 classrooms	Mixed	Needs repair	No
VICENTE DUTERTE	Barangay Hall	V. Duterte Brgy. Hall	2	400.24	N/A	concrete	good	yes
Vicente Duterte	BHS	Vetran Hills Health Center	1	51.20	N/A	Concrete	Good	Yes
Vicente Duterte	day care center	Rotary Club DCC	1	100.00	1 classroom	concrete	good	No
Vicente Duterte	Elementary School	Don Julian Rodriguez ES	1	1500.00	48 classrooms	Mixed	Needs repair	No
LEON GARCIA SR.	Barangay Hall	Leon Garcia Brgy. Hall	2	94.41	N/A	concrete	good	yes
Leon Garcia	BHS	Leon Garcia Health Center	1	68.74	N/A	Concrete	Good	Yes
Leon Garcia	day care center	Baybay DCC	1	40.00	1 classroom	concrete	good	No
Leon Garcia	day care center	GOTAMCO DCC	1	80.00	1 classroom	concrete	good	No
Leon Garcia	day care center	St. Luke DCC	1	70.00	1 classroom	concrete	needs repair	No
Leon Garcia	Elementary School	Manuel M. Garcia ES	1	1807.00		Mixed	Needs repair	No
Leon Garcia	Police Sub Station	Leon Garcia Police Sub Station	1	25.00	3 persons	wood	poor	no
Leon Garcia	Secondary School	Leon Garcia Sr. NHS	3	1000.00	42 classrooms	Mixed	Needs repair	No
Leon Garcia	TFD Headquarters	Task Force Davao (Task Group Agila)	1	9990.00	5 facilities	mixed	good	no
LAPU - LAPU	Barangay Hall	Lapu-Lapu Brgy. Hall	2	202.50	N/A	concrete	good	yes
Lapu-Lapu	BHS	Lapu-Lapu Health Center	1	142.88	N/A	Concrete	Fair	No
Lapu-Lapu	day care center	Lapu-Lapu DCC	1	150.00	1 classroom	concrete	good	No
Lapu-Lapu	day care center	Seaside DCC	1	38.00	1 classroom	mixed	needs repair	No
Lapu-Lapu	day care center	IKP DCC	1	84.00	1 classroom	mixed	good	No
Lapu-Lapu	day care center	Isla Noah DCC	1	30.00	1 classroom	light	needs repair	No
Lapu-Lapu	Elementary School	Lapu-lapu ES	3	4400.00	40 classrooms	Mixed	Needs repair	No
Tomas Monteverde	Barangay Hall	T. Monteverde Brgy. Hall	1	89.50	N/A	concrete	good	yes

Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Tomas Monteverde	BHS	Times Beach Health Center	1	50.23	N/A	Concrete	Good	Yes
Tomas Monteverde	day care center	KTM DCC	1	84.00	1 classroom	concrete	good	No
Tomas Monteverde	Fire Station	Central Fire Station	3	1587.00	92 persons	mixed	fair	yes
Tomas Monteverde	Police Sub Station	Tomas Monteverde Police Sub Station	2	25.00	3 persons	wood	poor	no
SAN ANTONIO	Barangay Hall	San Antonio Brgy. Hall	1	121.56	N/A	concrete	good	yes
San Antonio	BHS	San Antonio Health Center	1	113.82	N/A	Concrete	Poor	No
San Antonio	day care center	San Antonio (NHA) DCC	1	250.00	1 classroom	concrete	good	No
San Antonio	day care center	Ibula DCC	1	42.00	1 classroom	concrete	good	No
San Antonio	day care center	Sto. Niño DCC	1	128.00	1 classroom	concrete	good	No
Ubalde	Barangay Hall	Ubalde Brgy. Hall	2	152.27	N/A	concrete	good	yes
Ubalde	BHS	Ubalde Health Center	1	86.17	N/A	Concrete	Poor	No
V. HIZON	day care center	Ubalde DCC	1	174.00	1 classroom	concrete	good	No
Ubalde	Elementary School	Ubalde Elem. School	1	540.00	19 classrooms	Mixed	Needs repair	No
Ubalde Agdao	Police Sub Station	Ubalde Police Sub Station	1	25.00	3 persons	wood	poor	no
Ubalde	Secondary School	Dona Carmen Denia NHS	3	19550.00	204	Mixed	Needs repair	No
SASA	Barangay Hall	Sasa Brgy. Hall	2	359.48	N/A	concrete	fair	no
Sasa	day care center	Km 11 Sasa PHDCC	1	70.00	1 classroom	concrete	good	No
Sasa	day care center	San Isidro DCC	1	90.00	1 classroom	mixed	good	No
Sasa	day care center	Fatima DCC	1	60.00	1 classroom	mixed	poor	No
Sasa	day care center	ICSAMA DCC	1	256.00	1 classroom	concrete	good	No
Sasa	day care center	Bayview DCC	1	50.00	1 classroom	concrete	good	No
Sasa	Elementary School	F. Bangoy CES SPED Center	1	5000.00	39 classrooms	Mixed	Needs repair	No
Sasa	Elementary School	Osmena ES	3	3851.00	55 classrooms	Mixed	Needs repair	No
Sasa	Fire Station	Lanang Fire Station	2	500.00	12 persons	concrete	fair	yes
Sasa	Police Station	Police Station 4 (Sasa)	1	600.00	300 persons	concrete	poor	no
Sasa	RHU	Sasa Health Center	2	250.00	N/A	Concrete	Good	Yes

Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Sasa	Secondary School	F. Bangoy NHS	4	2849.00	86 classrooms	Mixed	Needs repair	No
Sasa	Secondary School	F. Bangoy NHS - Annex	4	906.00		Mixed	Needs repair	No
Sasa	Teen Center	Sasa Health Center	1	499.40	N/A	Concrete	Good	Yes
Tigatto	day care center	Uyanguren PHDCC I	1	150.00	1 classroom	concrete	good	No
Tigatto	day care center	Uyanguren PHDCC II	1	150.00	1 classroom	concrete	good	No
Tigatto	day care center	Jade Valley PHDCC	1	150.00	1 classroom	concrete	good	No
Tigatto	day care center	Juliville PHDCC	1	150.00	1 classroom	concrete	good	No
Tigatto	day care center	Deca Homes Esperanza	1	100.00	1 classroom	concrete	good	No
Tigatto	Police Sub Station	Tigatto Police Sub Station	1	80.00	8 persons	concrete	good	no
Waan	Barangay Hall	W. Aquino Brgy. Hall	2	101.81	N/A	mixed	fair	no
Alongto	Police Outpost	Damosa Police Outpost	1	5.00	5 persons	wood	good	no
V. HIZON	Barangay Hall	V. Hizon Brgy. Hall	2	293.67	N/A	concrete	good	yes
V, Hizon	BHS	Hizon Health Center	1	107.00	N/A	Concrete	Fair	Yes
V, Hizon	day care center	ALSONS DCC	1	70.00	1 classroom	concrete	good	No
V, Hizon	Elementary School	V. Hizon Elem. Sch.	1	10001.00	63 classrooms	Mixed	Needs repair	No
BUNAWAN	Barangay Hall	Bunawan Brgy. Hall	2	199.52	N/A	concrete	good	yes
Bunawan	day care center	Rhema DCC	1	75.00	1 classroom	light	fair	No
Bunawan	day care center	DCPI 1 & 2 DCC	1	150.00	1 classroom	concrete	good	No
Bunawan	day care center	Damiana DCC	1	100.00	1 classroom	concrete	good	No
Bunawan	day care center	Tesorero DCC	1	60.00	1 classroom	concrete	good	No
Bunawan	day care center	Bunawan Aplaya DCC	1	60.00	1 classroom	concrete	good	No
Bunawan	Elementary School	Bunawan Aplaya ES	3	3919.00	23 classrooms	Mixed	Needs repair	No
Bunawan	Elementary School	Daniel M. Perez ES	2	19445.00	50 classrooms	Mixed	Needs repair	No
Bunawan	Fire Station	Bunawan Fire Station	1	300.00	14 persons	mixed	poor	no
Bunawan	Police Station	Police Station 6 (Bunawan)	1	300.00	12 persons	concrete	good	no
Bunawan	RHU	Bunawan Rural Health Unit	2	373.84	N/A	Concrete	Good	Yes
Ilang	Elementary School	Sixto Babao ES	3	5021.00	25 classrooms	Mixed	Needs repair	No
Ilang	Police Sub Station	Ilang Police Sub Station	1	80.00	3 persons	concrete	good	no
LASANG	Barangay Hall	Lasang Brgy. Hall	2	212.89	N/A	concrete	fair	no
Lasang	BHS	Lasang Health Center	1	193.93	N/A	Concrete	Good	No

Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
A. Navarro (Lasang)	day care center	Tambongon DCC	1	100.00	1 classroom	concrete	good	No
A. Navarro (Lasang)	day care center	Aledia DCC	1	110.00	1 classroom	concrete	good	No
A. Navarro (Lasang)	day care center	Sto. Niño DCC	1	90.00	1 classroom	light	needs repair	No
Lasang	Elementary School	Alfredo A. Aledia Elementary School	3	5000.00	9 classrooms	Mixed	Needs repair	No
Lasang	Elementary School	Tambongon ES	1	9000.00	7 classrooms	Mixed	Needs repair	No
Lasang	Elementary School	AL Navarro CES	3	21984.00	30 classrooms	Mixed	Needs repair	No
Lasang	Elementary School	Dacudao Sr. ES	2	1345.00	8 classrooms	Mixed	Needs repair	No
Lasang	Secondary School	AL Navarro NHS	3	21984.00	71 classrooms	Mixed	Needs repair	No
Lasang	TFD Detachment	Task Group Lawin	1	2256.00	7 facilities	mixed	good	no
PANACAN	Barangay Hall	Panacan Brgy. Hall	2	167.45	N/A	concrete	fair	no
Panacan	BHS	Panacan Proper Health Center	1	89.77	N/A	Concrete	Fair	No
Panacan	BHS	Panacan 13 Health Center	1	100.00	N/A	Concrete	Fair	No
Panacan	day care center	St. John DCC	1	70.00	1 classroom	light	good	No
Panacan	day care center	F.L. Apostol DCC	1	150.00	1 classroom	concrete	good	No
Panacan	day care center	Panacan Trece DCC	1	120.00	1 classroom	concrete	good	No
Panacan	Elementary School	Armed Forces of the Philippines Logistics Command Elementary School	1	3662980.00	45 classrooms	Mixed	Needs repair	No
Panacan	Fire Station	Panacan Fire Station	2	155.00	14 persons	concrete	poor	no
SAN ISIDRO	Barangay Hall	San Isidro Brgy. Hall	2	146.60	N/A	concrete	good	yes
San Isidro	BHS	Kabacan Health Center II	1	51.20	N/A	Concrete	Good	Yes
San Isidro	BHS	Lasang Health Center	1	193.93	N/A	Concrete	Fair	No
San Isidro (Licanan)	day care center	New Millenium DCC	1	150.00	1 classroom	concrete	good	No
San Isidro	Elementary School	Pablo M. Piatos ES	1	16500.00	20 classrooms	Mixed	Needs repair	No

Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
BAGO APLAYA	Barangay Hall	Bago Aplaya Brgy. Hall	2	426.69	N/A	concrete	good	yes
Bago Aplaya	BHS	Bago Aplaya Health Center	1	51.20	N/A	Concrete	Good	Yes
Bago Aplaya	BHS	Gulf View Health Center	1	51.20	N/A	Concrete	Good	Yes
Bago Aplaya	day care center	D'Garden PHDCC	1	46.00	1 classroom	concrete	fair	No
Bago Aplaya	day care center	Gulf View Subd. PHDCC	1	42.00	1 classroom	concrete	good	No
Bago Aplaya	day care center	BLISS PHDCC	1	70.00	1 classroom	concrete	good	No
Bago Aplaya	day care center	Bago Sea side PHDCC	1	42.00	1 classroom	concrete	fair	No
Bago Aplaya	day care center	BALAI, PHDCC	1	75.00	1 classroom	concrete	good	No
Bago Aplaya	day care center	LORAMPCO PHDCC	1	40.00	1 classroom	mixed	fair	No
Bago Aplaya	Elementary School	RC Quimpo ES	3	6000.00	17 classrooms	Mixed	Needs repair	No
Bago Aplaya	Elementary School	Dr. Jovito Francisco ES(Camilo Osias ES)	2	2037.00	13 classrooms	Mixed	Needs repair	No
Bago Aplaya	Elementary School	Generoso ES	2	5198.00	14 classrooms	Mixed	Needs repair	No
Bago Aplaya	Secondary School	Erico Nograles NHS-B	3	2456.00		Mixed	Needs repair	No
Bago Galleria	day care center	Bago Galleria De Oro Home Based	1	100.00	1 classroom	concrete	good	No
Baliok Proper	BHS	Baliok Health Center	1	53.86	N/A	Concrete	Good	Yes
BUCANA	Barangay Hall	Bucana Brgy. Hall	3	98.66	N/A	concrete	good	yes
BUCANA	Barangay Hall	Bucana Brgy. Hall	2	169.80	N/A	mixed	fair	no
Bucana	BHS	Kabacan Health Center I	1	51.20	N/A	Concrete	Good	Yes
Bucana	BHS	Bucana Health Center	1	47.89	N/A	Concrete	Fair	No
Bucana	BHS	St. John Health Center	1	92.49	N/A	Concrete	Good	Yes
Bucana	BHS	Talomo North Health Center RHU	1	338.47	N/A	Concrete	Good	Yes
Bucana	BHS	SIR Phase 2 Health Center	1	41.08	N/A	Concrete	Good	Yes
bucana	CDRRMO Headquarters	City Disaster Risk Reduction and Management Office	2	60.00	N/A	mixed	poor	no
Bucana	day care center	Prk 7 PHDCC	1	148.00	1 classroom	concrete	fair	No

Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Bucana	day care center	Prk 6 PHDCC	1	120.00	1 classroom	concrete	fair	No
Bucana	day care center	Bilusa PHDCC	1	100.00	1 classroom	concrete	fair	No
Bucana	day care center	Kasilak PHDCC	1	150.00	1 classroom	concrete	fair	No
Bucana	day care center	Rosas DCC	1	100.00	1 classroom	concrete	fair	No
Bucana	day care center	St. John PHDCC II	1	85.00	1 classroom	concrete	fair	No
Bucana	day care center	Prk 2 Bucana DCC	1	150.00	1 classroom	mixed	fair	No
Bucana	day care center	Pebsa PHDCC	1	100.00	1 classroom	concrete	fair	No
Bucana	day care center	Kabacan Times Beach DCC	1	36.00	1 classroom	concrete	fair	No
Bucana	day care center	P 32 Holy Trinity DCC	1	30.00	1 classroom	concrete	fair	No
Bucana	day care center	S.I.R Phase 2 PHDCC 3	1	64.00	1 classroom	concrete	fair	No
Bucana	day care center	Sabroso Village PHDCC	1	56.00	1 classroom	concrete	fair	No
Bucana	day care center	Savina DCC	1	45.00	1 classroom	concrete	fair	No
Bucana	day care center	SIR Phase 2 DCC 1	1	36.00	1 classroom	concrete	fair	No
Bucana	day care center	SIR Phase 2 DCC 2	1	36.00	1 classroom	concrete	fair	No
bucana	day care center	W. Aquino DCC 2	1	65.00	1 classroom	concrete	good	No
Bucana	Elementary School	Cesario Villa Abrille ES	3	4788.00	69 classrooms	Mixed	Needs repair	No
Bucana	Elementary School	New Matina ES	4	450.00	18 classrooms	Mixed	Needs repair	No
Bucana	Elementary School	SIR ES	1	23215.00	41 classrooms	Mixed	Needs repair	No
Bucana	Elementary School	Kabacan ES	1	1000.00	46 classrooms	Mixed	Needs repair	No
bucana	Fire Station	SIR Fire Station	2	155.00	12 persons	mixed	poor	no
bucana	Police Outpost	Sandawa Mc Arthur Police Outpost	1	8.00	6 persons	concrete	fair	no
bucana	Police Sub Station	Sandawa Police Sub Station	1	15.00	8 persons	concrete	fair	no
bucana	PSSCC Headquarters	Public Safety and Security Services	3	8138.00	N/A	mixed	poor	no
Bucana	residential facility	Sidlakan Women Crisis Center	2	200.00	30 persons	concrete	good	Yes
Bucana	Secondary School	Vicenta C. Nograles NHS	4	1200.00		Mixed	Needs repair	No
Bucana	TC	Teen Center	1	51.20	N/A	Concrete	Good	Yes

Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Ma-a	day care center	Don Julian PHDCC	1	56.00	1 classroom	concrete	good	No
Ma-a	day care center	P34 South Villa PHDCC	1	48.00	1 classroom	concrete	good	No
Ma-a	day care center	DIHO IV PHDCC	1	56.00	1 classroom	concrete	good	No
Ma-a	day care center	Prk 38 NHA PHDCC	1	250.00	1 classroom	concrete	good	No
Ma-a	day care center	Purok 16 St. Michael DCC	1	380.00	1 classroom	concrete	good	No
Ma-a	day care center	Maharlika PHDCC	1	147.00	1 classroom	concrete	good	No
Ma-a	day care center	New Washington PHDCC	1	250.00	1 classroom	concrete	good	No
Maa	Elementary School	JL Escoda ES	3	2500.00	33 classrooms	Mixed	Needs repair	No
Ma-a	Jail Facility	Main City Jail	1	750.00	44 Cells, 400 Bed Capacity, 400 Inmate Capacity	mixed	good	yes
Ma-a	Jail Facility	Female City Jail	1	400.00	20 Cottage, 200 bed capacity, 200 Inmate Capacity	mixed	good	yes
Ma-a	Jail Facility	Annex City Jail	1	198.00	15 Cells, 116 Bed Capacity, 116 Inmate Capacity	mixed	good	yes
MATINA APLAYA	Barangay Hall	Matina Aplaya Brgy. Hall	2	258.72	N/A	concrete	good	yes
Matina Aplaya	BHS	Matina Aplaya Health Center	1	109.00	N/A	Concrete	Good	Yes
Matina Aplaya	day care center	Dumalag PHDCC	1	200.00	1 classroom	mixed	good	No
Matina Aplaya	day care center	Cristina Village PHDCC	1	90.00	1 classroom	mixed	critical	No
Matina Aplaya	day care center	Malinawon DCC	1	40.00	1 classroom	concrete	good	No
Matina Aplaya	day care center	Shanghai PHDCC	1	75.00	1 classroom	concrete	good	No
Matina Aplaya	day care center	Dumalag PHDCC 3	1	40.00	1 classroom	concrete	good	No
Matina Aplaya	day care center	Seaside II PHDCC	1	54.00	1 classroom	concrete	good	No
Matina Aplaya	day care center	Teacher's Village PHDCC	1	40.00	1 classroom	concrete	good	No
Matina Aplaya	Elementary School	Diego Silang ES	4	620.00	7 classroom	Mixed	Needs repair	No
Matina Aplaya	Elementary School	Matina Aplaya ES	1	8474.00	37 classrooms	Mixed	Needs repair	No
MATINA APLAYA	Police Outpost	Bogser Police Outpost	1	16.00	6 persons	concrete	fair	no

Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
MATINA APLAYA	Police Sub Station	Matina Aplaya Police Sub Station	1	8.00	4 persons	concrete	fair	no
MATINA CROSSING	Barangay Hall	Matina Crossing Brgy. Hall	4	404.94	N/A	concrete	good	yes
Matina Crossing	BHS	Gravahan Health Center	1	21.00	N/A	Concrete	Poor	No
Matina Crossing	BHS	Matina Crossing Health Center	1	410.69	N/A	Concrete	Good	Yes
Matina Crossing	Elementary School	Don Manuel Gutierrez ES	3	13920.00	52 classrooms	Mixed	Needs repair	No
Matina Crossing	Elementary School	Matina CES	1	10737.00	98 classrooms	Mixed	Needs repair	No
Matina Crossing	Elementary School	Bayanihan ES	2	2800.00	14 classrooms	Mixed	Needs repair	No
Matina Crossing	Police Outpost	UM Matina Police Outpost	1	6.00	4 persons	mixed	fair	no
Matina Crossing	Police Station	Police Station 3 (Talomo)	2	200.00	300 persons	concrete	good	no
Matina Crossing	Secondary School	Daniel R. Aguinaldo NHS	4	665881.00	129 classrooms	Mixed	Needs repair	No
MATINA PANGI	Barangay Hall	Matina Pangi Brgy. Hall	3	107.73	N/A	concrete	fair	no
Matina Pangi	BHS	Pangi Health Center	1	63.00	N/A	Concrete	Good	Yes
Matina Pangi	day care center	Km.8 Matina Pangi PHDCC	1	50.00	1 classroom	concrete	good	No
TALOMO	Barangay Hall	Talomo Brgy. Hall	3	334.32	N/A	concrete	good	yes
TALOMO	BHS	NHA Relocation Health Center	1	57.59	N/A	Concrete	Fair	No
TALOMO	BHS	Royal Valley Health Center	1	63.00	N/A	Concrete	Good	Yes
TALOMO	BHS	Talomo Cemento Health Center	1	56.21	N/A	Concrete	Good	Yes
TALOMO	day care center	Kadayawan PHDCC	1	200.00	1 classroom	concrete	good	No
TALOMO	day care center	San Juan PHDCC	1	120.00	1 classroom	concrete	good	No
TALOMO	day care center	Christian Village, PHDCC	1	50.00	1 classroom	concrete	good	No
TALOMO	day care center	Taal Central Park PHDCC	1	40.00	1 classroom	concrete	good	No
TALOMO	day care center	NHA Relocation PHDCC	1	120.00	1 classroom	mixed	good	No
TALOMO	day care center	Talomo PHDCC	1	80.00	1 classroom	concrete	good	No
TALOMO	day care center	Talomo Barangay Hall 1	1	40.00	1 classroom	concrete	good	No
TALOMO	day care center	Mushville PHDC	1	40.00	1 classroom	mixed	good	No
TALOMO	day care center	Gabay Kabataan DCC	1	40.00	1 classroom	concrete	good	No

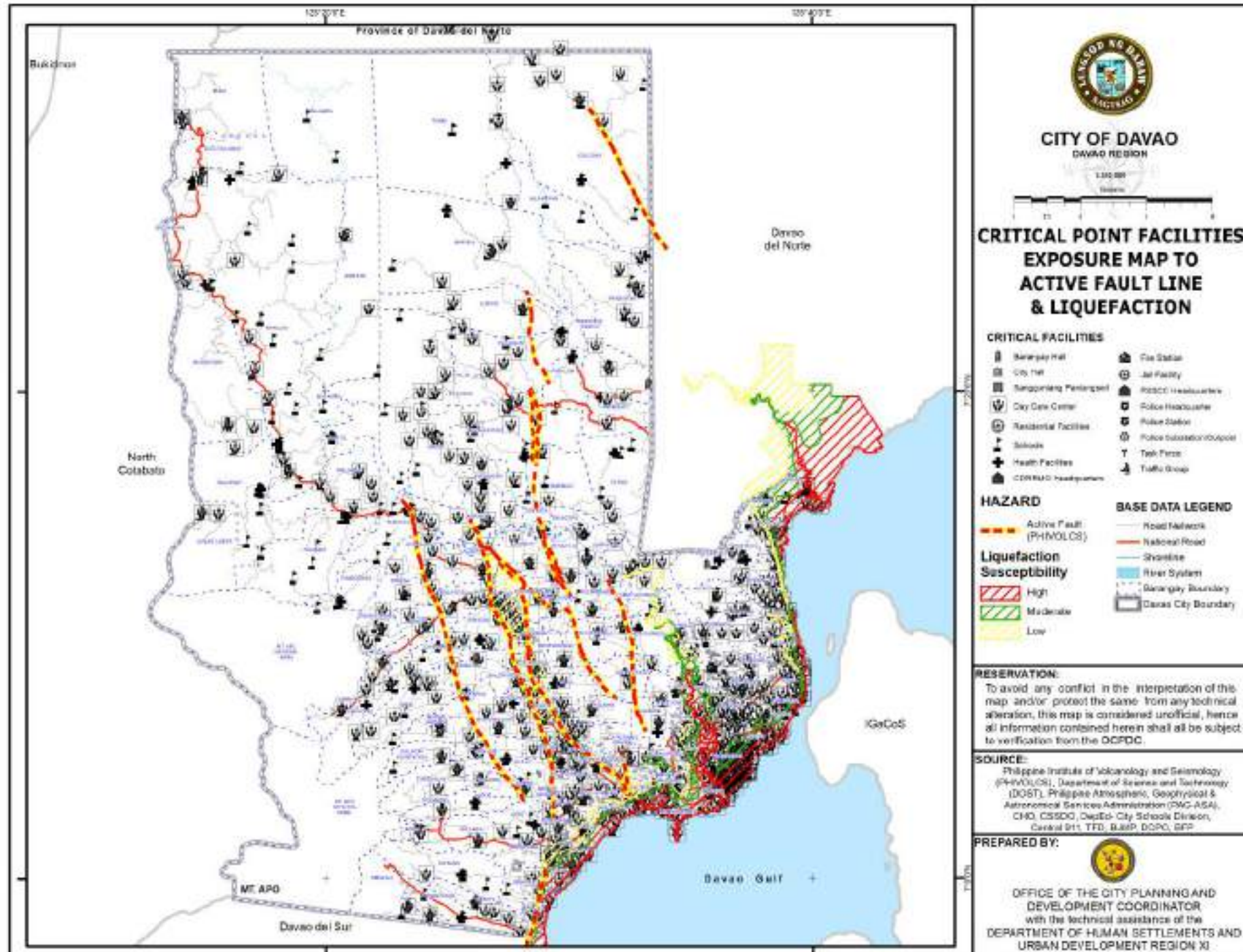
Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
TALOMO	day care center	Kalambuan Home-based	1	30.00	1 classroom	mixed	good	No
TALOMO	Elementary School	Dona Soledad Dolor ES	1	15228.00	24 classrooms	Mixed	Needs repair	No
TALOMO	Elementary School	A. Bonifacio Elem. School	1	10500.00	25 classrooms	Mixed	Needs repair	No
TALOMO	Elementary School	Talomo CES	1	10500.00	62 classrooms	Mixed	Needs repair	No
TALOMO	Elementary School	Leon A. Garcia Sr. ES	1	2051.00	22 classrooms	Mixed	Needs repair	No
TALOMO	Elementary School	A. Mabini ES	3	10000.00	36 classrooms	Mixed	Needs repair	No
Talomo	Police Outpost	Talomo Police Outpost	1	12.00	6 persons	concrete	fair	no
Talomo	Police Sub Station	Ulas Police Sub Station	2	50.00	20 persons	mixed	fair	no
TALOMO	Secondary School	Gov. V. Duterte NHS	4	4490.00	29 classrooms	Mixed	Needs repair	No
TALOMO	Secondary School	Talomo NHS	2	1200.00	50 classrooms	Mixed	Needs repair	No
TALOMO	Secondary School	Mabini NHS	4	5892.00	31 classrooms	Mixed	Needs repair	No
BINUGAO	Barangay Hall	Binugao Brgy Hall	2	303.10	N/A	concrete	good	yes
Binugao	day care center	Central Binugao HB	1	150.00	1 classroom	light	poor	No
Binugao	Elementary School	Binugao CES	3	26267.00	23 classrooms	Mixed	Needs repair	No
Binugao	Secondary School	Binugao NHS	4	10000.00	26 classrooms	Mixed	Needs repair	No
DALIAO	Barangay Hall	Daliao Brgy Hall	2	188.40	N/A	concrete	good	yes
Daliao	day care center	Daliao Proper DCC	1	150.00	1 classroom	concrete	good	No
Daliao	day care center	Daliao Beach DCC	1	150.00	1 classroom	concrete	good	No
Daliao	day care center	St. Jude DCC	1	150.00	1 classroom	concrete	good	No
Daliao	day care center	Prudential DCC	1	180.00	1 classroom	concrete	good	No
Daliao	day care center	Lipadas DCC	1	150.00	1 classroom	concrete	good	No
Daliao	day care center	San Jose DCC	1	150.00	1 classroom	concrete	good	No
Daliao	day care center	FESA DCC	1	150.00	1 classroom	concrete	good	No
Daliao	day care center	Doña Rosa I DCC	1	180.00	1 classroom	concrete	good	No
Daliao	day care center	Rovical DCC	1	150.00	1 classroom	concrete	good	No
Daliao	Elementary School	V.S. Bangoy ES	3	4437.00	22 classrooms	Mixed	Needs repair	No
Daliao	Elementary School	Sta. Clara ES	1	5036.00	34 classrooms	Mixed	Needs repair	No
Daliao	Elementary School	Ramon F. Magsaysay ES	2	20273.00	47 classrooms	Mixed	Needs repair	No
LIZADA	Barangay Hall	Lizada Brgy Hall	2	168.33	N/A	concrete	good	yes

Table CP-4. Critical Point Facilities Exposure to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design
Lizada	day care center	Lizada Proper DCC	1	200.00	1 classroom	concrete	good	No
Lizada	day care center	NLPL DCC	1	160.00	1 classroom	concrete	good	No
Lizada	day care center	Maharlika DCC	1	138.00	1 classroom	concrete	poor	No
Lizada	day care center	New Lizada DCC	1	150.00	1 classroom	concrete	good	No
Lizada	day care center	Curvada DCC	1	100.00	1 classroom	concrete	good	No
Lizada	day care center	`KASAMA DCC	1	150.00	1 classroom	concrete	good	No
Lizada	Elementary School	JV Ferriols ES	3	8000.00	23 classrooms	Mixed	Needs repair	No
Lizada	Secondary School	JV Ferriols NHS	2	4689.00	23 classrooms	Mixed	Needs repair	No
Sirawan	day care center	NRDP	1	300.00	1 classroom	concrete	good	No
Sirawan	day care center	Sirawan Beach DCC	1	300.00	1 classroom	concrete	good	No
Sirawan	Elementary School	Sirawan Beach ES	2	40000.00	14 classrooms	Mixed	Needs repair	No
Sirawan	Secondary School	Sirawan NHS(Toril NHS)	4	40867.00	20 classrooms	Mixed	Needs repair	No
Toril	Police Outpost	Shell Toril Police Outpost	1	5.00	5 persons	wood	good	no
Toril Poblacion	BHS	Tomas Monteverde Health Center	1	87.71	N/A	Concrete	Good	Yes
Toril Poblacion	Elementary School	Don Juan Dela Cruz CES	3	14985.00	112 classroom	Mixed	Needs repair	No

Map 3.4 Critical Point Facilities Exposure Map to Active Fault Line & Liquefaction, Davao City



DEGREE OF IMPACT RATING

Every structure identified in the succeeding tables have been determined to be exposed to different elements in varying extent and it is necessary to estimate the degree of the impact to critical point facilities. Information gathered will give the City Government of Davao a clearer picture of how much damage every element can do to exposed facilities which will facilitate the determination of cost, intervention, and resources necessary to improve existing structures.

FLOOD

There are 16 structures that are estimated to have impact scores of 3 or high in terms of degree of impact once flooding will take place. None of said structures employed hazard resistant design contributing to its rate of sensitivity to flood. The facilities having an impact rating of 3 are barangay health stations (6), police outposts (5), (3) day care centers, (1) barangay hall, and (1) fire station.

Table CP-5. Critical Point Facilities, Degree of Impact Rating to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
1-A	Barangay Hall	1-A Brgy. Hall	2	87.28	N/A	mixed	fair	no	3
1-A	BHS	Brgy 1-A Health Center	1	54.40	N/A	Concrete	Fair	Yes	2
1-A	day care center	Brgy. 1-A Day Care Center	1	80	1 classroom	concrete	fair	no	2
1-A	Elementary School	Bolton ES	3	10500	29 classrooms	Mixed	Needs repair	Yes	2
2-A	Barangay Hall	2-A Brgy. Hall	2	100.00	N/A	concrete	fair	no	2
2-A	BHS	Brgy. 2-A Health Center	1	118.87	N/A	Mixed	Fair	No	2
2-A	day care center	Project Hope DCC, Brgy 2-A	2	16	1 classroom	concrete	fair	no	1
5-A	day care center	Bankerohan Project Hope DCC 1, Brgy 5-A	2	36	1 classroom	concrete	good	no	1
5-A	day care center	Bankerohan Project Hope DCC 2, Brgy 5-A	2	36	1 classroom	concrete	good	no	1
5-A	day care center	Bankerohan Project Hope DCC 3, Brgy 5-A	2	36	1 classroom	concrete	good	no	1
5-A	day care center	Bankerohan Project Hope DCC 4, Brgy 5-A	2	36	1 classroom	concrete	good	no	1
5-A	day care center	Bankerohan Project Hope DCC 5, Brgy 5-A	2	36	1 classroom	concrete	good	no	1
5-A	Elementary School	Dona Pilar Marfori ES	2	2600	35 classrooms	Mixed	Needs repair	Yes	2.5

Table CP-5. Critical Point Facilities, Degree of Impact Rating to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
8-A	day care center	Mother Ignacia DCC, Brgy 8-A	1	45	1 classroom	concrete	good	no	2
15-B	day care center	Brgy.15-B, DCC	1	50	1 classroom	mixed	good	no	2
19-B	day care center	Mineral Village DCC, Brgy 19-B	1	100	1 classroom	mixed	fair	no	2
19-B	day care center	El Rio DCC, Brgy 19-B	1	100	1 classroom	mixed	critical	no	3
19-B	Elementary School	Don Francisco S. Dizon Sr.	3	8781	26 classrooms	Mixed	Needs repair	Yes	1.5
19-B	RHU	EL Rio Vista Health Center (RHU)	2	51.2	N/A	Concrete	Good	Yes	1
22-C	BHS	Brgy 22-C Health Center	1	278.75	N/A	Mixed	Fair	No	2
23-C	BHS	Brgy 23-C Health Center	1	51.85	N/A	Concrete	Good	Yes	1
23-C	day care center	Purok 4 b Home-Based I	1	80	1 classroom	mixed	fair	no	2
23-C	day care center	Badjao Home Based	1	60	1 classroom	concrete	fair	no	2
23-C	Elementary School	Zonta Elem. School	4	2681	17 classrooms	Mixed	Needs repair	Yes	2
24-C	BHS	Brgy 24-C Health Center	1	84.96	N/A	Concrete	Good	Yes	1
27-C	UHC	Sta. Ana Health Center	1	30	N/A	Concrete	Good	Yes	1
37-D	day care center	Brgy. 37-D DCC	1	60	1 classroom	concrete	fair	no	2
37-D	Secondary School	Erico Nograles NHS-A	4	450	41 classrooms	Mixed	Needs repair	Yes	2
39-D	Barangay Hall	39-D Brgy. Hall	1	93.98	N/A	concrete	fair	no	2
39-D	day care center	Brgy 39 D PHDCC	1	60	1 classroom	concrete	good	no	1
40-D	Barangay Hall	40-D Brgy. Hall	2	43.61	N/A	concrete	good	yes	1
AGDAO PROPER	Barangay Hall	Agdao Brgy. Hall	2	135.96	N/A	concrete	good	yes	1
AGDAO PROPER	day care center	San Isidro DCC	1	65	1 classroom	concrete	good	no	1
AGDAO PROPER	Elementary School	Agdao ES	2	1007	23 classrooms	Mixed	Needs repair	Yes	1.5
AGDAO PROPER	RHU	Agdao Health Center	2	550	N/A	Concrete	Good	Yes	1
W. AQUINO	Barangay Hall	W. Aquino Brgy. Hall	2	101.81	N/A	mixed	fair	no	3

Table CP-5. Critical Point Facilities, Degree of Impact Rating to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
W. AQUINO	BHS	Wilfredo Aquino Health Center	1	259.09	N/A	Concrete	Poor	No	3
W. AQUINO	day care center	W. Aquino 1	1	80	1 classroom	concrete	good	no	1
P. BANGOY	day care center	RGA DCC	1	80	1 classroom	mixed	good	no	1
P. BANGOY	day care center	Bagongbuhay DCC	1	80	1 classroom	mixed	good	no	1
P. BANGOY	Police Sub Station	Paciano Bangoy Police Sub Station	1	665881	3 persons	wood	poor	No	3
R. CASTILLO	Barangay Hall	Ubalde Brgy. Hall	2	142.15	N/A	concrete	good	yes	1
UBALDE	Police Sub Station	Ubalde Police Sub Station	1	1200	3 persons	wood	poor	No	3
CENTRO	Barangay Hall	Centro Brgy. Hall	2	144.23	N/A	concrete	good	yes	1
CENTRO	BHS	South San Juan Health Center	1	125.95	N/A	Concrete	Poor	No	3
CENTRO	day care center	South San Juan DCC	1	117	1 classroom	concrete	good	no	1
CENTRO	day care center	North San Juan DCC	1	100	1 classroom	concrete	good	no	1
CENTRO	day care center	San Miguel Centro DCC	1	100	1 classroom	concrete	good	no	1
CENTRO	day care center	New Fatima DCC	1	100	1 classroom	concrete	good	no	1
CENTRO	Elementary School	San Juan ES	3	2100	43	Mixed	Needs repair	Yes	1.5
V. DUTERTE	day care center	Rotary Club DCC	1	100	1 classroom	concrete	good	no	1
L. GARCIA SR.	Barangay Hall	Leon Garcia Brgy. Hall	2	94.41	N/A	concrete	good	yes	1
L. GARCIA SR.	BHS	Leon Garcia Health Center	1	53.97	N/A	Concrete	Good	Yes	1
L. GARCIA SR.	day care center	Baybay DCC	1	55	1 classroom	mixed	good	no	1
L. GARCIA SR.	day care center	Gotamco DCC	1	80	1 classroom	concrete	good	no	1
L. GARCIA SR.	Elementary School	Manuel M. Garcia ES	2	1807		Mixed	Needs repair	Yes	2
L. GARCIA SR.	Police Sub Station	Leon Garcia Police Sub Station	1	4490	42 classrooms	wood	poor	No	3
L. GARCIA SR.	Secondary School	Leon Garcia Sr. NHS	2	1000	7 facilities	Mixed	Needs repair	Yes	2
L. GARCIA SR.	TFD Headquarters	Task Force Davao (Task Group Agila)	1	5	3 persons	mixed	good	no	2

Table CP-5. Critical Point Facilities, Degree of Impact Rating to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
LAPU-LAPU	day care center	IKP DCC	1	200	1 classroom	mixed	good	no	1
LAPU-LAPU	day care center	Seaside DCC	1	84	1 classroom	mixed	dilapidated	no	3
LAPU-LAPU	Elementary School	Lapu-lapu ES	4	4400	40 classrooms	Mixed	Needs repair	Yes	2
T. MONTE-VERDE	Barangay Hall	T. Monteverde Brgy. Hall	1	89.50	N/A	concrete	good	yes	1
T. MONTE-VERDE	BHS	Tomas Monteverde Health Center	1	87.71	N/A	Concrete	Good	Yes	1
T. MONTE-VERDE	day care center	KTM DCC	1	84	1 classroom	concrete	good	no	1
T. MONTE-VERDE	Police Sub Station	Tomas Monteverde Police Sub Station	2	27389	3 persons	wood	poor	No	3
GUMALANG	Barangay Hall	Gumalang Brgy. Hall	2	172.78	N/A	concrete	good	yes	1
GUMALANG	BHS	Gumalang Health Center	1	141.13	N/A	Mixed	Poor	No	3
GUMALANG	day care center	Gumalang Proper DCC	1	150	1 classroom	concrete	good	no	1
GUMALANG	Elementary School	Gumalang ES	3	2000	17 classrooms	Mixed	Needs repair	Yes	1.5
BUHANGIN	day care center	Sandawa Phase 2 DCC	1	150	1 classroom	concrete	good	no	1
MANDUG	day care center	DDF Village Mandug DCC	1	400	1 classroom	concrete	good	no	1
PAMPANGA	Barangay Hall	Pampanga Brgy. Hall	2	198.22	N/A	concrete	good	yes	1
PAMPANGA	BHS	Pampanga Health Center	1	171.56	N/A	Concrete	Good	Yes	1
PAMPANGA	BHS	New BHS	1	57.96	N/A	Concrete	Good	Yes	1
SASA	day care center	St. Martin Day Care Center	1	120	1 classroom	concrete	good	no	1
SASA	day care center	AHSAI Day Care Center	1	80	1 classroom	concrete	good	no	1
SASA	day care center	Sunbeam Day Care Center	1	200	1 classroom	concrete	good	no	1
SASA	Police Station	Police Station 4 (Sasa)	1	20000	86 classrooms	concrete	poor	no	2
SASA	Secondary School	F. Bangoy NHS	4	200		Mixed	Needs repair	Yes	1.5
SASA	Secondary School	F. Bangoy NHS - Annex	4	600	300 personnel	Mixed	Needs repair	Yes	1.5
TIGATTO	Barangay Hall	Tigatto Brgy. Hall	2	225.54	N/A	concrete	good	yes	1

Table CP-5. Critical Point Facilities, Degree of Impact Rating to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
TIGATTO	day care center	Uyanguren PHDCC 1	1	150	1 classroom	concrete	good	no	1
TIGATTO	day care center	Uyanguren PHDCC 2	1	150	1 classroom	concrete	good	no	1
TIGATTO	day care center	Jade Valley DCC	1	150	1 classroom	concrete	good	no	1
WAAN	day care center	Waan PHDCC	1	40	1 classroom	mixed	good	no	1
A. ANGLI-ONGTO	Barangay Hall	Angliongto Brgy. Hall	2	114.82	N/A	concrete	good	yes	1
V. HIZON	Barangay Hall	V. Hizon Brgy. Hall	2	293.67	N/A	concrete	good	yes	1
V. HIZON	Elementary School	V. Hizon Elem. Sch.	3	10001	63 classrooms	Mixed	Needs repair	Yes	1.5
V. HIZON	BHS	Hizon Health Center	1	107	N/A	Concrete	Good	Yes	1
BUNAWAN	day care center	DCPI 1&2 DCC	1	150	1 classroom	concrete	good	no	1
BUNAWAN	Elementary School	Bunawan Aplaya ES	1	3919	23 classrooms	Mixed	Needs repair	Yes	2.5
LASANG	day care center	Tambongon DCC	1	100	1 classroom	concrete	good	no	1
LASANG	day care center	Alfredo A. Aledia Day Care Center	1	110	1 classroom	concrete	good	no	1
LASANG	Elementary School	AL Navarro CES	3	21984	30 classrooms	Mixed	Needs repair	Yes	1.5
LASANG	Elementary School	Tambongon ES	1	5000	9 classrooms	Mixed	Needs repair	Yes	2
LASANG	Elementary School	Alfredo A. Aledia Elementary School	1	9000	7 classrooms	Mixed	Needs repair	Yes	2.5
PANACAN	Barangay Hall	Panacan Brgy. Hall	2	167.45	N/A	concrete	fair	no	2
PANACAN	Elementary School	Armed Forces of the Philippines Logistics Command Elementary School	2	3662980	45 classrooms	Mixed	Needs repair	Yes	2
TIBUNGCO	Barangay Hall	Tibungco Brgy. Hall	2	263.22	N/A	concrete	good	yes	1
BIAO JOAQUIN	Barangay Hall	Biao Joaquin Brgy. Hall	2	191.78	N/A	concrete	good	yes	1
BIAO JOAQUIN	BHS	Biao Joaquin Health Center	1	108.39	N/A	Concrete	Good	Yes	1
BIAO JOAQUIN	day care center	Biao Joaquin PHDCC	1	200	1 classroom	concrete	good	no	1
BIAO JOAQUIN	Elementary School	Joaquin ES	1	12000	14 classrooms	Mixed	Needs repair	Yes	1.5

Table CP-5. Critical Point Facilities, Degree of Impact Rating to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
CALINAN	BHS	Calinan Subcenter	1	342.65	N/A	Mixed	Poor	No	3
CALINAN	day care center	Sunflower PHDCC	1	180	1 classroom	concrete	fair	no	1
CALINAN	day care center	Waling-Waling PHDCC	1	150	1 classroom	concrete	good	no	1
CALINAN	day care center	Narcon DCC	1	300	1 classroom	concrete	good	no	1
CALINAN	day care center	Anthurium PHDCC	1	300	1 classroom	concrete	good	no	1
CALINAN	day care center	Sampaguita PHDCC	1	200	1 classroom	mixed	fair	no	2
CALINAN	day care center	Balite / San Pedro PHDCC	1	160	1 classroom	mixed	fair	no	2
CALINAN	day care center	Peñano St. PHDCC	1	100	1 classroom	mixed	fair	no	2
CALINAN	day care center	San Roque DCC (Bagobo Vill)	1	60	1 classroom	mixed	fair	no	2
CALINAN	day care center	Isaguirre DCC	1	120	1 classroom	light	critical	no	3
CALINAN	Elementary School	Calinan CES	4	18075	65 classrooms	Mixed	Needs repair	Yes	1.5
CALINAN	Elementary School	Lt C Villafuerte ES	4	60882	51 classrooms	Mixed	Needs repair	Yes	1.5
CALINAN	Fire Station	Calinan Fire Station	2	124.06	N/A	concrete	fair	yes	2
CALINAN	Police Station	Police Station 10 (Calinan)	2	1200	124 classrooms	concrete	good	yes	1
CALINAN	Police Sub Station	Calinan Police Sub Station	1	17000	15 personnel	concrete	good	Yes	1
CALINAN	RHU	Calinan Pob. Rurak Health Unit	2	510	100 persons	Concrete	Good	Yes	1
CALINAN	Secondary School	Calinan NHS	4	1000	10 persons	Mixed	Needs repair	Yes	1.5
DACUDAO	Barangay Hall	Dacudao Brgy. Hall	2	194.16	N/A	concrete	good	yes	1
DACUDAO	BHS	Dacudao Health Center	1	136.67	N/A	Concrete	Good	Yes	1
DALAGDAG	Elementary School	Dalagdag ES	1	20000	7 classrooms	Mixed	Needs repair	Yes	1.5
DOMINGA	Barangay Hall	Dominga Brgy. Hall	2	193.22	N/A	concrete	good	yes	1
DOMINGA	Elementary School	Dominga ES	3	20000	7 classrooms	Mixed	Needs repair	Yes	1.5
INAYANGAN	Elementary School	Popo ES	1	19900	7 classrooms	Mixed	Needs repair	Yes	1.5

Table CP-5. Critical Point Facilities, Degree of Impact Rating to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
LACSON	TFD Detachment	Task Group Falcon	1	16	5 facilities	mixed	good	no	2
LAMANAN	Elementary School	Lamanan ES	3	18000	14 classrooms	Mixed	Needs repair	Yes	1.5
LAMANAN	Secondary School	Lamanan NHS	3	300	17 classrooms	Mixed	Needs repair	Yes	1.5
RIVERSIDE	Barangay Hall	Riverside Brgy. Hall	2	114.47	N/A	concrete	good	yes	1
RIVERSIDE	BHS	Riverside Health Center	1	173.34	N/A	Concrete	Fair	Yes	2
RIVERSIDE	Elementary School	Riverside ES	1	16041	16 classrooms	Mixed	Needs repair	Yes	2
SALOY	Barangay Hall	Saloy Brgy. Hall	2	177.97	N/A	concrete	good	yes	1
SALOY	BHS	Saloy Health Center	1	109.81	N/A	Concrete	Good	Yes	1
SALOY	Elementary School	Saloy ES	1	19241	10 classrooms	Mixed	Needs repair	Yes	1.5
SIRIB	Elementary School	Sirib ES	1	64470	11 classrooms	Mixed	Needs repair	Yes	1.5
SIRIB	Secondary School	Sirib NHS	3	750	18 classrooms	Mixed	Needs repair	Yes	1.5
SUBASTA	Barangay Hall	Subasta Brgy.Hall	2	196.88	N/A	concrete	good	yes	1
SUBASTA	BHS	Subasta Health Center	1	233.63	N/A	Concrete	Good	Yes	1
TALOMO RIVER	Barangay Hall	Talomo River Brgy. Hall	2	118.10	N/A	concrete	good	yes	1
TALOMO RIVER	Elementary School	Quirino ES	3	9000	14 classrooms	Mixed	Needs repair	Yes	1.5
TAMUGAN	Barangay Hall	Tamugan Brgy. Hall	2	214.50	N/A	concrete	good	yes	1
TAMUGAN	BHS	Tamugan	1	75	N/A	Concrete	Good	Yes	1
TAMUGAN	Elementary School	Lower Tamugan ES	1	20000	26 classrooms	Mixed	Needs repair	Yes	1.5
TAMUGAN	Elementary School	Pagan Grande ES	3	2024	7 classrooms	Mixed	Needs repair	Yes	1.5
TAMUGAN	Elementary School	Siao ES	2	20000	7 classrooms	Mixed	Needs repair	Yes	2

Table CP-5. Critical Point Facilities, Degree of Impact Rating to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
TAMUGAN	Elementary School	Tagbaw ES	1	20000	7 classrooms	Mixed	Needs repair	Yes	2
TAMUGAN	Secondary School	Lower Tamugan NHS	4	400	33 classrooms	Mixed	Needs repair	Yes	1.5
COLOSAS	Elementary School	Apalili ES	1	6000	7 classrooms	Mixed	Needs repair	Yes	1.5
SUMIMAO	Elementary School	Sumimao ES	1	18990	6 classrooms	Mixed	Needs repair	Yes	1.5
SUMIMAO	Secondary School	Sumimao NHS	3	198	14 classrooms	Mixed	Needs repair	Yes	1.5
BAGO APLAYA	Barangay Hall	Bago Aplaya Brgy. Hall	2	426.69	N/A	concrete	good	yes	1
BAGO APLAYA	BHS	Bago Aplaya Health Center	1	51.2	N/A	Concrete	Good	Yes	1
BAGO APLAYA	day care center	BLISS PHDCC	1	70	1 classroom	concrete	good	no	1
BAGO APLAYA	day care center	Sea side PHDCC	1	42	1 classroom	concrete	good	no	1
BAGO APLAYA	Elementary School	RC Quimpo ES	3	6000	17 classrooms	Mixed	Needs repair	Yes	2
BAGO GAL-LERA	BHS	Bago Gallera Health Center	1	51.2	N/A	Concrete	Good	Yes	1
BAGO GAL-LERA	day care center	Bago Gallera De Oro Home Based	1	52	1 classroom	concrete	good	no	1
BAGO GAL-LERA	day care center	San Lorenzo PHDCC	1	48	1 classroom	concrete	good	no	1
BAGO GAL-LERA	Elementary School	San Lorenzo ES	3	3108	19 classrooms	Mixed	Needs repair	Yes	1.5
BALIOK	BHS	Purok 6, Ramonena	1	51.2	N/A	Concrete	Good	Yes	1
BUCANA	Barangay Hall	Bucana Brgy. Hall	2	169.80	N/A	concrete	good	yes	1
BUCANA	BHS	St. John Health Center	1	92.49	N/A	Concrete	Good	Yes	1
BUCANA	BHS	Kabacan Health Center I	1	51.2	N/A	Concrete	Good	Yes	1
BUCANA	day care center	Prk 7 PHDCC	1	148	1 classroom	concrete	fair	no	1
BUCANA	day care center	Prk 6 PHDCC	1	120	1 classroom	concrete	fair	no	1
BUCANA	day care center	Bilusa PHDCC	1	100	1 classroom	concrete	fair	no	1

Table CP-5. Critical Point Facilities, Degree of Impact Rating to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
BUCANA	day care center	Kasilak PHDCC	1	150	1 classroom	concrete	fair	no	1
BUCANA	day care center	Rosas DCC	1	100	1 classroom	concrete	fair	no	1
BUCANA	day care center	Prk 2 Bucana DCC	1	85	1 classroom	concrete	fair	no	1
BUCANA	day care center	Isla Suerte PHDCC 2/SIR Phase I PHDCC 1	1	150	1 classroom	concrete	fair	no	1
BUCANA	day care center	St. John PHDCC II	1	100	1 classroom	mixed	fair	no	2
BUCANA	day care center	Pebsa PHDCC	1	150	1 classroom	mixed	fair	no	2
BUCANA	Elementary School	SIR ES	2	23215	classroom	Mixed	Needs re-pair	Yes	1.5
BUCANA	Fire Station	SIR Fire Station	2	367.83		mixed	poor	no	3
BUCANA	Police Outpost	Sandawa Mc Arthur Police Outpost	1	1000	N/A	concrete	fair	No	2
BUCANA	Secondary School	Vicenta C. Nograles NHS	4	9990	12 personnel	Mixed	Needs re-pair	Yes	1.5
BUCANA	TC	Teen Center	1	50	6 persons	Concrete	Good	Yes	1
CATALUNAN GRANDE	day care center	Bagahai DCC	1	56	1 classroom	concrete	good	no	1
CATALUNAN PEQUEÑO	Barangay Hall	Catalunan Pequeno Brgy. Hall	2	149.12	N/A	concrete	good	yes	1
CATALUNAN PEQUEÑO	BHS	Catalunan Pequeño Health Center	1	133.19	N/A	Mixed	Poor	No	3
CATALUNAN PEQUEÑO	Secondary School	Catalunan Pequeño NHS	4	500	48 classrooms	Mixed	Needs re-pair	Yes	1.5
MA-A	day care center	Don Julian PHDCC	1	56	1 classroom	concrete	good	no	1
MA-A	day care center	Prk 38 NHA PHDCC	1	250	1 classroom	concrete	good	no	1
MA-A	Elementary School	JL Escoda ES	4	2500	33 classrooms	Mixed	Needs re-pair	Yes	2.5
MA-A	Jail Facility	Main City Jail	1	437.58	44 Cells, 400 Bed Capacity, 400 Inmate Capacity	mixed	good	yes	2
MA-A	Jail Facility	Female City Jail	1	107.94	20 Cottage, 200 bed capacity, 200 Inmate Capacity	mixed	good	yes	2

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Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
MA-A	Jail Facility	Annex City Jail	1	1816	15 Cells, 116 Bed Capacity, 116 Inmate Capacity	mixed	good	yes	2
MA-A	Police Outpost	UM Matina Police Outpost	1	2849	4 persons	mixed	fair	No	2
MA-A	Police Sub Station	Maa Police Sub Station	1	40867	8 persons	mixed	fair	No	2
MATINA APLAYA	Barangay Hall	Matina Aplaya Brgy. Hall	2	258.72	N/A	concrete	good	yes	1
MATINA APLAYA	BHS	Matina Aplaya Health Center(RHU)	1	109	N/A	Concrete	Good	Yes	1
MATINA APLAYA	day care center	Dumalag PHDCC	1	200	1 classroom	mixed	good	no	1
MATINA APLAYA	day care center	Malinawon DCC	1	40	1 classroom	concrete	good	no	1
MATINA APLAYA	day care center	Shanghai PHDCC	1	75	1 classroom	concrete	poor	no	1
MATINA APLAYA	day care center	Dumalag PHDCC 3	1	40	1 classroom	concrete	good	no	1
MATINA APLAYA	day care center	Teachers Village PHDCC	1	40	1 classroom	concrete	fair	no	1
MATINA APLAYA	Elementary School	Matina Aplaya ES	1	620	7 classrooms	Mixed	Needs Repair	Yes	1.5
MATINA APLAYA	Elementary School	Diego Silang ES	2	8474	37 classrooms	Mixed	Needs Repair	Yes	2.5
MATINA APLAYA	Police Outpost	Bogser Police Outpost	1	6000	4 persons	concrete	fair	No	2
MATINA APLAYA	Police Sub Station	Matina Aplaya Police Sub Station	1	10000	6 persons	concrete	fair	No	2
MATINA CROSSING	Barangay Hall	Matina Crossing Brgy. Hall	4	404.94	N/A	concrete	good	yes	1

Table CP-5. Critical Point Facilities, Degree of Impact Rating to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
MATINA CROSSING	BHS	Matina Crossing Health Center	1	21	N/A	Concrete	Good	Yes	1
MATINA CROSSING	BHS	Gravahan Health Center	1	410.69	N/A	Mixed	Poor	No	3
MATINA CROSSING	Elementary School	Matina CES	4	10737	98	Mixed	Needs Repair	Yes	2
MATINA CROSSING	Elementary School	New Matina ES	2	450	18 classrooms	Mixed	Needs Repair	Yes	2.5
MATINA CROSSING	Police Station	Police Station 3 (Talomo)	2	69574	129 classrooms	concrete	good	No	1
MATINA CROSSING	Secondary School	Daniel R. Aguinaldo NHS	4	25	300 personnel	Mixed	Needs Repair	Yes	1.5
MATINA PANGI	Barangay Hall	Matina Pangi Brgy. Hall	3	107.73	N/A	concrete	fair	no	2
MATINA PANGI	BHS	Pangi Health Center	1	63	N/A	Concrete	Good	Yes	1
MATINA PANGI	day care center	Km.8 Matina Pangi PHDCC	1	50	1 classroom	concrete	good	no	1
MATINA PANGI	Elementary School	Matina Pangi ES	4	5000	27	Mixed	Needs repair	Yes	2
TALOMO	Barangay Hall	Talomo Brgy. Hall	3	334.32	N/A	concrete	good	yes	1
TALOMO	BHS	NHA Relocation Health Center	1	57.59	N/A	Concrete	Good	Yes	1
TALOMO	BHS	Royal Valley Health Center	1	63	N/A	Concrete	Good	Yes	1
TALOMO	day care center	Kadayawan PHDCC	1	200	1 classroom	concrete	good	no	1
TALOMO	day care center	San Juan PHDCC	1	120	1 classroom	concrete	good	no	1
TALOMO	day care center	Christian Village, PHDCC	1	50	1 classroom	concrete	good	no	1
TALOMO	day care center	Taal Central Park PHDCC	1	40	1 classroom	concrete	good	no	1
TALOMO	day care center	NHA Relocation PHDCC	1	120	1 classroom	mixed	good	no	1
TALOMO	day care center	Talomo PHDCC	1	80	1 classroom	concrete	good	no	1
TALOMO	day care center	Talomo Barangay Hall 1	1	40	1 classroom	concrete	good	no	1
TALOMO	day care center	Kalambuan Home-based	1	30	1 classroom	mixed	good	no	1

Table CP-5. Critical Point Facilities, Degree of Impact Rating to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
TALOMO	Elementary School	A. Bonifacio Elem. School	1	10500	25 classrooms	Mixed	Needs Repair	Yes	2
TALOMO	Elementary School	Doña Soledad Dolor ES	1	15228	24 classrooms	Mixed	Needs Repair	Yes	2
TALOMO	Elementary School	Leon A. Garcia Sr. ES	3	2051	22 classrooms	Mixed	Needs repair	Yes	2
TALOMO	Elementary School	Talomo CES	4	10500	62 classrooms	Mixed	Needs Repair	Yes	2
TALOMO	Police Outpost	Talomo Police Outpost	1	906	N/A	concrete	fair	No	2
TALOMO	Police Sub Station	Ulas Police Sub Station	2	8240	29 classrooms	mixed	fair	No	2
TALOMO	RHU	Puan Health Center	2	367.23	50 classrooms	Concrete	Good	Yes	1
TALOMO	Secondary School	Talomo NHS	4	25	N/A	Mixed	Needs Repair	Yes	1.5
TALOMO	Secondary School	Governor V. Duterte NHS	4	25	6 persons	Mixed	Needs repair	Yes	2
TALOMO	UHC	Talomo Urban Health Center	1	30	20 persons	Concrete	Good	Yes	1
BANGKAS HEIGHTS	Elementary School	Batolusa ES	4	2275	19 classrooms	Mixed	Needs Repair	Yes	1.5
BINUGAO	Barangay Hall	Binugao Brgy Hall	2	303.10	N/A	concrete	good	yes	1
BINUGAO	BHS	Binugao	1	198.71	N/A	Concrete	Good	Yes	1
BINUGAO	Elementary School	Binugao CES	1	26267	23 classrooms	Mixed	Needs Repair	Yes	1.5
BINUGAO	Secondary School	Binugao NHS	3	25	26 classrooms	Mixed	Needs Repair	Yes	1.5
DALIAO	Elementary School	V.S. Bangoy ES	3	4437	22 classrooms	Mixed	Needs Repair	Yes	1.5
LUBOGAN	BHS	Lubogan	1	147.19	N/A	Concrete	Good	Yes	1
LUBOGAN	Elementary School	San Miguel Integrated School	3	19998	21 classrooms	Mixed	Needs repair	Yes	1.5
LUBOGAN	Police Outpost	Lubogan Police Outpost	1	18967	5 persons	wood	good	No	3
MARAPANGI	Barangay Hall	Marapangi Brgy. Hall	2	186.88	N/A	concrete	good	yes	1

Table CP-5. Critical Point Facilities, Degree of Impact Rating to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
MARAPANGI	BHS	Marapangi	1	111.56	N/A	Mixed	Fair	No	2
MARAPANGI	Elementary School	C.B. Bangoy ES	3	10000	14 classrooms	Mixed	Needs Repair	Yes	1.5
SIRAWAN	Elementary School	Sirawan Beach ES	1	40000	14 classrooms	Mixed	Needs Repair	Yes	2
SIRAWAN	Secondary School	Sirawan NHS(Toril NHS)	2	8	20 classrooms	Mixed	Needs Repair	Yes	1.5
TORIL	Elementary School	Don Juan Dela Cruz CES	1	14985	112 classrooms	Mixed	Needs Repair	Yes	2
ANGALAN	Barangay Hall	Angalan Brgy. Hall	2	230.70	N/A	concrete	good	yes	1
ANGALAN	BHS	Angalan Health Center	1	117.05	N/A	Concrete	Fair	No	2
ANGALAN	Elementary School	A. Barbarona ES	1	10000	13 classrooms	Mixed	Needs Repair	Yes	1.5
BALENGAENG	Barangay Hall	Balengaeng Brgy. Hall	2	153.15	N/A	concrete	good	yes	1
BALENGAENG	BHS	Balingaeng	1	63.08	N/A	Concrete	Fair	No	2
BALENGAENG	Elementary School	Balengaeng ES	1	20000	9 classrooms	Mixed	Needs Repair	Yes	1.5
BIAO GUIANGA	Barangay Hall	Biao Guianga Brgy.Hall	2	179.93	N/A	concrete	good	yes	1
BIAO GUIANGA	BHS	Biao Guianga	1	72.74	N/A	Concrete	Fair	No	2
BIAO GUIANGA	Elementary School	Biao Guianga ES	1	10000	15 classrooms	Mixed	Needs repair	Yes	1.5
MATINA BIAO	Barangay Hall	Matina Biao Brgy. Hall	2	199.64	N/A	concrete	good	yes	1
MATINA BIAO	BHS	Matina Biao	1	150.60	N/A	Concrete	Fair	No	2
MATINA BIAO	Elementary School	Matina Biao ES	2	88508	8 classrooms	Mixed	Needs re- pair	Yes	1.5
LOS AMIGOS	Barangay Hall	Los Amigos Brgy. Hall	2	120.27	N/A	concrete	good	yes	1
LOS AMIGOS	BHS	Los Amigos	1	112.13	N/A	Concrete	Good	Yes	1
LOS AMIGOS	Elementary School	Los Amigos ES	4	15000	26 classrooms	Mixed	Needs re- pair	Yes	1.5

Table CP-5. Critical Point Facilities, Degree of Impact Rating to Flood, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
LOS AMIGOS	Police Sub Station	Los Amigos Police Sub Station	1	33371	57 classrooms	concrete	good	yes	1
LOS AMIGOS	Secondary School	Los Amigos NHS	4	6	N/A	Mixed	Needs repair	Yes	1.5
LOS AMIGOS	UHC	Los Amigos New Urban Health Center	1	30	10 persons	Concrete	Good	Yes	1
MANUEL GUI-ANGA	Elementary School	Vinzons ES	2	30037	21 classrooms	Mixed	Needs repair	Yes	1.5
MINTAL	Barangay Hall	Mintal Brgy. Hall	2	183.89	N/A	concrete	good	yes	1
MINTAL	BHS	Mintal	1	169.96	N/A	Concrete	Good	Yes	1
MINTAL	Elementary School	Mintal Central ES	4	3167	81 classrooms	Mixed	Needs repair	Yes	1.5
MINTAL	Fire Station	Mintal Fire Station	2	535.93	72 classrooms	concrete	fair	yes	2
MINTAL	Secondary School	Mintal Comprehensive NHS	4	8	15 personnel	Mixed	Needs repair	Yes	1.5
NEW VALENCIA	Elementary School	Luman ES	1	1000	7 classrooms	Mixed	Needs repair	Yes	1.5
TACUNAN	Police Sub Station	Tacunan Police Sub Station	1	4500	10 persons	concrete	good	yes	1
TAGAKPAN	Barangay Hall	Tagakpan Brgy. Hall	2	183.06	N/A	concrete	good	yes	1
TAGAKPAN	BHS	Tagakpan	1	114.39	N/A	Concrete	Good	Yes	1
TAGAKPAN	Elementary School	Tagakpan ES	2	67786	15 classrooms	Mixed	Needs repair	Yes	1.5
TAGAKPAN	Secondary School	Tagakpan NHS	3	20	26 classrooms	Mixed	Needs repair	Yes	1.5
TUGBOK	Barangay Hall	Tugbok Brgy Hall	2	180.65	N/A	concrete	good	yes	1
TUGBOK	Elementary School	Tugbok Central ES SPED Center	4	44019	45 classrooms	Mixed	Needs repair	Yes	1.5
TUGBOK	Police Station	Police Station 9 (Tugbok)	2	10000	N/A	concrete	good	yes	1
TUGBOK	RHU	Tugbok District Health Center	2	155	37 classrooms	Concrete	Good	Yes	1
MINTAL	Secondary School	Tugbok NHS	3	12	100 persons	Mixed	Needs repair	Yes	1.5

STORM SURGE

The table shows that there are 55 facilities that received a rating of 3 in terms of degree of impact in the occurrence of storm surge. These are day care centers (12), barangay hall (10), barangay health stations (8), elementary schools (9), police outposts (7), fire stations (6), secondary schools (2), and the CDRRMO headquarters.

Table CP-6. Critical Point Facilities, Degree of Impact Rating to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
1-A	Barangay Hall	1-A Brgy. Hall	2	87.277	N/A	mixed	fair	no	3
2-A	Barangay Hall	2-A Brgy. Hall	2	100.004	N/A	concrete	good	yes	1
3-A	Barangay Hall	3-A Brgy. Hall	1	64.248	N/A	concrete	good	yes	1
4-A	Barangay Hall	4-A Brgy. Hall	2	96.764	N/A	concrete	good	yes	1
5-A	Barangay Hall	5-A Brgy. Hall	3	172.16	N/A	concrete	good	yes	1
7-A	Barangay Hall	7-A Brgy. Hall	3	149.037	N/A	concrete	good	yes	1
9-A	Barangay Hall	9-A Brgy. Hall	2	115.481	N/A	concrete	good	yes	1
11-B	Barangay Hall	11-B Brgy. Hall	2	58.64	N/A	concrete	poor	no	3
12-B	Barangay Hall	12-B Brgy. Hall	2	101.626	N/A	concrete	good	yes	1
13-B	Barangay Hall	13-B Barangay Hall	*	*	N/A	*	*	*	3
14-B	Barangay Hall	14-B Brgy. Hall	2	33.552	N/A	concrete	good	yes	1
15-B	Barangay Hall	15-B Brgy. Hall	1	100.004	N/A	mixed	fair	no	2
16-B	Barangay Hall	16-B Brgy. Hall	*	*	N/A	*	*	*	3
17-B	Barangay Hall	17-B Brgy. Hall	1	51.376	N/A	wood	poor	no	3
18-B	Barangay Hall	18-B Brgy. Hall	2	122.104	N/A	concrete	good	yes	1
20-B	Barangay Hall	20-B Brgy. Hall	2	141.156	N/A	concrete	good	yes	1
21-C	Barangay Hall	21-C Brgy. Hall	1	45.417	N/A	concrete	fair	no	2
22-C	Barangay Hall	22-C Brgy. Hall	3	270.716	N/A	concrete	good	yes	1
23-C	Barangay Hall	23-C Brgy. Hall	2	134.647	N/A	concrete	good	yes	1
24-C	Barangay Hall	24-C Brgy. Hall	4	84.686	N/A	concrete	good	yes	1
25-C	Barangay Hall	25-C Brgy. Hall	2	25.847	N/A	concrete	good	yes	1
26-C	Barangay Hall	26-C Brgy. Hall	2	116.913	N/A	concrete	good	yes	1
27-C	Barangay Hall	27-C Brgy. Hall	2	42.076	N/A	concrete	good	yes	1
28-C	Barangay Hall	28-C Brgy. Hall	2	107.563	N/A	concrete	good	yes	1
29-C	Barangay Hall	29-C Brgy. Hall	3	42.076	N/A	concrete	good	yes	1

Table CP-6. Critical Point Facilities, Degree of Impact Rating to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
30-C	Barangay Hall	30-C Brgy. Hall	2	118.664	N/A	concrete	good	yes	1
31-D	Barangay Hall	31-D Brgy. Hall	2	81.604	N/A	concrete	good	yes	1
32-D	Barangay Hall	32-D Brgy. Hall	2	40.166	N/A	mixed	fair	no	3
33-D	Barangay Hall	33-D Brgy. Hall	2	77.389	N/A	concrete	good	yes	1
34-D	Barangay Hall	34-D Brgy. Hall	*	*	N/A	*	*	*	3
35-D	Barangay Hall	35-D Brgy. Hall	1	89.74	N/A	concrete	good	yes	1
36-D	Barangay Hall	36-D Brgy. Hall	2	109.071	N/A	concrete	good	yes	1
37-D	Barangay Hall	37-D Brgy. Hall	2	128.702	N/A	concrete	good	yes	1
38-D	Barangay Hall	38-D Brgy. Hall	2	100.004	N/A	mixed	fair	no	3
39-D	Barangay Hall	39-D Brgy. Hall	1	93.977	N/A	concrete	fair	no	2
40-D	Barangay Hall	40-D Brgy. Hall	2	43.605	N/A	concrete	good	yes	1
AGDAO PROP-ER	Barangay Hall	Agdao Brgy. Hall	2	135.957	N/A	concrete	good	yes	1
W. Aquino	Barangay Hall	W. Aquino Brgy. Hall	2	101.806	N/A	mixed	fair	no	3
PACIANO BANGOY	Barangay Hall	P. Bangoy Brgy. Hall	2	165.226	N/A	concrete	fair	no	2
RAFAEL CASTILLO	Barangay Hall	R. Castillo Brgy. Hall	2	142.147	N/A	concrete	good	yes	1
CENTRO	Barangay Hall	Centro Brgy. Hall	2	144.227	N/A	concrete	good	yes	1
VICENTE DUTERTE	Barangay Hall	V. Duterte Brgy. Hall	2	400.243	N/A	concrete	good	yes	1
LEON GARCIA SR.	Barangay Hall	Leon Garcia Brgy. Hall	2	94.406	N/A	concrete	good	yes	1
LAPU – LAPU	Barangay Hall	Lapu-Lapu Brgy. Hall	2	202.495	N/A	concrete	good	yes	1
TOMAS MONTEVERDE	Barangay Hall	T. Monteverde Brgy. Hall	1	89.501	N/A	concrete	good	yes	1
SAN ANTONIO	Barangay Hall	San Antonio Brgy. Hall	1	121.555	N/A	concrete	good	yes	1
UBALDE	Barangay Hall	Ubalde Brgy. Hall	2	152.268	N/A	concrete	good	yes	1
SASA	Barangay Hall	Sasa Brgy. Hall	2	359.48	N/A	concrete	fair	no	2
V. HIZON	Barangay Hall	V. Hizon Brgy. Hall	2	293.665	N/A	concrete	good	yes	1
BUNAWAN	Barangay Hall	Bunawan Brgy. Hall	2	199.517	N/A	concrete	good	yes	1
ILANG	Barangay Hall	Ilang Brgy. Hall	2	214.066	N/A	concrete	good	yes	1

Table CP-6. Critical Point Facilities, Degree of Impact Rating to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
PANACAN	Barangay Hall	Panacan Brgy. Hall	2	167.449	N/A	concrete	fair	no	2
BAGO APLAYA	Barangay Hall	Bago Aplaya Brgy. Hall	2	426.687	N/A	concrete	good	yes	1
BUCANA	Barangay Hall	Bucana Brgy. Hall	2	98.661	N/A	concrete	good	yes	1
BUCANA	Barangay Hall	Bucana Brgy. Hall	2	169.8	N/A	mixed	fair	no	3
MATINA APLAYA	Barangay Hall	Matina Aplaya Brgy. Hall	2	258.723	N/A	concrete	good	yes	1
TALOMO	Barangay Hall	Talomo Brgy. Hall	3	334.318	N/A	concrete	good	yes	1
DALIAO	Barangay Hall	Daliao Brgy Hall	2	188.398	N/A	concrete	good	yes	1
1-A	BHS	Brgy 1-A Health Center	1	54.40	N/A	Mixed	Fair	Yes	2
1-A	BHS	City Health Office	3	350	N/A	Concrete	Good	Yes	1
2-A	BHS	Brgy. 2-A Health Center	1	118.87	N/A	Concrete	Fair	No	2
4-A	BHS	Tomas Claudio Health Center	1	481.02	N/A	Concrete	Good	Yes	1
4-A	BHS	Teen Center	1	120	N/A	Concrete	Good	Yes	1
5-A	BHS	Bankerohan Health Center	1	68.04	N/A	Concrete	Good	Yes	1
9-a	BHS	Brgy.9-A Health Center	1	51.2	N/A	Concrete	Good	Yes	1
12-B	BHS	Brgy. 12-B Health Center	1	41.83	N/A	Concrete	Fair	No	2
14-B	BHS	Brgy.14-B Health Center	1	11.04	N/A	Mixed	Fair	No	2
15-B	BHS	Brgy. 15-B Health Center	1	6.02	N/A	Mixed	Poor	No	3
18-B	BHS	Brgy.18-B Health Center	1	39.44	N/A	Mixed	Poor	No	3
20-B	BHS	Brgy.20-B Health Center	1	46.02	N/A	Concrete	Good	Yes	1
21-C	BHS	Brgy.21-C Piapi Health Center	1	30	N/A	Concrete	Good	Yes	1
22-C	BHS	Brgy 22-C Health Center	1	278.75	N/A	Concrete	Good	Yes	2
23-C	BHS	Brgy 23-C Mini Forest Health Center	1	361.65	N/A	Concrete	Good	Yes	1
23-C	BHS	New BHS / Isla Verde Purok 3B	1	51.85	N/A	Concrete	Good	Yes	1
24-C	BHS	Brgy 24-C Health Center	1	84.96	N/A	Concrete	Good	Yes	1
25-C	BHS	Brgy.25-C Health Center	1	12.93	N/A	Concrete	Fair	No	2
26-C	BHS	Brgy.26-C Health Center	1	141.38	N/A	Concrete	Good	No	1
27-C	BHS	Brgy.27-C Health Center	1	21.66	N/A	Concrete	Good	Yes	1
27-C	BHS	Sta. Ana Health Center	1	550	N/A	Concrete	Good	Yes	1
28-C	BHS	Brgy.28-C Health Center	1	29.04	N/A	Concrete	Good	Yes	1
29-C	BHS	Brgy. 29-C Health Center	1	22.04	N/A	Concrete	Good	No	1

Table CP-6. Critical Point Facilities, Degree of Impact Rating to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
30-C	BHS	Brgy.30-C Health Center	1	31.32	N/A	Concrete	Good	No	1
31-D	BHS	Brgy. 31-D Health Center	1	38.71	N/A	Concrete	Good	Yes	1
32-D	BHS	Brgy. 32-D Health Center	1	249.12	N/A	Concrete	Good	Yes	1
32-D	BHS	Reproductive Health and Wellness Center	1	485.48	N/A	Concrete	Good	Yes	1
35-D	BHS	Brgy. 35-D Health Center	1	11	N/A	Mixed	Poor	No	3
36-D	BHS	Brgy. 36-D Health Center	1	38.88	N/A	Concrete	Good	Yes	1
37-D	BHS	Brgy. 37-D Health Center	1	94.12	N/A	Concrete	Good	Yes	1
38-D	BHS	Brgy. 38-D Health Center	1	38.94	N/A	Concrete	Good	Yes	1
39-D	BHS	Brgy. 39-D Health Center	1	50.80	N/A	Mixed	Poor	No	3
Wilfredo Aquino	BHS	Wilfredo Aquino Health Center	1	259.09	N/A	Concrete	Poor	No	3
Paciano Bangoy	BHS	Paciano Bangoy Health Center	1	153.09	N/A	Concrete	Poor	No	3
R. Castillo	BHS	R.Castillo Health Center	1	144.59	N/A	Concrete	Fair	No	2
Centro Agdao	BHS	New BHS	1	119.62	N/A	Concrete	Fair	No	1
Centro Agdao	BHS	South San Juan Health Center	1	125.95	N/A	Concrete	Good	Yes	1
Vicente Duterte	BHS	Vicente Duterte Health Center	1	345.27	N/A	Concrete	Good	No	1
Leon Garcia	BHS	Leon Garcia Health Center	1	68.74	N/A	Concrete	Good	Yes	1
Lapu-Lapu	BHS	Lapu-Lapu Health Center	1	142.88	N/A	Concrete	Fair	No	2
Tomas Monteverde	BHS	Tomas Monteverde Health Center	1	87.71	N/A	Concrete	Fair	No	2
San Antonio	BHS	San Antonio Health Center	1	113.82	N/A	Concrete	Poor	No	3
Ubalde	BHS	Ubalde Health Center	1	86.17	N/A	Concrete	Poor	No	3
Sasa	BHS	Km.11 Sasa Subcenter	1	418.01	N/A	Concrete	Good	Yes	1
Sasa	BHS	Landmark Sub Center	1	57.41	N/A	Concrete	Fair	No	2
Sasa	BHS	Beach Club Sub Center	1	622.27	N/A	Concrete	Fair	No	2
V. Hizon	BHS	Hizon Health Center	1	107	N/A	Concrete	Fair	Yes	2
Lasang	BHS	Lasang Health Center	1	193.93	N/A	Concrete	Good	No	1
Panacan	BHS	Panacan Proper Health Center	1	89.77	N/A	Concrete	Good	Yes	1
Panacan	BHS	Panacan 13 Health Center	1	100.00	N/A	Concrete	Fair	No	2

Table CP-6. Critical Point Facilities, Degree of Impact Rating to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
San Isidro	BHS	Kabacan Health Center II	1	51.2	N/A	Concrete	Good	Yes	1
Baliok Proper	BHS	Baliok Health Center	1	53.86	N/A	Concrete	Good	Yes	1
Bucana	BHS	Teen Center	1	51.2	N/A	Concrete	Good	Yes	1
Bucana	BHS	Bucana Health Center	1	47.89	N/A	Concrete	Fair	No	2
Bucana	BHS	St. John Health Center	1	92.49	N/A	Concrete	Good	Yes	1
Bucana	BHS	Talomo North Health Center RHU	1	338.47	N/A	Concrete	Good	Yes	1
Bucana	BHS	SIR Phase 2 Health Center	1	41.08	N/A	Concrete	Good	Yes	1
Bucana	BHS	Times Beach Health Center	1	50.23	N/A	Concrete	Good	Yes	1
Bucana	BHS	Kabacan Health Center I	1	51.2	N/A	Concrete	Good	Yes	1
Bago Aplaya	BHS	Bago Aplaya Health Center	1	51.2	N/A	Concrete	Good	Yes	1
Bago Aplaya	BHS	Gulf View Health Center	1	51.2	N/A	Concrete	Good	Yes	1
Matina Aplaya	BHS	Matina Aplaya Health Center	1	109	N/A	Concrete	Good	Yes	1
Matina Crossing	BHS	Gravahan Health Center	1	21	N/A	Concrete	Fair	No	2
Talomo Proper	BHS	NHA Relocation Health Center	1	57.59	N/A	Concrete	Good	Yes	1
Talomo Proper	BHS	Talomo Cemento Health Center	1	56.21	N/A	Concrete	Good	Yes	1
Daliao	BHS	Daliao Health Center	1	111.38	N/A	Concrete	Fair	No	2
bucana	CDRRMO Headquarters	City Disaster Risk Reduction and Management Office	2	60	N/A	mixed	poor	no	3
2-A	City Hall	City Hall (Main)	4	1951.641	N/A	concrete	good	yes	1
2-A	City Hall	Sangguniang Panlungsod	4	3249.636	N/A	concrete	good	yes	1
2-A	City Hall	City Hall Annex	5	391.441	N/A	concrete	good	yes	1
1-A	day care center	Bolton DCC	1	80	1 classroom	concrete	fair	no	2
2-A	day care center	Magallanes DCC	1	16	1 classroom	concrete	fair	no	2
4-A	day care center	Brgy 4-A DCC	1	36	1 classroom	concrete	good	no	1
5-A	day care center	Brgy 5-A DCC I	2	36	1 classroom	concrete	good	no	1
5-A	day care center	Brgy 5-A DCC II	2	36	1 classroom	concrete	good	no	1
5-A	day care center	Brgy 5-A DCC III	2	36	1 classroom	concrete	good	no	1
5-A	day care center	Brgy 5-A DCC IV	2	36	1 classroom	concrete	good	no	1
5-A	day care center	Brgy 5-A DCC V	2	36	1 classroom	concrete	good	no	1
9-a	day care center	Camus DCC (Barangay 9-A)	1	60	1 classroom	concrete	good	no	1
12-B	day care center	V. Mapa DCC	1	120	1 classroom	concrete	good	no	1

Table CP-6. Critical Point Facilities, Degree of Impact Rating to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
15-B	day care center	Brgy 15 B PHDCC	1	50	1 classroom	mixed	critical	no	3
18-B	day care center	Brgy. 18 DCC Little Angels DCC	1	120	1 classroom	concrete	good	no	2
20-B	day care center	Regina Comp. DCC	1	60	1 classroom	concrete	good	no	1
21-C	day care center	Barangay 21-C PHDCC	1	150	1 classroom	concrete	good	no	2
22-C	day care center	Brgy 22-C DCC	1	100	1 classroom	concrete	good	no	2
23-C	day care center	Mini-Forest DCC	1	60	1 classroom	concrete	fair	no	2
26-C	day care center	Silangan PHDCC	1	85	1 classroom	concrete	good	no	2
27-C	day care center	China Town DCC	1	100	1 classroom	concrete	good	no	2
27-C	day care center	Brgy. 27-C PHDCC	1	40	1 classroom	concrete	good	no	2
28-C	day care center	Brgay 28 -C PHDCC	1	40	1 classroom	concrete	fair	no	2
28-C	day care center	Rizal Day Care Center	1	100	1 classroom	concrete	good	no	2
30-C	day care center	St. Anne DCC	1	33	1 classroom	concrete	good	no	2
31-D	day care center	Roxas 1 DCC	1	100	1 classroom	mixed	good	no	2
31-D	day care center	Roxas 2 DCC	1	100	1 classroom	mixed	good	no	2
32-D	day care center	Jacinto DCC	1	100	1 classroom	concrete	good	no	2
33-D	day care center	Mabini DCC	1	120	1 classroom	concrete	good	no	2
35-D	day care center	Brgy 35 D PHDCC	1	120	1 classroom	concrete	good	no	2
36-D	day care center	Brgy 36 Day Care Center	1	20	1 classroom	concrete	good	no	2
37-D	day care center	Brgy. 37-D DCC?	1	60	1 classroom	concrete	fair	no	2
38-D	day care center	Brgy 38 D PHDCC	1	60	1 classroom	concrete	good	no	2
39-D	day care center	Brgy 39 D PHDCC	1	60	1 classroom	concrete	good	no	1
40-D	day care center	Brgy 40 D PHDCC	1	80	1 classroom	concrete	fair	no	2
Bunawan (Pob.)	day care center	Rhema DCC	1	75	1 classroom	concrete	good	no	1
Bunawan (Pob.)	day care center	DCPI 1 & 2 DCC	1	150	1 classroom	concrete	good	no	1
Bunawan (Pob.)	day care center	Damiana DCC	1	100	1 classroom	concrete	good	no	1
Bunawan (Pob.)	day care center	Tesorero DCC	1	60	1 classroom	concrete	good	no	1
Bunawan (Pob.)	day care center	Bunawan Aplaya DCC	1	60	1 classroom	mixed	fair	no	2

Table CP-6. Critical Point Facilities, Degree of Impact Rating to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Ilang	day care center	Sto. Niño Homebase	1	80	1 classroom	concrete	good	no	1
Ilang	day care center	Amparo Homes DCC	1	100	1 classroom	mixed	good	no	2
Ilang	day care center	Ilang DCC Sampaguita Section	1	75	1 classroom	light	fair	no	3
Ilang	day care center	Ilang Riverview	1	75	1 classroom	light	fair	no	3
Panacan	day care center	St. John DCC	1	70	1 classroom	concrete	good	no	1
Panacan	day care center	F.L. Apostol DCC	1	150	1 classroom	concrete	good	no	1
Panacan	day care center	Panacan Trece DCC	1	120	1 classroom	mixed	fair	no	2
Panacan	day care center	Lopez HB	1	70	1 classroom	concrete	good	no	1
Panacan	day care center	Benjamin Hills DCC	1	70	1 classroom	concrete	good	no	1
Panacan	day care center	Doña Mercedes DCC	1	100	1 classroom	light	poor	no	3
Tibungco	day care center	San Juan DCC	1	100	1 classroom	concrete	good	no	1
Tibungco	day care center	Deles Perez DCC		60	1 classroom	concrete	good	no	1
Bucana	day care center	Prk 7 PHDCC	1	148	1 classroom	concrete	fair	no	2
Bucana	day care center	Prk 6 PHDCC	1	120	1 classroom	concrete	fair	no	2
Bucana	day care center	Bilusa PHDCC	1	100	1 classroom	concrete	fair	no	2
Bucana	day care center	Kasilak PHDCC	1	150	1 classroom	concrete	fair	no	2
Bucana	day care center	Rosas DCC	1	100	1 classroom	concrete	fair	no	2
Bucana	day care center	St. John PHDCC II	1	85	1 classroom	mixed	fair	no	2
Bucana	day care center	Prk 2 Bucana DCC	1	150	1 classroom	concrete	fair	no	2
Bucana	day care center	Pebsa PHDCC	1	100	1 classroom	concrete	fair	no	2
Bucana	day care center	Kabacan Times Beach DCC	1	100	1 classroom	concrete	fair	no	2
Bucana	day care center	P 32 Holy Trinity DCC	1	100	1 classroom	concrete	fair	no	2
Bucana	day care center	S.I.R Phase 2 PHDCC 3	1	100	1 classroom	concrete	fair	no	2
Bucana	day care center	Sabroso Village PHDCC	1	100	1 classroom	mixed	fair	no	2
Bucana	day care center	Kalubihan DCC	1	100	1 classroom	mixed	fair	no	2
Bucana	day care center	Savina DCC	1	100	1 classroom	mixed	fair	no	2
Bucana	day care center	SIR Phase 2 DCC 1	1	100	1 classroom	mixed	fair	no	2
Bucana	day care center	SIR Phase 2 DCC 2	1	100	1 classroom	concrete	fair	no	2
Bago Aplaya	day care center	D'Garden PHDCC	1	46	1 classroom	concrete	good	no	2
Bago Aplaya	day care center	Gulf View Subd. PHDCC	1	42	1 classroom	concrete	good	no	2

Table CP-6. Critical Point Facilities, Degree of Impact Rating to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Classroom, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Bago Aplaya	day care center	BLISS PHDCC	1	70	1 classroom	concrete	fair	no	2
Bago Aplaya	day care center	Sea side PHDCC	1	42	1 classroom	concrete	good	no	2
Matina Aplaya	day care center	Dumalag PHDCC	1	200	1 classroom	mixed	critical	no	3
Matina Aplaya	day care center	Cristina Village PHDCC	1	90	1 classroom	concrete	good	no	2
Matina Aplaya	day care center	Malinawon DCC	1	40	1 classroom	concrete	good	no	1
Matina Aplaya	day care center	Shanghai PHDCC	1	75	1 classroom	concrete	good	no	1
Matina Aplaya	day care center	Dumalag PHDCC 3	1	40	1 classroom	concrete	good	no	1
Matina Aplaya	day care center	Seaside II PHDCC	1	54	1 classroom	concrete	fair	no	2
Matina Aplaya	day care center	Teacher's Village PHDCC	1	40	1 classroom	concrete	good	no	1
Bago Aplaya	day care center	BALAI, PHDCC	1	75	1 classroom	mixed	good	no	2
Talomo (Pob.)	day care center	Kadayawan PHDCC	1	200	1 classroom	concrete	good	no	1
Talomo (Pob.)	day care center	San Juan PHDCC	1	120	1 classroom	concrete	good	no	1
Talomo (Pob.)	day care center	Christian Village, PHDCC	1	50	1 classroom	concrete	good	no	1
Talomo (Pob.)	day care center	Taal Central Park PHDCC	1	40	1 classroom	mixed	good	no	2
Talomo (Pob.)	day care center	NHA Relocation PHDCC	1	120	1 classroom	light	fair	no	2
39-D	day care center	Child Minding Center	1	300	1 classroom	mixed	poor	no	3
23-C	Day care center (homebased)	Purok 2 Home-Based	1	50	1 classroom	light	poor	no	3
23-C	Day care center (homebased)	Purok 4 A Home-Based	1	50	1 classroom	light	poor	no	3
23-C	Day care center (homebased)	Kabingaag Home Based	1	80	1 classroom	light	poor	no	3
23-C	Day care center (homebased)	Purok 4 b Home-Based I	1	80	1 classroom	mixed	fair	no	3
23-C	Day care center (homebased)	Purok 4 b Home-Based II	1	50	1 classroom	light	poor	no	3
23-C	Day care center (homebased)	Badjao Home Based	1	60	1 classroom	concrete	fair	no	3
1-A	Elementary School	Bolton ES	3	10500	29 classrooms	Mixed	Needs re-pair	No	2.5
1-A	Elementary School	Magallanes ES	4	18943	124 classrooms	Mixed	Needs re-pair	No	2.5

Table CP-6. Critical Point Facilities, Degree of Impact Rating to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
4-A	Elementary School	Kapt. T. Monteverde Sr. CES	2	18870	101 classrooms	Mixed	Needs repair	No	2.5
9-a	Elementary School	T. Palma Gil Elem. Sch.	3	6202	29 classrooms	Mixed	Needs repair	No	2.5
12-B	Elementary School	JP Laurel ES	2	807	7 classrooms	Mixed	Needs repair	No	2.5
20-B	Elementary School	E. Quirino ES	3	3500	19 classrooms	Mixed	Needs repair	No	2.5
20-B	Elementary School	San Roque CES	3	10500	65 classrooms	Mixed	Needs repair	No	2.5
23-C	Elementary School	Zonta Elem. School	3	2681	17 classrooms	Mixed	Needs repair	No	3
28-C	Elementary School	Jose Rizal ES	1	9468	23 classrooms	Mixed	Needs repair	No	2.5
28-C	Elementary School	M. Quezon ES	1	9000	34 classrooms	Mixed	Needs repair	No	2.5
28-C	Elementary School	Manuel Roxas ES	4	3397	29 classrooms	Mixed	Needs repair	No	2.5
28-C	Elementary School	Sta. Ana CES	3	15013	73 classrooms	Mixed	Needs repair	No	2.5
Agdao Proper	Elementary School	Agdao ES	4	1007	23 classrooms	Mixed	Needs repair	No	2.5
Wilfredo Aquino	Elementary School	J. Porras ES	3	5000	54 classrooms	Mixed	Needs repair	No	2.5
Centro	Elementary School	San Juan ES	3	2100	43 classrooms	Mixed	Needs repair	No	2.5
Vicente Duterte	Elementary School	Don Julian Rodriguez ES	2	1500	48 classrooms	Mixed	Needs repair	No	2
Leon Garcia	Elementary School	Manuel M. Garcia ES	2	1807		Mixed	Needs repair	No	3
Lapu-Lapu	Elementary School	Lapu-lapu ES	3	4400	40 classrooms	Mixed	Needs repair	No	2.5

Table CP-6. Critical Point Facilities, Degree of Impact Rating to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Ubalde	Elementary School	Ubalde Elem. School	2	540	19 classrooms	Mixed	Needs repair	No	2.5
Sasa	Elementary School	F. Bangoy CES SPED Center	2	5000	39 classrooms	Mixed	Needs repair	No	2.5
Sasa	Elementary School	Osmena ES	1	3851	55 classrooms	Mixed	Needs repair	No	2.5
V. Hizon	Elementary School	V. Hizon Elem. Sch.	4	10001	63 classrooms	Mixed	Needs repair	No	2.5
Bunawan	Elementary School	Bunawan Aplaya ES	1	3919	23 classrooms	Mixed	Needs repair	No	3
Bunawan	Elementary School	Daniel M. Perez ES	3	19445	50 classrooms	Mixed	Needs repair	No	2.5
Lasang	Elementary School	AL Navarro CES	2	21984	30 classrooms	Mixed	Needs repair	No	2.5
Lasang	Elementary School	Alfredo A. Aledia Elementary School	1	5000	9 classrooms	Mixed	Needs repair	No	3
Lasang	Elementary School	Tambongon ES	1	9000	7 classrooms	Mixed	Needs repair	No	2.5
Bago Aplaya	Elementary School	Dr. Jovito Francisco ES(Camilo Osias ES)	1	2037	13 classrooms	Mixed	Needs repair	No	2.5
Bago Aplaya	Elementary School	Generoso ES	1	5198	14 classrooms	Mixed	Needs repair	No	2.5
Bago Aplaya	Elementary School	RC Quimpo ES	3	6000	17 classrooms	Mixed	Needs repair	No	3
Bucana	Elementary School	Cesario Villa Abrille ES	4	4788	69 classrooms	Mixed	Needs repair	No	3
Bucana	Elementary School	Kabacan ES	3	1000	46 classrooms	Mixed	Needs repair	No	2.5
Bucana	Elementary School	SIR ES	2	23215	41 classrooms	Mixed	Needs repair	No	2.5
Matina Aplaya	Elementary School	Diego Silang ES	1	620	7 classrooms	Mixed	Needs repair	No	3

Table CP-6. Critical Point Facilities, Degree of Impact Rating to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Matina Aplaya	Elementary School	Matina Aplaya ES	1	8474	37 classrooms	Mixed	Needs repair	No	2.5
Matina Crossing	Elementary School	Don Manuel Gutierrez ES	3	13920	52 classrooms	Mixed	Needs repair	No	2.5
Matina Crossing	Elementary School	New Matina ES	2	450	18 classrooms	Mixed	Needs repair	No	3
Talomo Poblacion	Elementary School	Leon A. Garcia Sr. ES	3	2051	22 classrooms	Mixed	Needs repair	No	2.5
Talomo Proper	Elementary School	A. Bonifacio Elem. School	1	10500	25 classrooms	Mixed	Needs repair	No	2.5
Talomo Proper	Elementary School	Doña Soledad Dolor ES	3	15228	24 classrooms	Mixed	Needs repair	No	2.5
Talomo Proper	Elementary School	Talomo CES	4	10500	62 classrooms	Mixed	Needs repair	No	2.5
Daliao	Elementary School	V.S. Bangoy ES	4	4437	22 classrooms	Mixed	Needs repair	No	2.5
Lizada	Elementary School	JV Ferriols ES	3	8000	23 classrooms	Mixed	Needs repair	No	2.5
Sirawan	Elementary School	Sirawan Beach ES	1	40000	14 classrooms	Mixed	Needs repair	No	3
Paciano Bangoy	Fire Station	Bangoy Fire Station	2	580	20 persons	wood	critical	no	3
Tomas Monteverde	Fire Station	Central Fire Station	3	1587	92 persons	mixed	fair	yes	3
Sasa	Fire Station	Lanang Fire Station	2	500	12 persons	concrete	fair	yes	2
Bunawan	Fire Station	Bunawan Fire Station	1	300	14 persons	mixed	poor	no	3
Panacan	Fire Station	Panacan Fire Station	2	155	14 persons	concrete	poor	no	3
bucana	Fire Station	SIR Fire Station	2	155	12 persons	mixed	poor	no	3
Matina Crossing	Fire Station	Talomo Fire Station	2	300	15 persons	mixed	critical	no	3
38-D	Police Headquarters	Camp Captain Domingo E. Leonor	2	59629	14 facilities	mixed	fair	no	3

Table CP-6. Critical Point Facilities, Degree of Impact Rating to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
bucana	Police Outpost	Sandawa Mc Arthur Police Outpost	1	8	6 persons	concrete	fair	no	2
Matina Aplaya	Police Outpost	Bogser Police Outpost	1	16	6 persons	concrete	fair	no	2
Matina Crossing	Police Outpost	UM Matina Police Outpost	1	6	4 persons	mixed	fair	no	2
Talomo	Police Outpost	Talomo Police Outpost	1	12	6 persons	concrete	fair	no	2
23-C	Police Station	Police Station 1 (Sta. Ana)	3	300	200 persons	concrete	good	yes	1
Buhangin	Police Station	Police Station 5 (Buhangin)	1	400	150 persons	concrete	good	no	1
Bunawan	Police Station	Police Station 6 (Bunawan)	1	300	12 persons	concrete	good	no	1
23-c	Police Sub Station	23-C Police Sub Station	1	25	3 persons	wood	poor	no	3
31-D	Police Sub Station	31-D Police Sub Station	1	100	10 persons	concrete	good	no	1
Agdao	Police Sub Station	Agdao Proper Police Sub Station	1	50	10 persons	concrete	good	yes	1
Leon Garcia	Police Sub Station	Leon Garcia Police Sub Station	1	25	3 persons	wood	poor	no	3
Tomas Monteverde	Police Sub Station	Tomas Monteverde Police Sub Station	2	25	3 persons	wood	poor	no	3
Ubalde Agdao	Police Sub Station	Ubalde Police Sub Station	1	25	3 persons	wood	poor	no	3
Ilang	Police Sub Station	Ilang Sub Police Station	1	80	3 persons	concrete	good	no	1
Lasang	Police Sub Station	Lasang Police Sub Station	2	100	3 persons	concrete	good	no	1
bucana	Police Sub Station	Sandawa Police Sub Station	1	15	8 persons	concrete	fair	no	2
MATINA APLAYA	Police Sub Station	Matina Aplaya Police Sub Station	1	8	4 persons	concrete	fair	no	2
Talomo	Police Sub Station	Ulas Police Sub Station	2	50	20 persons	mixed	fair	no	2
bucana	PSSCC Headquarters	Public Safety and Security Services	3	8138	N/A	mixed	poor	no	3
38-D	residential facility	Paginhawaan Drop-In Center	2	300	1 classroom	concrete	good	yes	1
38-D	residential facility	Quick Response Team for Children's Concern / Kean Gabriel	2	300	1 classroom	concrete	good	yes	1
Agdao	RHU	Agdao Health Center	2	278.11	N/A	Concrete	Good	No	1
Sasa	RHU	Sasa Health Center	2	250	N/A	Concrete	Good	Yes	1
Bunawan	RHU	Bunawan Rural Health Unit	2	373.84	N/A	Concrete	Good	Yes	1

Table CP-6. Critical Point Facilities, Degree of Impact Rating to Storm Surge, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
10-A	Secondary School	Davao City NHS	4	6222	256 classrooms	Mixed	Needs repair	No	2.5
28-C	Secondary School	Sta. Ana NHS	4	14023	72 classrooms	Mixed	Needs repair	No	2.5
28-C	Secondary School	Sta. Ana SHS-Annex	4	1224	72 classrooms	Mixed	Needs repair	No	2.5
Leon Garcia	Secondary School	Leon Garcia Sr. NHS	2	1000	42 classrooms	Mixed	Needs repair	No	3
Sasa	Secondary School	F. Bangoy NHS	4	2849	86 classrooms	Mixed	Needs repair	No	2.5
Sasa	Secondary School	F. Bangoy NHS - Annex	4	906		Mixed	Needs repair	No	2.5
Lasang	Secondary School	AL Navarro NHS	4	21984	71 classrooms	Mixed	Needs Repair	No	2.5
Bucana	Secondary School	Vicenta C. Nograles NHS	4	1200		Mixed	Needs Repair	No	2.5
Bago Aplaya	Secondary School	Erico Nograles NHS-B	3	2456		Mixed	Needs Repair	No	2.5
Talomo Proper	Secondary School	Gov. V. Duterte NHS	4	4490	129 classrooms	Mixed	Needs Repair	No	2.5
Talomo Proper	Secondary School	Talomo NHS	4	1200	50 classrooms	Mixed	Needs Repair	No	2.5
Lizada	Secondary School	JV Ferriols NHS	3	4689	23 classrooms	Mixed	Needs Repair	No	2.5
Sirawan	Secondary School	Sirawan NHS(Toril NHS)	3	40867	20 classrooms	Mixed	Needs repair	No	3
Sasa	Teen Center	Sasa Health Center		499.4		Concrete	Good	Yes	1
Lasang	TFD Detachment	Task Group Lawin	1	2256	5 facilities	mixed	good	no	2
Leon Garcia	TFD Headquarters	Task Force Davao (Task Group Agila)	1	9990	7 facilities	mixed	good	no	2

LANDSLIDE

The structures that received a high rate in terms of degree of impact in its exposure to landslide total to 39 composed of 23 day care centers, eight (8) elementary schools, three (3) barangay halls, three (3) are barangay health stations, and two (2) secondary schools. Most of the structures need to be repaired in terms of existing condition.

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
TAMBOBONG	Barangay Hall	Tambobong Brgy. Hall	2	184.667	N/A	concrete	good	yes	1
ACACIA	Barangay Hall	Acacia Brgy. Hall	2	111.403	N/A	concrete	good	yes	1
GATUNGAN	Barangay Hall	Gatungan Brgy. Hall	2	198.003	N/A	concrete	fair	no	2
MUDIANG	Barangay Hall	Mudiang Brgy. Hall	2	143.224	N/A	concrete	good	yes	1
INAYANGAN	Barangay Hall	Inayangan Brgy. Hall	2	167.876	N/A	concrete	good	yes	1
LAMPIANAO	Barangay Hall	Lampianao Brgy. Hall	2	56.607	N/A	concrete	good	yes	1
MEGKAWAYAN	Barangay Hall	Megkawayan Brgy. Hall	2	183.715	N/A	concrete	good	yes	1
BAGANIHAN	Barangay Hall	Baganihan Brgy. Hall	2	200.835	N/A	concrete	good	yes	1
BANTOL	Barangay Hall	Bantol Brgy. Hall	2	193.175	N/A	concrete	good	yes	1
BUDA	Barangay Hall	Buda Brgy. Hall	2	196.615	N/A	concrete	good	yes	1
DALAG LUMOT	Barangay Hall	Dalag Lumot Brgy. Hall	2	198.44	N/A	concrete	good	yes	1
DATU SALUMAY	Barangay Hall	Datu Salumay Brgy. Hall	2	201.775	N/A	concrete	good	yes	1
MAGSAYSAY	Barangay Hall	Magsaysay Brgy. Hall	2	154.502	N/A	concrete	good	yes	1
MALAMBA	Barangay Hall	Malamba Brgy. Hall	2	224.093	N/A	concrete	good	yes	1
MARILOG	Barangay Hall	Marilog Brgy. Hall	2	81.587	N/A	concrete	good	yes	1
SALAYSAY	Barangay Hall	Salaysay Brgy. Hall	2	180.932	N/A	concrete	good	yes	1
COLOSAS	Barangay Hall	Colosas Brgy. Hall	1	100.007	N/A	concrete	good	yes	1
FATIMA	Barangay Hall	Fatima Brgy Hall	2	100.762	N/A	concrete	fair	no	2
LUMIAD	Barangay Hall	Lumiad Brgy Hall	2	100.008	N/A	mixed	fair	no	3

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
MABUHAY	Barangay Hall	MABUHAY Barangay Hall	2	153.091	N/A	concrete	good	yes	1
MALABOG	Barangay Hall	Malabog Brgy. Hall	2	101.466	N/A	concrete	good	yes	1
MAPULA	Barangay Hall	Mapula Brgy Hall	1	100.009	N/A	concrete	good	yes	1
PANDAITAN	Barangay Hall	Pandaitan Brgy Hall	2	100.006	N/A	mixed	fair	no	3
PAÑALUM	Barangay Hall	Panalum Brgy Hall	2	198.564	N/A	concrete	good	yes	1
PARADISE EMBAC	Barangay Hall	Paradise Embac Brgy Hall	2	100.007	N/A	concrete	good	yes	1
SALAPAWAN	Barangay Hall	Salapawan Brgy Hall	*	*	N/A	*	*	*	3
SUMIMAO	Barangay Hall	Sumimao Brgy Hall	2	86.231	N/A	concrete	good	yes	1
LANGUB	Barangay Hall	Langub Brgy. Hall	2	53.321	N/A	concrete	good	yes	1
ATAN-AWE	Barangay Hall	Atan-awe Brgy. Hall	2	154.914	N/A	concrete	good	yes	1
CAMANSI	Barangay Hall	Camansi Brgy. Hall	2	163.766	N/A	concrete	good	yes	1
DALIAON PLANTATION	Barangay Hall	Daliaon Plantation Brgy Hall	2	171.908	N/A	concrete	good	yes	1
EDEN	Barangay Hall	Eden Brgy. Hall	2	72.393	N/A	concrete	good	yes	1
SIBULAN	Barangay Hall	Sibulan Brgy. Hall	2	166.851	N/A	concrete	good	yes	1
TIBULOY	Barangay Hall	Tibuloy Brgy. Hall	2	176.301	N/A	concrete	good	yes	1
NEW CARMEN	Barangay Hall	New Carmen Brgy/. Hall	2	188.271	N/A	concrete	good	yes	1
TALANDANG	Barangay Hall	Pangyan Brgy Hall	2	182.292	N/A	concrete	good	yes	1
Acacia	Elementary School	Acacia ES		20,000	13	Mixed	Needs repair	No	2
Acacia	Secondary School	Acacia NHS		1248		Mixed	Needs repair	No	2.5
Malabog	Elementary School	Alon ES		396		Mixed	Needs repair	No	2.5
Atan-Awe	Elementary School	Atan-Owe ES		10000	7	Mixed	Needs repair	No	2.5

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Sumimao	Elementary School	Bacsarpa ES		4000	7	Mixed	Needs Repair	No	3
Salaysay	Elementary School	Balah Licosan ES		10000	7	Mixed	Needs Repair	No	2.5
Talandang	Elementary School	Balderas ES		7590	7	Mixed	Needs Repair	No	2
Marilog	Elementary School	Balite ES		70000	7	Mixed	Needs Repair	No	2.5
Malabog	Elementary School	Balugo ES		25000	6	Mixed	Needs Repair	No	2.5
Cabantian	Elementary School	Banganga ES		4,195	7	Mixed	Needs Repair	No	2.5
Bantol	Elementary School	Bantol ES		19000	7	Mixed	Needs Repair	No	2.5
Daliaon Plantation	Elementary School	Baracayo Integrated School		11156	12	Mixed	Needs Repair	No	2.5
Bato	Elementary School	Bato ES		10000	8	Mixed	Needs Repair	No	2.5
Baganihan	Elementary	Bayanihan ES		3000	7	Mixed	Needs Repair	No	2.5
Malabog	Elementary School	Betan ES		40000	7	Mixed	Needs Repair	No	2.5
Fatima	Elementary School	Binowang ES		27048	14	Mixed	Needs repair	No	2.5
Fatima	Secondary School	Binowang NHS		15000	18	Mixed	Needs repair	No	2.5
Buda	Secondary	Buda NHS		18000	20	Mixed	Needs repair	No	2.5
Tibungco	Elementary School	Buhisan ES		20831	29	Mixed	Needs repair	No	2.5
Tapak	Elementary School	Butay ES		60000	7	Mixed	Needs repair	No	2.5

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Suawan	Elementary School	Cabagbahangan ES		40000	7	Mixed	Needs Repair	No	2.5
Dominga	Elementary School	Cabagtukan ES		20000	7	Mixed	Needs repair	No	2.5
Cabantian	Elementary School	Cabantian ES		2,000	40	Mixed	Needs repair	No	2.5
Malabog	Elementary School	Cabonbon ES		14400	7	Mixed	Needs Repair	No	2.5
Malabog	Secondary	Cabonbon NHS		235	7	Mixed	Needs Repair	No	2.5
New Carmen	Elementary School	Carmen ES		15085	9	Mixed	Needs Repair	No	2.5
Matina Crossing	Elementary School	Ciriaco Mariano ES		1000	8	Mixed	Needs Repair	No	3
Colosas	Elementary School	Colosas ES		20000	7	Mixed	Needs Repair	No	2.5
Buda	Elementary	Columbus ES		1000	11	Mixed	Needs Repair	No	3
Mapula	Elementary School	Damilag PS		4000	11	Mixed	Needs Repair	No	3
Dalag Lumot	Elementary School	Datu Duyan ES		2000	9	Mixed	Needs repair	No	2.5
Colosas	Elementary School	Datu Libayao ES		36000	14	Mixed	Needs Repair	No	2.5
Marilog Proper	Elementary School	Datu Lompipi ES		35703	7	Mixed	Needs Repair	No	2.5
Salapawan	Elementary School	Datu Manlangan ES		20000	7	Mixed	Needs Repair	No	2.5
Datu Salumay	Elementary	Datu Salumay ES		55000	8	Mixed	Needs Repair	No	2.5
Malabog	Elementary School	Don Mariano Marcos ES		1750	7	Mixed	Needs repair	No	2.5

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Gumitan	Elementary School	Dumalogdog ES		20000	7	Mixed	Needs Repair	No	3
Eden	Secondary School	Elias Lopez Memorial NHS		10000	23	Mixed	Needs Repair	No	2.5
Malamba	Secondary School	G Astila SNCM HS		10000	15	Mixed	Needs Repair	No	2.5
Colosas	Elementary School	Galacia ES		36000	7	Mixed	Needs Repair	No	2.5
Mandug	Elementary School	Galon ES		2865	7	Mixed	Needs Repair	No	2.5
Gatungan	Elementary School	Gatungan ES		6623	7	Mixed	Needs Repair	No	2.5
Matina Crossing	Elementary School	GSIS Heights ES		20000	14	Mixed	Needs Repair	No	2.5
Inayangan	Elementary School	Inayangan ES		11880	17	Mixed	Needs Repair	No	3
Inayangan	Secondary School	Inayangan NHS		11200	6	Mixed	Needs Repair	No	3
Tamugan	Elementary School	Kanacan ES		2467	7	Mixed	Needs Repair	No	2.5
Marilog Proper	Elementary School	Kibalang ES		40012	13	Mixed	Needs Repair	No	2.5
Malamba	Elementary School	Kibangay ES		30316	9	Mixed	Needs Repair	No	2.5
Tambobong	Elementary School	Kidali ES		500	7	Mixed	Needs Repair	No	2.5
Tapak	Elementary School	Labo ES		60000	7	Mixed	Needs Repair	No	2.5
Tapak	Secondary School	Labo NHS		410	0	Mixed	Needs Repair	No	2.5

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Marilog Proper	Elementary	Ladian ES		11600	7	Mixed	Needs Repair	No	2.5
Marilog Proper	Elementary School	Laho ES		1500	7	Mixed	Needs Repair	No	2.5
Lampianao	Elementary School	Lampianao ES		20000	7	Mixed	Needs Repair	No	2.5
Marilog Proper	Elementary School	Lapinig ES		326	7	Mixed	Needs Repair	No	2.5
Pandaitan	Secondary School	Lorenzo Latawan NHS		10000		Mixed	Needs Repair	No	2.5
Dalag Lumot	Elementary School	Lumatag ES		10000	7	Mixed	Needs Repair	No	2.5
Lumiad	Elementary School	Lumiad ES		50000	7	Mixed	Needs Repair	No	2.5
Marilog Proper	Elementary School	Lumondao ES		5000	7	Mixed	Needs Repair	No	2.5
Malabog	Elementary School	M. Guloman IS(Binatón ES)		30000	7	Mixed	Needs Repair	No	2.5
Marilog Proper	Elementary School	Mabuhay ES		40000	7	Mixed	Needs Repair	No	2.5
Magsaysay	Elementary School	Magsaysay ES		43056	8	Mixed	Needs Repair	No	2.5
Malabog	Elementary School	Malabog CES		24740	18	Mixed	Needs Repair	No	2.5
Malabog	Secondary School	Malabog NHS		10000	20	Mixed	Needs Repair	No	2.5
Malabog	Secondary School	Malabog NHS-Annex		292		Mixed	Needs Repair	No	2.5
Bantol	Elementary School	Malakeba ES		20000	7	Mixed	Needs Repair	No	2.5
Malamba	Elementary School	Malamba ES		12000	7	Mixed	Needs repair	No	2.5

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Malabog	Elementary School	Malamboon Integrated School		20850	7	Mixed	Needs Repair	No	2.5
Marilog Proper	Elementary School	Malikongkong ES		40000	11	Mixed	Needs Repair	No	2.5
Marilog Proper	Elementary School	Maluan ES		2500	7	Mixed	Needs Repair	No	2.5
Salaysay	Elementary School	Manaong ES		5000	7	Mixed	Needs Repair	No	2.5
Tapak	Elementary	Mangani ES		50000	7	Mixed	Needs Repair	No	2.5
Tambobong	Elementary School	Mangas-as ES		20000	7	Mixed	Needs Repair	No	2.5
Malabog	Elementary School	Mangmang & Canoy IS(Crossing Malabog ES)		3000	7	Mixed	Needs Repair	No	2.5
Mapula	Elementary School	Mapula ES		20000	11	Mixed	Needs Repair	No	2.5
Marilog Proper	Secondary School	Marahan NHS		25890	21	Mixed	Needs Repair	No	2.5
Marilog Proper	Elementary School	Marahan West ES		60000	10	Mixed	Needs Repair	No	2.5
Marilog Proper	Elementary School	Marilog CES		40000	15	Mixed	Needs Repair	No	2.5
Datu Salumay	Secondary	Marilog HS of Agr'l		55000	11	Mixed	Needs repair	No	2.5
Marilog Proper	Secondary School	Marilog NHS		21300	11	Mixed	Needs Repair	No	2.5
Salaysay	Elementary School	Masawang ES		12500	8	Mixed	Needs Repair	No	2.5
Suawan	Elementary School	Masicampo ES		20000	7	Mixed	Needs Repair	No	2.5
Megkawayan	Elementary School	Megkawayan ES		2580	15	Mixed	Needs repair	No	2.5

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Datu Salumay	Elementary	Misuhumey ES		745	7	Mixed	Needs repair	No	2.5
Sibulan	Elementary School	Mt. Apo ES		20214	7	Mixed	Needs repair	No	2.5
Sibulan	Secondary School	Mt. Apo NHS		3218		Mixed	Needs repair	No	2.5
Mudiang	Elementary School	Mudiang ES		10000	10	Mixed	Needs repair	No	2.5
Marilog Proper	Elementary School	Namnam ES		14000	7	Mixed	Needs repair	No	2.5
Datu Salumay	Elementary School	Nangalid ES		60000	7	Mixed	Needs repair	No	2.5
Marilog Proper	Elementary School	New Sabang ES		10000	7	Mixed	Needs repair	No	2.5
Inayangan	Elementary School	Pablo Sebuan ES		10000	7	Mixed	Needs repair	No	2.5
Malabog	Elementary School	Pamantawan ES		15540	7	Mixed	Needs repair	No	2.5
Marilog Proper	Elementary School	Pamuhatan ES		10000	7	Mixed	Needs repair	No	2.5
Colosas	Secondary School	Panaga NHS		17000	16	Mixed	Needs repair	No	2.5
Pañalum	Elementary School	Panalum ES		10000	7	Mixed	Needs repair	No	2.5
Pandaitan	Elementary School	Pandaitan ES		2000	10	Mixed	Needs repair	No	2.5
Pangyan	Elementary School	Pangyan ES		25000	6	Mixed	Needs repair	No	2.5
Tamugan	Elementary School	Pangyan ES		25000	6	Mixed	Needs repair	No	2.5
Marilog Proper	Elementary School	Panipasan ES		10590	7	Mixed	Needs repair	No	2.5

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Malabog	Elementary School	Panulawan ES		28682	7	Mixed	Needs repair	No	2.5
Paradise Embac	Elementary School	Paradise Embac ES		25191	15	Mixed	Needs repair	No	2.5
Paradise Embac	Secondary School	Paradise Embac NHS		1028	19	Mixed	Needs repair	No	2.5
Marilog Proper	Elementary School	Patag ES		17000	8	Mixed	Needs repair	No	2.5
Tamayong	Elementary School	Pedro P Rodriguez ES (Upper Tamayong ES)		20000	13	Mixed	Needs repair	No	2.5
Pandaitan	Elementary School	Pegdalahan ES		40000	7	Mixed	Needs repair	No	2.5
Lamanan	Elementary School	Polocon ES		25000	7	Mixed	Needs repair	No	3
Inayangan	Elementary School	Popo ES		19900	7	Mixed	Needs repair	No	2.5
Daliaon Plantation	Elementary School	Quezon ES		227882000	7	Mixed	Needs repair	No	2.5
Dominga	Elementary School	Quibatón ES		20000	4	Mixed	Needs repair	No	3
Baracatan	Elementary School	Rizal ES		5000	7	Mixed	Needs repair	No	2.5
Salapawan	Elementary School	Salapawan ES		10000	7	Mixed	Needs repair	No	2.5
Salaysay	Elementary School	Salaysay ES		19994	11	Mixed	Needs repair	No	2.5
Salaysay	Secondary School	Salaysay NHS		10000		Mixed	Needs repair	No	2.5
Eden	Elementary School	San Jose ES		20000	13	Mixed	Needs repair	No	2.5
Marilog Proper	Elementary School	San Jose ES		2000	7	Mixed	Needs repair	No	2.5

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Fatima	Elementary School	San Pablo ES		10000	7	Mixed	Needs repair	No	2.5
Tamugan	Elementary School	Siao ES		20000	7	Mixed	Needs repair	No	2.5
Buhangin Proper	Elementary School	St. Jude ES		8881	19	Mixed	Needs repair	No	2.5
Fatima	Elementary School	Sta. Maria ES		13000	7	Mixed	Needs repair	No	2.5
Marilog Proper	Elementary School	Sto. Niño ES		3500	7	Mixed	Needs repair	No	2.5
Marilog Proper	Elementary School	Sumilop ES		20000	7	Mixed	Needs repair	No	2.5
Sumimao	Elementary School	Sumimao ES		18990	6	Mixed	Needs repair	No	2.5
Sumimao	Secondary School	Sumimao NHS		10000	14	Mixed	Needs repair	No	2.5
Colosas	Elementary School	Surayan ES		11946	7	Mixed	Needs repair	No	2.5
Megkawayan	Secondary School	T. Singson NHS		10000	21	Mixed	Needs repair	No	3
Malamba	Elementary School	Taga-ibo ES		20000	7	Mixed	Needs repair	No	2.5
Tambobong	Elementary School	Tambobong ES		2000	20	Mixed	Needs repair	No	2.5
Tambobong	Secondary School	Tambobong NHS		10000	12	Mixed	Needs repair	No	2.5
Tapak	Elementary	Tapak ES		9000	11	Mixed	Needs repair	No	2.5
Tapak	Secondary School	Tapak NHS		488	11	Mixed	Needs repair	No	2.5
Tibuloy	Elementary School	Tibuloy ES		21115	10	Mixed	Needs repair	No	2.5

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Malamba	Elementary School	Titogop ES		77730	7	Mixed	Needs re-pair	No	2.5
Marilog Proper	Elementary School	Upian ES		30000	7	Mixed	Needs re-pair	No	2.5
Salaysay	Elementary School	Upper Masawang ES		24000	7	Mixed	Needs re-pair	No	2.5
Malabog	Elementary School	V. Bontilao Sr. IS (Kapihan ES)		30000	7	Mixed	Needs re-pair	No	2.5
Acacia	BHS	Acacia Health Center	1	35.00	N/A	Concrete	Fair	No	2
Atan-Awe	BHS	Atan-Awe	1	81.34	N/A	Concrete	Good	Yes	1
Bantol	BHS	Bantol	1	136.09	N/A	Concrete	Good	Yes	1
Catigan	BHS	Catigan	1	34.23	N/A	Concrete	Good	Yes	2
Dalag Lumot	BHS	Dalag	1	171.88	N/A	Concrete	Good	Yes	1
Daliaon Plantation	BHS	Daliaon Plantation	1	101.58	N/A	Concrete	Fair	No	2
Mapula	BHS	Damilag BHS	1	100.00	N/A	Concrete	Good	Yes	1
Eden	BHS	Eden	1	62.54	N/A	Concrete	Good	Yes	1
Fatima	BHS	Fatima Health Center	1	118.85	N/A	Concrete	Good	Yes	1
Gatungan	BHS	Gatungan, Health Center	1	349.23	N/A	Concrete	Fair	No	2
Inayagan	BHS	Inayangan Health Center	1	59.15	N/A	Concrete	Good	Yes	1
Salapawan	BHS	Kinse-kinse Health Center	1	123.69	N/A	Concrete	Good	Yes	1
Langub	BHS	Langub Health Center	1	299.10	N/A	Concrete	Fair	No	2
Lumiad	BHS	Lumiad Health Center	1	77.14	N/A	Concrete	Fair	No	2
Magsaysay	BHS	Magsaysay	1	72.03	N/A	Concrete	Poor	No	3
Magtuod	BHS	Magtuod Health Center	1	137.54	N/A	Concrete	Good	Yes	1

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Mahayag	BHS	Mahayag Health Center	1	76.60	N/A	Concrete	Good	Yes	1
Malabog	Birthing Home	Malabog Lying-In and RHU	1	81.72	N/A	Concrete	Good	Yes	1
Malamba	BHS	Malamba	1	55.83	N/A	Concrete	Good	Yes	2
Mapula	BHS	Mapula Health Center	1	63.58	N/A	Concrete	Good	Yes	1
Marilog	RHU	Marahan RHU with Birthing	2	266.79	N/A	Concrete	Good	Yes	1
Marilog	Primary Hospital	Marilog District Infirmary	1	1472.64	N/A	Concrete	Good	Yes	1
Marilog	BHS	Marilog Proper	1	143.36	N/A	Concrete	Fair	No	2
Marilog	UHC	Marilog Urban Health Center	1	137.99	N/A	Concrete	Good	Yes	1
Megkawayan	BHS	Megkawayan Health Center	1	75.61	N/A	Concrete	Good	Yes	1
Langub	BHS	Mojon BHS	1	51.20	N/A	Concrete	Good	Yes	1
Mudiang	BHS	Mudiang Health Center	1	103.84	N/A	Concrete	Fair	No	2
New Carmen	BHS	New Carmen	1	36.71	N/A	Concrete	Fair	No	2
Colosas	BHS	Panaga Health Center	1	390.86	N/A	Concrete	Good	Yes	1
Pañalum	RHU	Pañalum Health Center	1	279.49	N/A	Concrete	Good	Yes	1
Pandaitan	BHS	Pandaitan Health Center	1	76.09	N/A	Concrete	Poor	No	3
Pangyan	BHS	Pangyan Health Center	1	75.40	N/A	Concrete	Good	Yes	1
Paradise Embak	BHS	Paradise Embac Health Center	1	202.97	N/A	Concrete	Good	Yes	1
Salapawan	BHS	Salapawan Health Center	1	41.58	N/A	Concrete	Good	Yes	1
Salaysay	BHS	Salaysay	1	192.04	N/A	Concrete	Good	Yes	1
Sibulan	BHS	Sibulan	1	51.79	N/A	Concrete	Good	Yes	1
Datu Salumay	BHS	Sitio Tagumpay BHS	1	535.95	N/A	Concrete	Good	Yes	1
Sumimao	BHS	Sumimao Health Center	1	189.08	N/A	Concrete	Good	Yes	1
Tambobong	BHS	Tambobong Health Center	1	138.64	N/A	Mixed	Poor	No	3
TIBULOY	BHS	Tibuloy	1	56.46	N/A	Concrete	Fair	No	2
Tibungco	Birthing Home	Tibungco Lying-In	1	60.00	N/A	Concrete	Good	Yes	1
Cabantian	Fire Station	Cabantian Fire Station	1	598.00	10 personnel	concrete	fair	Yes	2

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Malabog	Police Station	Police Station 7 (Paquibato)	1	5621.00	100 personnels	concrete	good	Yes	1
Marilog	Police Station	Police Station 12 (Marilog)	1	600	80 persons	concrete	good	No	1
Indangan	Police Sub Station	North Town Sub Station	1	120	20 persons	concrete	good	no	1
Brgy. 19-B	day care center	19-B	1	100	1 classroom	concrete	good	No	2
Langub	day care center	Langub PHDCC	1	200	1 classroom	concrete	good	No	2
Ma-a	day care center	GASAI PHDCC	1	85	1 classroom	concrete	good	No	2
Ma-a	day care center	Nacilla PHDCC	1	200	1 classroom	concrete	fair	No	2
Magtuod	day care center	Magtuod PHDCC	1	150	1 classroom	light	poor	No	3
Acacia	day care center	Acacia PHDCC	1	200	1 classroom	concrete	good	No	1
Acacia	day care center	Upper Sta. Cruz	1	50	1 classroom	mixed	fair	No	2
Buhangin (Pob.)	day care center	Buhangin Hills DCC	1	242	1 classroom	concrete	good	No	1
Cabantian	day care center	Greenland 2 DCC	1	130	1 classroom	concrete	good	No	1
Cabantian	day care center	Green Orchard Village DCC	1	150	1 classroom	concrete	good	No	1
Cabantian	residential facility	Balay Dangupan Crisis Intervention Center	2	2684	30 beds	concrete	good	Yes	1
Callawa	day care center	P14 Callawa DCC	1	85	1 classroom	concrete	good	No	1
Callawa	day care center	Manaklay DCC	1	90	1 classroom	mixed	fair	No	2
Callawa	day care center	P15 Callawa-IP HB	1	85	1 classroom	concrete	good	No	1
Tigatto	day care center	Pilar Rodriguez PHDCC	1	80	1 classroom	concrete	fair	No	1
Mahayag	day care center	Liloan DCC	1	100	1 classroom	concrete	good	No	1
Mahayag	day care center	Mahayag DCC	1	150	1 classroom	concrete	good	No	2
Colosas	day care center	Galacia DCC	1	100	1 classroom	concrete	good	No	1
Colosas	day care center	Panaga DCC	1	200	1 classroom	light	good	No	2
Colosas	day care center	Surayan Day Care Center	1	84	1 classroom	light	poor	No	2
Colosas	day care center	Surayan Day Care Center	1	84	1 classroom	mixed	good	No	2
Colosas	day care center	Colosas Proper DCC	1	100	1 classroom	concrete	good	No	1

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Fatima (Benawang)	day care center	Fatima DCC	1	120	1 classroom	mixed	good	No	2
Fatima (Benawang)	day care center	San Pablo DCC	1	84	1 classroom	concrete	good	No	1
Lumiad	day care center	Lumiad DCC	1	110	1 classroom	concrete	good	No	1
Mabuhay	day care center	Mabuhay DCC	1	100	1 classroom	concrete	good	No	1
Mabuhay	day care center	Lawis DCC	1	120	1 classroom	mixed	good	No	2
Malabog	day care center	Malambo-on DCC	1	110	1 classroom	light	good	No	2
Malabog	day care center	Taloytoy HB	1	100	1 classroom	mixed	good	No	2
Malabog	day care center	Quarry DCC	1	95	1 classroom	mixed	good	No	2
Malabog	day care center	Crossing Malabog DCC	1	84	1 classroom	concrete	good	No	2
Malabog	day care center	Binaton DCC	1	84	1 classroom	concrete	good	No	2
Malabog	day care center	Bal-ong Day Care Center	1	84	1 classroom	concrete	good	No	2
Malabog	day care center	Panulawan DCC	1	112	1 classroom	concrete	good	No	2
Malabog	day care center	Malabog DCC	1	84	1 classroom	concrete	good	No	3
Malabog	day care center	Malabog Project Hope DCC	1	110	1 classroom	light	good	No	1
Malabog	day care center	Cabonbon DCC	1	90	1 classroom	concrete	good	No	1
Malabog	day care center	Balugo Day Care Center	1	100	1 classroom	light	poor	No	2
Mapula	day care center	Lower Mapula DCC	1	111	1 classroom	concrete	good	No	1
Mapula	day care center	Upper Mapula DCC	1	100	1 classroom	mixed	good	No	1
Pandaitan	day care center	Pegdalahan DCC	1	150	1 classroom	concrete	good	No	1
Pañalum	day care center	Pañalum DCC	1	200	1 classroom	concrete	good	No	1
Paquibato	day care center	Alfredo Degamo DCC	1	190	1 classroom	concrete	fair	No	2
Paradise Embak	day care center	Paradise Embac DCC	1	130	1 classroom	concrete	good	No	1
Paradise Embak	day care center	Dela Cerna DCC	1	130	1 classroom	mixed	good	No	2
Salapawan	day care center	Balite DCC	1	110	1 classroom	concrete	poor	No	2
Sumimao	day care center	Sumimao Day Care Center	1	160	1 classroom	concrete	good	No	1

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Sumimao	day care center	Marcos T. Vistal DCC	1	100	1 classroom	concrete	fair	No	2
Malabog	day care center	KTC DCC	1	40	1 classroom	light	poor	No	2
Malabog	day care center	Pamantawan Day Care Center	1	50	1 classroom	mixed	poor	No	2
Dominga	day care center	Sitio Quiabaton HB	1	192	1 classroom	light	poor	No	2
Inayangan	day care center	Inayangan Proper PHDCC	1	400	1 classroom	mixed	good	No	2
Inayangan	day care center	Sinagmacan PHDCC	1	150	1 classroom	concrete	good	No	1
Inayangan	day care center	Sitio Galao PHDCC	1	150	1 classroom	mixed	good	No	2
Inayangan	day care center	Pablo Sebulan PHDCC	1	400	1 classroom	concrete	good	No	1
Inayangan	day care center	Popo PHDCC	1	600	1 classroom	mixed	good	No	2
Lacson	day care center	Lacson Riverside PHDCC	1	150	1 classroom	concrete	good	No	1
Lamanan	day care center	Colabol / Darila PHDCC	1	400	1 classroom	concrete	good	No	1
Lamanan	day care center	Libongan PHDCC	1	600	1 classroom	concrete	good	No	1
Lamanan	day care center	Polokon PHDCC	1	200	1 classroom	mixed	good	No	2
Lamanan	day care center	Upper Libongan HB	1	32	1 classroom	light	fair	No	3
Megkawayan	day care center	Megkawayan PHDCC	1	250	1 classroom	light	poor	No	2
Megkawayan	day care center	Purok Mahayag Home Based	1	80	1 classroom	light	poor	No	3
Pangyan	day care center	Pangyan DCC	1	60	1 classroom	light	poor	No	2
Saloy	day care center	Purok Salome PHDCC	1	300	1 classroom	concrete	good	No	1
Saloy	day care center	Sitio Ulas HB	1	48	1 classroom	concrete	good	No	1
Saloy	day care center	P- Masaya HB	1	40	1 classroom	light	poor	No	3
Saloy	day care center	P-Bagong Silang HB	1	40	1 classroom	light	poor	No	3
Tamayong	day care center	Upper Tamayong PHDCC	1	100	1 classroom	mixed	fair	No	2
Dalag	day care center	Dalag DCC	1	150	1 classroom	light	fair	No	2
Dalag	day care center	Purok 3 Dalag HB (Dalag Lumot HB)	1	150	1 classroom	mixed	fair	No	3
Gumitan	day care center	Kapatagan DCC (Kapatagan HB?)	1	300	1 classroom	concrete	good	No	1
Magsaysay	day care center	Magsaysay DCC	1	350	1 classroom	mixed	fair	No	2
Magsaysay	day care center	Sitio Imboy HB	1	255	1 classroom	light	fair	No	3
Magsaysay	day care center	Sitio Lanao HB	1	100	1 classroom	concrete	good	No	1
Malamba	day care center	Titugop DCC	1	400	1 classroom	concrete	good	No	1
Malamba	day care center	Malamba DCC	1	100	1 classroom	concrete	good	No	1

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Malamba	day care center	Lanitum DCC	1	500	1 classroom	concrete	good	No	1
Malamba	day care center	Sambunotan (AWID) DCC	1	600	1 classroom	mixed	good	No	2
Malamba	day care center	Lower Malungon HB	1	40	1 classroom	concrete	good	No	1
Marilog	day care center	Upper Kibalang DCC	1	500	1 classroom	concrete	good	No	1
Marilog	day care center	Balite DCC	1	200	1 classroom	mixed	good	No	2
Marilog	day care center	OSCC DCC, Kibalang	1	150	1 classroom	concrete	good	No	1
Marilog	day care center	Lomondao DCC	1	400	1 classroom	concrete	good	No	1
Marilog	day care center	Sto. Niño DCC	1	100	1 classroom	concrete	good	No	1
Marilog	day care center	Malikongkong HB	1	150	1 classroom	mixed	fair	No	3
Marilog	day care center	Pataga Adonai HB	1	40	1 classroom	light	good	No	3
Marilog	day care center	East Marahan HB	1	100	1 classroom	light	good	No	3
Marilog	day care center	Namnam HB	1	150	1 classroom	light	fair	No	3
Marilog	day care center	Mundo Hill HB	1	400	1 classroom	light	fair	No	3
Marilog	day care center	Mabuhay HB	1	500	1 classroom	light	good	No	3
Marilog	day care center	Campo Santos HB	1	60	1 classroom	mixed	good	No	3
Marilog	day care center	Marilog Proper HB	1	120	1 classroom	mixed	good	No	3
Marilog	day care center	Panipasan HB	1	300	1 classroom	light	fair	No	3
Marilog	day care center	Matigsalog HB	1	500	1 classroom	light	good	No	1
Marilog	day care center	Quimasog DCC	1	288	1 classroom	concrete	good	No	1
Marilog	day care center	Upian DCC	1	300	1 classroom	light	good	No	2
Marilog	day care center	Magwawa DCC	1	340	1 classroom	light	fair	No	2
Marilog	day care center	Sumilop DCC	1	168	1 classroom	concrete	good	No	1
Marilog	day care center	CSSDO Marilog District Office	1	300	1 classroom	concrete	good	No	1
Salaysay	day care center	Salaysay DCC	1	300	1 classroom	mixed	fair	No	2
Salaysay	day care center	Sitio Ballah HB	1	300	1 classroom	concrete	good	No	2
Salaysay	day care center	Masawang DCC	1	300	1 classroom	concrete	good	No	1
Salaysay	day care center	Cantimon DCCC	1	80	1 classroom	light	poor	No	2
Salaysay	day care center	Mahalyang HB	1	96	1 classroom	concrete	good	No	1
Suawan (Tuli)	day care center	Unapan DCC	1	300	1 classroom	concrete	good	No	1
Suawan (Tuli)	day care center	Suawan DCC	1	300	1 classroom	light	needsrepair	No	2

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Suawan (Tuli)	day care center	Quirorom DCC (Quirorom HB?)	1	150	1 classroom	mixed	good	No	2
Suawan (Tuli)	day care center	Lower Happy Valley DCC	1	100	1 classroom	light	fair	No	2
Suawan (Tuli)	day care center	Balite HB	1	144	1 classroom	light	fair	No	2
Suawan (Tuli)	day care center	Masicampo HB	1	200	1 classroom	mixed	good	No	3
Tamugan	day care center	Lower Tamugan DCC	1	800	1 classroom	mixed	good	No	2
Tamugan	day care center	Kanacan DCC	1	200	1 classroom	light	poor	No	2
Tamugan	day care center	Bagobo Village HB	1	100	1 classroom	light	good	No	3
Tamugan	day care center	Pangyan DCC (Pangyan HB?)	1	360	1 classroom	concrete	good	No	1
Tamugan	day care center	Siao DCC	1	70	1 classroom	mixed	good	No	2
Tamugan	day care center	Lower Patag DCC	1	88	1 classroom	mixed	poor	No	2
Tamugan	day care center	Acacia HB	1	40	1 classroom	concrete	fair	No	2
Tamugan	day care center	Sabang HB	1	40	1 classroom	light	fair	No	3
Tamugan	day care center	Tagbao HB	1	300	1 classroom	light	fair	No	3
Tamugan	day care center	Sualon HB	1	100	1 classroom	mixed	good	No	3
Tamugan	day care center	Centro Tamugan DCC	1	100	1 classroom	mixed	fair	No	2
Tamugan	day care center	Sto. Niño DCC	1	150	1 classroom	concrete	fair	No	2
Atan-awe	day care center	Atan-awe DCC	1	100	1 classroom	concrete	good	No	1
Binugao	day care center	Binugao PHDCC	1	250	1 classroom	concrete	good	No	1
Camansi	day care center	Camansi DCC	1	100	1 classroom	concrete	good	No	1
Catigan	day care center	Acacia DCC	1	150	1 classroom	concrete	good	No	1
Daliaon Plantation	day care center	Daliaon Plantation DCC I	1	180	1 classroom	concrete	good	No	1
Eden	day care center	Eden PHDCC I	1	150	2 classroom	concrete	good	No	1
Ilang	day care center	Liloan DCC	1	100	1 classroom	mixed	good	No	1
Mahayag	day care center	Mahayag DCC	1	150	1 classroom	concrete	good	No	1
Mahayag	day care center	Mahayag Riverside DCC	1	150	1 classroom	concrete	good	No	1
Bunawan	day care center	Mudiang DCC	1	100	1 classroom	concrete	good	No	1
Bunawan	day care center	K-4 DCC	1	100	1 classroom	concrete	good	No	1
Lumiad	day care center	Lumiad DCC	1	110	1 classroom	concrete	good	No	1
Tapak	day care center	Tapak DCC	1	100	1 classroom	concrete	good	No	1

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Landslide, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Tapak	day care center	Tipakis HB	1	84	1 classroom	concrete	good	No	1
Tapak	day care center	Butay DCC	1	95	1 classroom	concrete	good	No	1
Tapak	day care center	Labo DCC	1	85	1 classroom	mixed	good	No	1
Tapak	day care center	Paraiso DCC	1	84	1 classroom	light	poor	No	2
Tapak	day care center	Mangani Day Care HB	1	90	1 classroom	light	poor	No	2
Tapak	day care center	Napus-okan DCC	1	90	1 classroom	light	poor	No	2
Tapak	day care center	Mirol-o HB	1	70	1 classroom	light	poor	No	3

LIQUEFACTION

A total of 73 structures have been rated with a high degree of impact or 3 in the occurrence of liquefaction. The critical point facilities are day care centers (19), barangay halls (16), elementary schools (12), barangay health stations (12), police outposts (8), fire stations (5), and the CDRRMO headquarters.

Table CP-8. Critical Point Facilities, Degree of Impact Rating to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
1-A	Barangay Hall	1-A Brgy. Hall	2	87.28	N/A	mixed	fair	no	3
1-A	BHS	Brgy 1-A Health Center	1	54.40	N/A	Mixed	Fair	Yes	2
1-A	day care center	Bolton DCC	1	80.00	1 classroom	concrete	fair	No	2
1-A	Elementary School	Magallanes ES	4	18943.00	124 classroom	Mixed	Needs Repair	No	2.5
2-A	Barangay Hall	2-A Brgy. Hall	2	100.00	N/A	concrete	good	yes	1
2-A	BHS	Brgy. 2-A Health Center	1	118.87	N/A	Concrete	Fair	No	2
2-A	City Hall	City Hall (Main)	4	1951.64	N/A	concrete	good	yes	1
2-A	City Hall	Sangguniang Panlungsod	4	3249.64	N/A	concrete	good	yes	1
2-A	City Hall	City Hall Annex	5	391.44	N/A	concrete	good	yes	1
2-A	day care center	Magallanes DCC	1	16.00	1 classroom	concrete	fair	No	2
2-A	Elementary School	Bolton ES	3	10500.00	29 classroom	Mixed	Needs Repair	No	2.5
3-A	Barangay Hall	3-A Brgy. Hall	1	64.25	N/A	concrete	good	yes	1
4-A	Barangay Hall	4-A Brgy. Hall	2	96.76	N/A	concrete	good	yes	1
4-A	BHS	Teen Center	1	120.00	N/A	Concrete	Good	Yes	1
4-A	day care center	Brgy 4-A DCC	1	36.00	1 classroom	concrete	good	No	1
4-A	Elementary School	Kapt. T. Monteverde Sr. CES	3	18870.00	101 classroom	Mixed	Needs Repair	No	2.5
4-A	RHU	Tomas Claudio Health Center	2	481.02	N/A	Concrete	Good	Yes	1
5-A	Barangay Hall	5-A Brgy. Hall	3	172.16	N/A	concrete	good	yes	1
5-A	BHS	Bankerohan Health Center	1	68.04	N/A	Concrete	Good	Yes	1

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
5-A	day care center	Brgy 5-A DCC I	1	36.00	1 classroom	concrete	good	No	1
5-A	day care center	Brgy 5-A DCC II	1	36.00	1 classroom	concrete	good	No	1
5-A	day care center	Brgy 5-A DCC III	1	36.00	1 classroom	concrete	good	No	1
5-A	day care center	Brgy 5-A DCC IV	1	36.00	1 classroom	concrete	good	No	1
5-A	day care center	Brgy 5-A DCC V	1	36.00	1 classroom	concrete	good	No	1
5-A	Elementary School	Dona Pilar Marfori ES	4	2600.00	35 classroom	Mixed	Needs Repair	No	3
7-A	Barangay Hall	7-A Brgy. Hall	3	149.04	N/A	concrete	good	yes	1
7-A	day care center	Malvar DCC	1	40.00	1 classroom	concrete	fair	No	1
9-A	Barangay Hall	9-A Brgy. Hall	2	115.48	N/A	concrete	good	yes	1
9-A	BHS	Brgy.9-A Health Center	1	51.20	N/A	Concrete	Good	Yes	1
9-A	day care center	Camus DCC (Barangay 9-A)	1	60.00	1 classroom	concrete	good	No	1
9-A	day care center	San Rafael Day Care Center	1	100.00	1 classroom	mixed	fair		2
9-A	day care center	DUHA DCC	1	80.00	1 classroom	light	poor		3
9-A	Elementary School	T. Palma Gil Elem. Sch.	1	6202.00	29 classroom	Mixed	Needs Repair	No	2.5
11-B	Barangay Hall	11-B Brgy. Hall	2	58.64	N/A	concrete	poor	no	3
12-B	Barangay Hall	12-B Brgy. Hall	2	101.63	N/A	concrete	good	yes	2
12-B	BHS	Brgy. 12-B Health Center	1	41.83	N/A	Concrete	Fair	No	2
12-B	day care center	V. Mapa DCC	1	120.00	1 classroom	concrete	good	No	1
13-B	Barangay Hall	13-B Brgy. Hall	*	*	N/A	*	*	*	3
14-B	Barangay Hall	14-B Brgy. Hall	2	33.55	N/A	concrete	good	yes	1
14-B	BHS	Brgy.14-B Health Center	1	11.04	N/A	Concrete	Fair	No	3
15-B	Barangay Hall	15-B Brgy. Hall	1	100.00	N/A	mixed	fair	no	3
15-B	BHS	Brgy. 15-B Health Center	1	6.02	N/A	Concrete	Fair	No	3
15-B	day care center	Brgy 15 B PHDCC	1	50.00	1 classroom	mixed	critical	No	3
16-B	Barangay Hall	16-B Brgy. Hall	*	*	N/A	*	*	*	3
17-B	Barangay Hall	17-B Brgy. Hall	1	51.38	N/A	wood	poor	no	3

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
18-B	Barangay Hall	18-B Brgy. Hall	2	122.10	N/A	concrete	good	yes	1
18-B	BHS	Brgy.18-B Health Center	1	39.44	N/A	Concrete	Fair	No	3
18-B	day care center	Brgy. 18 DCC Little Angels DCC	1	120.00	1 classroom	concrete	good	No	3
19-B	day care center	El Rio Vista DCC	1	150.00	1 classroom	concrete	fair	No	2
19-B	RHU	El Rio Vista Health Center	2	46.02	N/A	Concrete	Good	Yes	1
20-B	Barangay Hall	20-B Brgy. Hall	2	141.16	N/A	concrete	good	yes	1
20-B	BHS	Brgy.20-B Health Center	1	46.02	N/A	Concrete	Good	Yes	1
20-B	day care center	Regina Comp. DCC	1	60.00	1 classroom	concrete	good	No	1
20-B	Elementary School	E. Quirino ES	2	3500.00	19 classroom	Mixed	Needs Repair	No	2.5
20-B	Elementary School	San Roque CES	3	10500.00	65 classroom	Mixed	Needs Repair	No	2.5
21-C	Barangay Hall	21-C Brgy. Hall	1	45.42	N/A	concrete	fair	no	3
21-C	BHS	Brgy.21-C Piapi Health Center	1	30.00	N/A	Concrete	Good	Yes	1
21-C	day care center	Barangay 21-C PHDCC	1	150.00	1 classroom	concrete	good		1
22-C	Barangay Hall	22-C Brgy. Hall	3	270.72	N/A	concrete	good	yes	1
22-C	BHS	Brgy 22-C Health Center	1	278.75	N/A	Concrete	Fair	No	2
22-C	day care center	Brgy 22-C DCC	1	100.00	1 classroom	concrete	good		1
23-C	Barangay Hall	23-C Brgy. Hall	2	134.65	N/A	concrete	good	yes	1
23-C	BHS	New BHS / Isla Verde Purok 3B	1	51.85	N/A	Concrete	Good	Yes	1
23-C	day care center	Mini-Forest DCC	1	60.00	1 classroom	concrete	fair	No	2
23-C	Day care center (homebased)	Purok 2 Home-Based	1	50.00	1 classroom	light	poor	No	3
23-C	Day care center (homebased)	Purok 4 A Home-Based	1	50.00	1 classroom	light	poor	No	3
23-C	Day care center (homebased)	Kabingaag Home Based	1	80.00	1 classroom	light	poor	No	3

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
23-C	Day care center (homebased)	Purok 4 b Home-Based I	1	80.00	1 classroom	mixed	fair	No	3
23-C	Day care center (homebased)	Badjao Home Based	1	60.00	1 classroom	concrete	fair	No	3
23-C	Elementary School	Zonta Elem. School	3	2681.00	17 classroom	Mixed	Needs Repair	No	3
23-C	Police Station	Police Station 1 (Sta. Ana)	3	300.00	200 persons	concrete	good	yes	1
23-C	Police Sub Station	23-C Police Sub Station	1	25.00	3 persons	wood	poor	no	3
23-C	RHU	Brgy 23-C Mini Forest Health Center	2	361.65	N/A	Concrete	Good	Yes	1
24-C	Barangay Hall	24-C Brgy. Hall	4	84.69	N/A	concrete	good	yes	1
24-C	BHS	Brgy 24-C Health Center	1	84.96	N/A	Concrete	Good	Yes	1
25-C	Barangay Hall	25-C Brgy. Hall	2	25.85	N/A	concrete	good	yes	1
25-C	BHS	Brgy.25-C Health Center	1	12.93	N/A	Mixed	Poor	No	3
26-C	Barangay Hall	26-C Brgy. Hall	2	116.91	N/A	concrete	good	yes	1
26-C	BHS	Brgy.26-C Health Center	1	141.38	N/A	Concrete	Good	No	1
26-C	day care center	Silangan PHDCC	1	85.00	1 classroom	concrete	good	No	1
27-C	Barangay Hall	27-C Brgy. Hall	2	42.08	N/A	concrete	good	yes	1
27-C	BHS	Brgy.27-C Health Center	1	167.03	N/A	Concrete	Good	Yes	1
27-C	day care center	China Town DCC	1	100.00	1 classroom	concrete	good		1
27-C	day care center	Brgy. 27-C PHDCC	1	40.00	1 classroom	concrete	good	No	1
27-C	UHC	Sta. Ana Health Center	1	550.00	N/A	Concrete	Good	Yes	1
28-C	Barangay Hall	28-C Brgy. Hall	2	107.56	N/A	concrete	good	yes	1
28-C	BHS	Brgy.28-C Health Center	1	29.04	N/A	Concrete	Good	Yes	1
28-C	day care center	Brgay 28 -C PHDCC	1	40.00	1 classroom	concrete	fair	No	1
28-C	day care center	Rizal Day Care Center	1	100.00	1 classroom	concrete	good		1
28-C	Elementary School	Jose Rizal ES	3	9468.00	23 classroom	Mixed	Needs repair	No	2.5

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
28-C	Elementary School	M. Quezon ES	2	9000.00	34 classroom	Mixed	Needs Repair	No	2.5
28-C	Elementary School	Sta. Ana CES	3	15013.00	73 classroom	Mixed	Needs Repair	No	2.5
28-C	Elementary School	Manuel Roxas ES	3	3397.00	29 classroom	Mixed	Needs Repair	No	2.5
28-C	Secondary School	Sta. Ana NHS	4	14023.00	72 classroom	Mixed	Needs Repair	No	2
28-C	Secondary School	Sta. Ana SHS-Annex	4	1224.00	72 classroom	Mixed	Needs Repair	No	2
29-C	Barangay Hall	29-C Brgy. Hall	*	*	N/A	concrete	good	yes	1
29-C	BHS	Brgy. 29-C Health Center	1	22.04	N/A	Concrete	Good	Yes	1
30-C	Barangay Hall	30-C Brgy. Hall	2	118.66	N/A	concrete	good	yes	1
30-C	BHS	Brgy.30-C Health Center	1	31.32	N/A	Concrete	Good	Yes	1
30-C	day care center	St. Anne DCC	1	33.00	1 classroom	concrete	good	No	1
31-D	Barangay Hall	31-D Brgy. Hall	2	81.60	N/A	concrete	good	yes	1
31-D	BHS	Brgy. 31-D Health Center	1	38.71	N/A	Concrete	Good	Yes	1
31-D	day care center	Roxas 1 DCC	1	100.00	1 classroom	mixed	good	No	1
31-D	day care center	Roxas 2 DCC	1	100.00	1 classroom	mixed	good	No	1
31-D	Police Sub Station	31-D Police Sub Station	1	100.00	10 persons	concrete	good	no	1
32-D	Barangay Hall	32-D Brgy. Hall	2	40.17	N/A	mixed	fair	no	3
32-D	BHS	Reproductive Health and Wellness Center	1	485.48	N/A	Concrete	Good	Yes	1
32-D	day care center	Jacinto DCC	1	100.00	1 classroom	concrete	good	No	1
32-D	RHU	Brgy. 32-D Health Center	2	249.12	N/A	Concrete	Good	Yes	1
33-D	Barangay Hall	33-D Brgy. Hall	2	77.39	N/A	concrete	good	yes	1
33-D	day care center	Mabini DCC	1	120.00	1 classroom	concrete	good	No	1
34-D	Barangay Hall	34-D Brgy. Hall	*	*	N/A	*	*	*	3
35-D	Barangay Hall	35-D Brgy. Hall	1	89.74	N/A	concrete	good	yes	1
35-D	BHS	Brgy. 35-D Health Center	1	11.00	N/A	Mixed	Poor	No	3

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Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
35-D	day care center	Brgy 35 D PHDCC	1	120.00	1 classroom	concrete	good	No	1
36-D	Barangay Hall	36-D Brgy. Hall	2	109.07	N/A	concrete	good	yes	1
36-D	BHS	Brgy. 36-D Health Center	1	38.88	N/A	Concrete	Good	Yes	1
36-D	day care center	Brgy 36 Day Care Center	1	20.00	1 classroom	concrete	good	No	1
37-D	Barangay Hall	37-D Brgy. Hall	2	128.70	N/A	concrete	good	yes	1
37-D	BHS	Brgy. 37-D Health Center	1	94.12	N/A	Concrete	Good	Yes	1
37-D	day care center	Brgy. 37-D DCC?	1	60.00	1 classroom	concrete	fair	No	1
38-D	Barangay Hall	38-D Brgy. Hall	2	100.00	N/A	concrete	good	yes	1
38-D	BHS	Brgy. 38-D Health Center	1	38.94	N/A	Concrete	Good	Yes	1
38-D	day care center	Brgy 38 D PHDCC	1	60.00	1 classroom	concrete	good	No	1
38-D	Police Headquarters	Camp Captain Domingo E. Leonor	2	59629.00	14 facilities	mixed	fair	no	3
38-D	Police Station	Police Station 2 (San Pedro)	1	640.00	100 persons	concrete	good	no	1
38-D	residential facility	Paginhawaan Drop-In Center	2	200.00	140 persons	concrete	good	Yes	1
38-D	residential facility	Quick Response Team for Children's Concern / Kean Gabriel	2	200.00	140 persons	concrete	good	Yes	1
39-D	Barangay Hall	39-D Brgy. Hall	1	93.98	N/A	concrete	fair	no	2
39-D	BHS	Brgy. 39-D Health Center	1	50.80	N/A	Mixed	Poor	No	3
39-D	day care center	Brgy 39 D PHDCC	1	60.00	1 classroom	concrete	good	No	1
39-D	day care center	Child-Minding Center	2	200.00	1 classroom	concrete	good	Yes	1
40-D	Barangay Hall	40-D Brgy. Hall	2	43.61	N/A	concrete	good	yes	1
40-D	day care center	Brgy 40 D PHDCC	1	60.00	1 classroom	concrete	good	No	1
AGDAO PROPER	Barangay Hall	Agdao Brgy. Hall	2	135.96	N/A	concrete	good	yes	1
Agdao Proper	day care center	San Miguel DCC	1	68.00	1 classroom	concrete	needs Repair	No	3
Agdao Proper	day care center	Sta. Cruz DCC	1	35.00	1 classroom	mixed	needs repair	No	3

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Agdao Proper	day care center	San Isidro DCC	1	65.00	1 classroom	concrete	good	No	1
Agdao Proper	Elementary School	Agdao ES	2	1007.00	23 classroom	Mixed	Needs Repair	No	2.5
Agdao	RHU	Agdao Health Center	2	278.11	N/A	Concrete	Good	Yes	1
W. Aquino	BHS	Vicente Duterte Health Center	1	345.27	N/A	Concrete	Good	No	1
Wilfredo Aquino	BHS	Wilfredo Aquino Health Center	1	259.09	N/A	Concrete	Poor	No	3
Wilfredo Aquino	day care center	Waan PHDCC	1	40.00	1 classroom	mixed	good	No	2
PACIANO BANGOY	Barangay Hall	P. Bangoy Brgy. Hall	2	165.23	N/A	concrete	fair	no	3
Paciano Bangoy	BHS	Paciano Bangoy Health Center	1	153.09	N/A	Concrete	Poor	No	3
Paciano Bangoy	day care center	Cory Village DCC	1	45.00	1 classroom	cocrete	good	No	1
Paciano Bangoy	day care center	RGA DCC	1	80.00	1 classroom	mixed	good	No	2
Paciano Bangoy	day care center	Bagong Buhay DCC	1	30.00	1 classroom	mixed	needs Repair	No	3
Wilfredo Aquino	day care center	W. Aquino DCC I	1	80.00	1 classroom	concrete	good	No	1
Wilfredo Aquino	Elementary School	J. Porras ES	1	5000.00	54 classroom	Mixed	Needs Repair	No	2.5
Paciano Bangoy	Fire Station	Bangoy Fire Station	2	580.00	20 persons	wood	critical	no	3
Agdao Proper	Police Sub Station	Agdao Proper Police Sub Station	1	50.00	10 persons	concrete	good	yes	1
R. Castillo	Barangay Hall	R. Castillo Brgy. Hall	2	142.15	N/A	concrete	good	yes	1
R. Castillo	BHS	R.Castillo Health Center	1	144.59	N/A	Concrete	Fair	No	2
Rafael Castillo	day care center	R. Castillo DCC	1	100.00	1 classroom	concrete	good	No	1
CENTRO	Barangay Hall	Centro Brgy. Hall	2	144.23	N/A	concrete	good	yes	1
Centro	BHS	North San Juan Health Center	1	384.46	N/A	Concrete	Fair	No	2

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Centro	BHS	New BHS	1	119.62	N/A	Concrete	Good	Yes	1
Centro	BHS	South San Juan Health Center	1	125.95	N/A	Concrete	Poor	No	3
Centro	day care center	Sto. Niño Pelayo DCC	1	72.00	1 classroom	concrete	good	No	1
Centro	day care center	South San Juan DCC	1	117.00	1 classroom	concrete	good	No	1
Centro	day care center	North San Juan DCC	1	100.00	1 classroom	concrete	good	No	1
Centro	day care center	San Miguel DCC	1	100.00	1 classroom	concrete	good	No	1
Centro	day care center	Sta. Lucia DCC	1	35.00	1 classroom	concrete	needs Repair	No	3
Centro	day care center	New Fatima DCC	1	150.00	1 classroom	concrete	good	No	1
Centro	Elementary School	San Juan ES	1	2100.00	43 classroom	Mixed	Needs Repair	No	2.5
VICENTE DUTERTE	Barangay Hall	V. Duterte Brgy. Hall	2	400.24	N/A	concrete	good	yes	1
Vicente Duterte	BHS	Vetran Hills Health Center	1	51.20	N/A	Concrete	Good	Yes	1
Vicente Duterte	day care center	Rotary Club DCC	1	100.00	1 classroom	concrete	good	No	1
Vicente Duterte	Elementary School	Don Julian Rodriguez ES	1	1500.00	48 classroom	Mixed	Needs Repair	No	2.5
LEON GARCIA SR.	Barangay Hall	Leon Garcia Brgy. Hall	2	94.41	N/A	concrete	good	yes	1
Leon Garcia	BHS	Leon Garcia Health Center	1	68.74	N/A	Concrete	Good	Yes	1
Leon Garcia	day care center	Baybay DCC	1	40.00	1 classroom	concrete	good	No	1
Leon Garcia	day care center	GOTAMCO DCC	1	80.00	1 classroom	concrete	good	No	1
Leon Garcia	day care center	St. Luke DCC	1	70.00	1 classroom	concrete	needs Repair	No	3
Leon Garcia	Elementary School	Manuel M. Garcia ES	1	1807.00		Mixed	Needs Repair	No	3

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Leon Garcia	Police Sub Station	Leon Garcia Police Sub Station	1	25.00	3 persons	wood	poor	no	3
Leon Garcia	Secondary School	Leon Garcia Sr. NHS	3	1000.00	42 classroom	Mixed	Needs Repair	No	2.5
Leon Garcia	TFD Headquarters	Task Force Davao (Task Group Agila)	1	9990.00	5 facilities	mixed	good	no	2
LAPU - LAPU	Barangay Hall	Lapu-Lapu Brgy. Hall	2	202.50	N/A	concrete	good	yes	1
Lapu-Lapu	BHS	Lapu-Lapu Health Center	1	142.88	N/A	Concrete	Fair	No	2
Lapu-Lapu	day care center	Lapu-Lapu DCC	1	150.00	1 classroom	concrete	good	No	1
Lapu-Lapu	day care center	Seaside DCC	1	38.00	1 classroom	mixed	needs Repair	No	3
Lapu-Lapu	day care center	IKP DCC	1	84.00	1 classroom	mixed	good	No	2
Lapu-Lapu	day care center	Isla Noah DCC	1	30.00	1 classroom	light	needs Repair	No	3
Lapu-Lapu	Elementary School	Lapu-lapu ES	3	4400.00	40 classroom	Mixed	Needs Repair	No	2.5
Tomas Monte-verde	Barangay Hall	T. Monteverde Brgy. Hall	1	89.50	N/A	concrete	good	yes	1
Tomas Monte-verde	BHS	Times Beach Health Center	1	50.23	N/A	Concrete	Good	Yes	1
Tomas Monte-verde	day care center	KTM DCC	1	84.00	1 classroom	concrete	good	No	1
Tomas Monte-verde	Fire Station	Central Fire Station	3	1587.00	92 persons	mixed	fair	yes	3
Tomas Monte-verde	Police Sub Station	Tomas Monteverde Police Sub Station	2	25.00	3 persons	wood	poor	no	3
SAN ANTONIO	Barangay Hall	San Antonio Brgy. Hall	1	121.56	N/A	concrete	good	yes	1
San Antonio	BHS	San Antonio Health Center	1	113.82	N/A	Concrete	Poor	No	3
San Antonio	day care center	San Antonio (NHA) DCC	1	250.00	1 classroom	concrete	good	No	1
San Antonio	day care center	Ibula DCC	1	42.00	1 classroom	concrete	good	No	1

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San Antonio	day care center	Sto. Niño DCC	1	128.00	1 classroom	concrete	good	No	1
Ubalde	Barangay Hall	Ubalde Brgy. Hall	2	152.27	N/A	concrete	good	yes	1
Ubalde	BHS	Ubalde Health Center	1	86.17	N/A	Concrete	Poor	No	3
V. HIZON	day care center	Ubalde DCC	1	174.00	1 classroom	concrete	good	No	1
Ubalde	Elementary School	Ubalde Elem. School	1	540.00	19 classroom	Mixed	Needs Repair	No	2.5
Ubalde Agdao	Police Sub Station	Ubalde Police Sub Station	1	25.00	3 persons	wood	poor	no	3
Ubalde	Secondary School	Dona Carmen Denia NHS	3	19550.00	204	Mixed	Needs Repair	No	2.5
SASA	Barangay Hall	Sasa Brgy. Hall	2	359.48	N/A	concrete	fair	no	3
Sasa	day care center	Km 11 Sasa PHDCC	1	70.00	1 classroom	concrete	good	No	1
Sasa	day care center	San Isidro DCC	1	90.00	1 classroom	mixed	good	No	1
Sasa	day care center	Fatima DCC	1	60.00	1 classroom	mixed	poor	No	3
Sasa	day care center	ICSAMA DCC	1	256.00	1 classroom	concrete	good	No	1
Sasa	day care center	Bayview DCC	1	50.00	1 classroom	concrete	good	No	1
Sasa	Elementary School	F. Bangoy CES SPED Center	1	5000.00	39 classroom	Mixed	Needs Repair	No	2
Sasa	Elementary School	Osmena ES	3	3851.00	55 classroom	Mixed	Needs Repair	No	2.5
Sasa	Fire Station	Lanang Fire Station	2	500.00	12 persons	concrete	fair	yes	2
Sasa	Police Station	Police Station 4 (Sasa)	1	600.00	300 persons	concrete	poor	no	2
Sasa	RHU	Sasa Health Center	2	250.00	N/A	Concrete	Good	Yes	1
Sasa	Secondary School	F. Bangoy NHS	4	2849.00	86 classroom	Mixed	Needs Repair	No	2
Sasa	Secondary School	F. Bangoy NHS - Annex	4	906.00		Mixed	Needs Repair	No	2
Sasa	Teen Center	Sasa Health Center	1	499.40	N/A	Concrete	Good	Yes	1

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Tigatto	day care center	Uyanguren PHDCC I	1	150.00	1 classroom	concrete	good	No	1
Tigatto	day care center	Uyanguren PHDCC II	1	150.00	1 classroom	concrete	good	No	1
Tigatto	day care center	Jade Valley PHDCC	1	150.00	1 classroom	concrete	good	No	1
Tigatto	day care center	Juliville PHDCC	1	150.00	1 classroom	concrete	good	No	1
Tigatto	day care center	Deca Homes Esperanza	1	100.00	1 classroom	concrete	good	No	1
Tigatto	Police Sub Station	Tigatto Police Sub Station	1	80.00	8 persons	concrete	good	no	1
Waan	Barangay Hall	W. Aquino Brgy. Hall	2	101.81	N/A	mixed	fair	no	3
Aliongto	Police Outpost	Damosa Police Outpost	1	5.00	5 persons	wood	good	no	3
V. HIZON	Barangay Hall	V. Hizon Brgy. Hall	2	293.67	N/A	concrete	good	yes	1
V, Hizon	BHS	Hizon Health Center	1	107.00	N/A	Concrete	Fair	Yes	2
V, Hizon	day care center	ALSONS DCC	1	70.00	1 classroom	concrete	good	No	1
V, Hizon	Elementary School	V. Hizon Elem. Sch.	1	10001.00	63 classroom	Mixed	Needs Repair	No	2
BUNAWAN	Barangay Hall	Bunawan Brgy. Hall	2	199.52	N/A	concrete	good	yes	1
Bunawan	day care center	Rhema DCC	1	75.00	1 classroom	light	fair	No	3
Bunawan	day care center	DCPI 1 & 2 DCC	1	150.00	1 classroom	concrete	good	No	1
Bunawan	day care center	Damiana DCC	1	100.00	1 classroom	concrete	good	No	1
Bunawan	day care center	Tesorero DCC	1	60.00	1 classroom	concrete	good	No	1
Bunawan	day care center	Bunawan Aplaya DCC	1	60.00	1 classroom	concrete	good	No	1
Bunawan	Elementary School	Bunawan Aplaya ES	3	3919.00	23 classroom	Mixed	Needs Repair	No	3
Bunawan	Elementary School	Daniel M. Perez ES	2	19445.00	50 classroom	Mixed	Needs Repair	No	2.5
Bunawan	Fire Station	Bunawan Fire Station	1	300.00	14 persons	mixed	poor	no	3
Bunawan	Police Station	Police Station 6 (Bunawan)	1	300.00	12 persons	concrete	good	no	1
Bunawan	RHU	Bunawan Rural Health Unit	2	373.84	N/A	Concrete	Good	Yes	1

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Ilang	Elementary School	Sixto Babao ES	3	5021.00	25 classroom	Mixed	Needs Repair	No	2.5
Ilang	Police Sub Station	Ilang Police Sub Station	1	80.00	3 persons	concrete	good	no	1
LASANG	Barangay Hall	Lasang Brgy. Hall	2	212.89	N/A	concrete	fair	no	3
Lasang	BHS	Lasang Health Center	1	193.93	N/A	Concrete	Good	No	1
A. Navarro (Lasang)	day care center	Tambongon DCC	1	100.00	1 classroom	concrete	good	No	1
A. Navarro (Lasang)	day care center	Aledia DCC	1	110.00	1 classroom	concrete	good	No	1
A. Navarro (Lasang)	day care center	Sto. Niño DCC	1	90.00	1 classroom	light	needs Repair	No	3
Lasang	Elementary School	Alfredo A. Aledia Elementary School	3	5000.00	9 classroom	Mixed	Needs Repair	No	3
Lasang	Elementary School	Tambongon ES	1	9000.00	7 classroom	Mixed	Needs Repair	No	2.5
Lasang	Elementary School	AL Navarro CES	3	21984.00	30 classroom	Mixed	Needs Repair	No	2.5
Lasang	Elementary School	Dacudao Sr. ES	2	1345.00	8 classroom	Mixed	Needs Repair	No	2.5
Lasang	Secondary School	AL Navarro NHS	3	21984.00	71 classroom	Mixed	Needs Repair	No	2.5
Lasang	TFD Detachment	Task Group Lawin	1	2256.00	7 facilities	mixed	good	no	2
PANACAN	Barangay Hall	Panacan Brgy. Hall	2	167.45	N/A	concrete	fair	no	3
Panacan	BHS	Panacan Proper Health Center	1	89.77	N/A	Concrete	Fair	No	2
Panacan	BHS	Panacan 13 Health Center	1	100.00	N/A	Concrete	Fair	No	2
Panacan	day care center	St. John DCC	1	70.00	1 classroom	light	good	No	2
Panacan	day care center	F.L. Apostol DCC	1	150.00	1 classroom	concrete	good	No	1
Panacan	day care center	Panacan Trece DCC	1	120.00	1 classroom	concrete	good	No	1
Panacan	Elementary School	Armed Forces of the Philippines Logistics Command Elementary School	1	3662980.00	45 classroom	Mixed	Needs Repair	No	2.5
Panacan	Fire Station	Panacan Fire Station	2	155.00	14 persons	concrete	poor	no	3

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SAN ISIDRO	Barangay Hall	San Isidro Brgy. Hall	2	146.60	N/A	concrete	good	yes	1
San Isidro	BHS	Kabacan Health Center II	1	51.20	N/A	Concrete	Good	Yes	1
San Isidro	BHS	Lasang Health Center	1	193.93	N/A	Concrete	Fair	No	2
San Isidro (Licanan)	day care center	New Millenium DCC	1	150.00	1 classroom	concrete	good	No	1
San Isidro	Elementary School	Pablo M. Piatos ES	1	16500.00	20 classroom	Mixed	Needs Repair	No	2.5
BAGO APLAYA	Barangay Hall	Bago Aplaya Brgy. Hall	2	426.69	N/A	concrete	good	yes	1
Bago Aplaya	BHS	Bago Aplaya Health Center	1	51.20	N/A	Concrete	Good	Yes	1
Bago Aplaya	BHS	Gulf View Health Center	1	51.20	N/A	Concrete	Good	Yes	1
Bago Aplaya	day care center	D'Garden PHDCC	1	46.00	1 classroom	concrete	fair	No	2
Bago Aplaya	day care center	Gulf View Subd. PHDCC	1	42.00	1 classroom	concrete	good	No	1
Bago Aplaya	day care center	BLISS PHDCC	1	70.00	1 classroom	concrete	good	No	1
Bago Aplaya	day care center	Bago Sea side PHDCC	1	42.00	1 classroom	concrete	fair	No	2
Bago Aplaya	day care center	BALAI, PHDCC	1	75.00	1 classroom	concrete	good	No	1
Bago Aplaya	day care center	LORAMPCO PHDCC	1	40.00	1 classroom	mixed	fair	No	2
Bago Aplaya	Elementary School	RC Quimpo ES	3	6000.00	17 classroom	Mixed	Needs Repair	No	3
Bago Aplaya	Elementary School	Dr. Jovito Francisco ES(Camilo Osias ES)	2	2037.00	13 classroom	Mixed	Needs Repair	No	2.5
Bago Aplaya	Elementary School	Generoso ES	2	5198.00	14 classroom	Mixed	Needs Repair	No	2.5
Bago Aplaya	Secondary School	Erico Nograles NHS-B	3	2456.00		Mixed	Needs Repair	No	2.5

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Bago Gallera	day care center	Bago Gallera De Oro Home Based	1	100.00	1 classroom	concrete	good	No	1
Baliok Proper	BHS	Baliok Health Center	1	53.86	N/A	Concrete	Good	Yes	1
BUCANA	Barangay Hall	Bucana Brgy. Hall	3	98.66	N/A	concrete	good	yes	1
BUCANA	Barangay Hall	Bucana Brgy. Hall	2	169.80	N/A	mixed	fair	no	3
Bucana	BHS	Kabacan Health Center I	1	51.20	N/A	Concrete	Good	Yes	1
Bucana	BHS	Bucana Health Center	1	47.89	N/A	Concrete	Fair	No	2
Bucana	BHS	St. John Health Center	1	92.49	N/A	Concrete	Good	Yes	1
Bucana	BHS	Talomo North Health Center RHU	1	338.47	N/A	Concrete	Good	Yes	1
Bucana	BHS	SIR Phase 2 Health Center	1	41.08	N/A	Concrete	Good	Yes	1
bucana	CDRRMO Headquarters	City Disaster Risk Reduction and Management Office	2	60.00	N/A	mixed	poor	no	3
Bucana	day care center	Prk 7 PHDCC	1	148.00	1 classroom	concrete	fair	No	2
Bucana	day care center	Prk 6 PHDCC	1	120.00	1 classroom	concrete	fair	No	2
Bucana	day care center	Bilusa PHDCC	1	100.00	1 classroom	concrete	fair	No	2
Bucana	day care center	Kasilak PHDCC	1	150.00	1 classroom	concrete	fair	No	2
Bucana	day care center	Rosas DCC	1	100.00	1 classroom	concrete	fair	No	2
Bucana	day care center	St. John PHDCC II	1	85.00	1 classroom	concrete	fair	No	2
Bucana	day care center	Prk 2 Bucana DCC	1	150.00	1 classroom	mixed	fair	No	2
Bucana	day care center	Pebsa PHDCC	1	100.00	1 classroom	concrete	fair	No	2
Bucana	day care center	Kabacan Times Beach DCC	1	36.00	1 classroom	concrete	fair	No	2
Bucana	day care center	P 32 Holy Trinity DCC	1	30.00	1 classroom	concrete	fair	No	2

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Bucana	day care center	S.I.R Phase 2 PHDCC 3	1	64.00	1 classroom	concrete	fair	No	2
Bucana	day care center	Sabroso Village PHDCC	1	56.00	1 classroom	concrete	fair	No	2
Bucana	day care center	Savina DCC	1	45.00	1 classroom	concrete	fair	No	2
Bucana	day care center	SIR Phase 2 DCC 1	1	36.00	1 classroom	concrete	fair	No	2
Bucana	day care center	SIR Phase 2 DCC 2	1	36.00	1 classroom	concrete	fair	No	2
bucana	day care center	W. Aquino DCC 2	1	65.00	1 classroom	concrete	good	No	1
Bucana	Elementary School	Cesario Villa Abrille ES	3	4788.00	69 classroom	Mixed	Needs Repair	No	3
Bucana	Elementary School	New Matina ES	4	450.00	18 classroom	Mixed	Needs Repair	No	3
Bucana	Elementary School	SIR ES	1	23215.00	41 classroom	Mixed	Needs Repair	No	2.5
Bucana	Elementary School	Kabacan ES	1	1000.00	46 classroom	Mixed	Needs Repair	No	2.5
bucana	Fire Station	SIR Fire Station	2	155.00	12 persons	mixed	poor	no	3
bucana	Police Outpost	Sandawa Mc Arthur Police Outpost	1	8.00	6 persons	concrete	fair	no	2
bucana	Police Sub Station	Sandawa Police Sub Station	1	15.00	8 persons	concrete	fair	no	2
bucana	PSSCC Headquarters	Public Safety and Security Services	3	8138.00	N/A	mixed	poor	no	3
Bucana	residential facility	Sidlakan Women Crisis Center	2	200.00	30 persons	concrete	good	Yes	1
Bucana	Secondary School	Vicenta C. Nograles NHS	4	1200.00		Mixed	Needs Repair	No	2.5
Bucana	TC	Teen Center	1	51.20	N/A	Concrete	Good	Yes	1
Ma-a	day care center	Don Julian PHDCC	1	56.00	1 classroom	concrete	good	No	1
Ma-a	day care center	P34 South Villa PHDCC	1	48.00	1 classroom	concrete	good	No	1

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Ma-a	day care center	DIHO IV PHDCC	1	56.00	1 classroom	concrete	good	No	1
Ma-a	day care center	Prk 38 NHA PHDCC	1	250.00	1 classroom	concrete	good	No	1
Ma-a	day care center	Purok 16 St. Michael DCC	1	380.00	1 classroom	concrete	good	No	1
Ma-a	day care center	Maharlika PHDCC	1	147.00	1 classroom	concrete	good	No	1
Ma-a	day care center	New Washington PHDCC	1	250.00	1 classroom	concrete	good	No	1
Maa	Elementary School	JL Escoda ES	3	2500.00	33 classroom	Mixed	Needs Repair	No	3
Ma-a	Jail Facility	Main City Jail	1	750.00	44 Cells, 400 Bed Capacity, 400 In-mate Capacity	mixed	good	yes	2
Ma-a	Jail Facility	Female City Jail	1	400.00	20 Cottage, 200 bed capacity, 200 Inmate Capacity	mixed	good	yes	2
Ma-a	Jail Facility	Annex City Jail	1	198.00	15 Cells, 116 Bed Capacity, 116 In-mate Capacity	mixed	good	yes	2
MATINA APLAYA	Barangay Hall	Matina Aplaya Brgy. Hall	2	258.72	N/A	concrete	good	yes	1
Matina Aplaya	BHS	Matina Aplaya Health Center	1	109.00	N/A	Concrete	Good	Yes	1
Matina Aplaya	day care center	Dumalag PHDCC	1	200.00	1 classroom	mixed	good	No	1
Matina Aplaya	day care center	Cristina Village PHDCC	1	90.00	1 classroom	mixed	critical	No	1
Matina Aplaya	day care center	Malinawon DCC	1	40.00	1 classroom	concrete	good	No	1
Matina Aplaya	day care center	Shanghai PHDCC	1	75.00	1 classroom	concrete	good	No	1
Matina Aplaya	day care center	Dumalag PHDCC 3	1	40.00	1 classroom	concrete	good	No	1
Matina Aplaya	day care center	Seaside II PHDCC	1	54.00	1 classroom	concrete	good	No	1
Matina Aplaya	day care center	Teacher's Village PHDCC	1	40.00	1 classroom	concrete	good	No	1

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Matina Aplaya	Elementary School	Diego Silang ES	4	620.00	7 classroom	Mixed	Needs re-pair	No	3
Matina Aplaya	Elementary School	Matina Aplaya ES	1	8474.00	37 classroom	Mixed	Needs re-pair	No	2.5
MATINA APLAYA	Police Outpost	Bogser Police Outpost	1	16.00	6 persons	concrete	fair	no	2
MATINA APLAYA	Police Sub Station	Matina Aplaya Police Sub Station	1	8.00	4 persons	concrete	fair	no	2
MATINA CROSSING	Barangay Hall	Matina Crossing Brgy. Hall	4	404.94	N/A	concrete	good	yes	1
Matina Crossing	BHS	Gravahan Health Center	1	21.00	N/A	Concrete	Poor	No	3
Matina Crossing	BHS	Matina Crossing Health Center	1	410.69	N/A	Concrete	Good	Yes	1
Matina Crossing	Elementary School	Don Manuel Gutierrez ES	3	13920.00	52 classroom	Mixed	Needs re-pair	No	2.5
Matina Crossing	Elementary School	Matina CES	1	10737.00	98 classroom	Mixed	Needs re-pair	No	2.5
Matina Crossing	Elementary School	Bayanihan ES	2	2800.00	14 classroom	Mixed	Needs re-pair	No	2.5
Matina Crossing	Police Outpost	UM Matina Police Outpost	1	6.00	4 persons	mixed	fair	no	2
Matina Crossing	Police Station	Police Station 3 (Talomo)	2	200.00	300 persons	concrete	good	no	1
Matina Crossing	Secondary School	Daniel R. Aguinaldo NHS	4	665881.00	129 classroom	Mixed	Needs re-pair	No	2.5
MATINA PANGI	Barangay Hall	Matina Pangi Brgy. Hall	3	107.73	N/A	concrete	fair	no	3
Matina Pangi	BHS	Pangi Health Center	1	63.00	N/A	Concrete	Good	Yes	1
Matina Pangi	day care center	Km.8 Matina Pangi PHDCC	1	50.00	1 classroom	concrete	good	No	1
TALOMO	Barangay Hall	Talomo Brgy. Hall	3	334.32	N/A	concrete	good	yes	1

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
TALOMO	BHS	NHA Relocation Health Center	1	57.59	N/A	Concrete	Fair	No	2
TALOMO	BHS	Royal Valley Health Center	1	63.00	N/A	Concrete	Good	Yes	1
TALOMO	BHS	Talomo Cemento Health Center	1	56.21	N/A	Concrete	Good	Yes	1
TALOMO	day care center	Kadayawan PHDCC	1	200.00	1 classroom	concrete	good	No	1
TALOMO	day care center	San Juan PHDCC	1	120.00	1 classroom	concrete	good	No	1
TALOMO	day care center	Christian Village, PHDCC	1	50.00	1 classroom	concrete	good	No	1
TALOMO	day care center	Taal Central Park PHDCC	1	40.00	1 classroom	concrete	good	No	1
TALOMO	day care center	NHA Relocation PHDCC	1	120.00	1 classroom	mixed	good	No	1
TALOMO	day care center	Talomo PHDCC	1	80.00	1 classroom	concrete	good	No	1
TALOMO	day care center	Talomo Barangay Hall 1	1	40.00	1 classroom	concrete	good	No	1
TALOMO	day care center	Mushville PHDC	1	40.00	1 classroom	mixed	good	No	1
TALOMO	day care center	Gabay Kabataan DCC	1	40.00	1 classroom	concrete	good	No	1
TALOMO	day care center	Kalambuan Home-based	1	30.00	1 classroom	mixed	good	No	1
TALOMO	Elementary School	Dona Soledad Dolor ES	1	15228.00	24 classroom	Mixed	Needs Repair	No	2.5
TALOMO	Elementary School	A. Bonifacio Elem. School	1	10500.00	25 classroom	Mixed	Needs Repair	No	2.5
TALOMO	Elementary School	Talomo CES	1	10500.00	62 classroom	Mixed	Needs Repair	No	2.5
TALOMO	Elementary School	Leon A. Garcia Sr. ES	1	2051.00	22 classroom	Mixed	Needs Repair	No	2.5
TALOMO	Elementary School	A. Mabini ES	3	10000.00	36 classroom	Mixed	Needs Repair	No	2
Talomo	Police Outpost	Talomo Police Outpost	1	12.00	6 persons	concrete	fair	no	2

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Talomo	Police Sub Station	Ulas Police Sub Station	2	50.00	20 persons	mixed	fair	no	2
TALOMO	Secondary School	Gov. V. Duterte NHS	4	4490.00	29 classroom	Mixed	Needs Repair	No	2.5
TALOMO	Secondary School	Talomo NHS	2	1200.00	50 classroom	Mixed	Needs Repair	No	2.5
TALOMO	Secondary School	Mabini NHS	4	5892.00	31 classroom	Mixed	Needs Repair	No	2
BINUGAO	Barangay Hall	Binugao Brgy Hall	2	303.10	N/A	concrete	good	yes	1
Binugao	day care center	Central Binugao HB	1	150.00	1 classroom	light	poor	No	3
Binugao	Elementary School	Binugao CES	3	26267.00	23 classroom	Mixed	Needs Repair	No	2.5
Binugao	Secondary School	Binugao NHS	4	10000.00	26 classroom	Mixed	Needs Repair	No	2.5
DALIAO	Barangay Hall	Daliao Brgy Hall	2	188.40	N/A	concrete	good	yes	1
Daliao	day care center	Daliao Proper DCC	1	150.00	1 classroom	concrete	good	No	1
Daliao	day care center	Daliao Beach DCC	1	150.00	1 classroom	concrete	good	No	1
Daliao	day care center	St. Jude DCC	1	150.00	1 classroom	concrete	good	No	1
Daliao	day care center	Prudential DCC	1	180.00	1 classroom	concrete	good	No	1
Daliao	day care center	Lipadas DCC	1	150.00	1 classroom	concrete	good	No	1
Daliao	day care center	San Jose DCC	1	150.00	1 classroom	concrete	good	No	1
Daliao	day care center	FESA DCC	1	150.00	1 classroom	concrete	good	No	1
Daliao	day care center	Doña Rosa I DCC	1	180.00	1 classroom	concrete	good	No	1
Daliao	day care center	Rovical DCC	1	150.00	1 classroom	concrete	good	No	1
Daliao	Elementary School	V.S. Bangoy ES	3	4437.00	22 classroom	Mixed	Needs repair	No	2.5

Table CP-7. Critical Point Facilities, Degree of Impact Rating to Liquefaction, Davao City

Barangay	Facility Type	Name	Storeys	Area (sq. m)	Capacity (Classroom, Bed, Capacity, Loading Capacity)	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design	Degree of Impact
Daliao	Elementary School	Sta. Clara ES	1	5036.00	34 classroom	Mixed	Needs Repair	No	2.5
Daliao	Elementary School	Ramon F. Magsaysay ES	2	20273.00	47 classroom	Mixed	Needs re-pair	No	2.5
LIZADA	Barangay Hall	Lizada Brgy Hall	2	168.33	N/A	concrete	good	yes	1
Lizada	day care center	Lizada Proper DCC	1	200.00	1 classroom	concrete	good	No	1
Lizada	day care center	NLPL DCC	1	160.00	1 classroom	concrete	good	No	1
Lizada	day care center	Maharlika DCC	1	138.00	1 classroom	concrete	poor	No	1
Lizada	day care center	New Lizada DCC	1	150.00	1 classroom	concrete	good	No	1
Lizada	day care center	Curvada DCC	1	100.00	1 classroom	concrete	good	No	1
Lizada	day care center	`KASAMA DCC	1	150.00	1 classroom	concrete	good	No	1
Lizada	Elementary School	JV Ferriols ES	3	8000.00	23 classroom	Mixed	Needs Repair	No	3
Lizada	Secondary School	JV Ferriols NHS	2	4689.00	23 classroom	Mixed	Needs Repair	No	2.5
Sirawan	day care center	NRDP	1	300.00	1 classroom	concrete	good	No	1
Sirawan	day care center	Sirawan Beach DCC	1	300.00	1 classroom	concrete	good	No	1
Sirawan	Elementary School	Sirawan Beach ES	2	40000.00	14 classroom	Mixed	Needs Repair	No	3
Sirawan	Secondary School	Sirawan NHS(Toril NHS)	4	40867.00	20 classroom	Mixed	Needs Repair	No	2.5
Toril	Police Outpost	Shell Toril Police Outpost	1	5.00	5 persons	wood	good	no	3
Toril Poblacion	BHS	Tomas Monteverde Health Center	1	87.71	N/A	Concrete	Good	Yes	1
Toril Poblacion	Elementary School	Don Juan Dela Cruz CES	3	14985.00	112 classroom	Mixed	Needs Repair	No	2.5

ADAPTIVE CAPACITY

The adaptive capacity of critical point facilities is determined for every hazard exposure. The facilities affected will be measured in terms of its flexibility to take in changes in the climate. The tables below show the degree of adaptive capacity of critical point facilities upon its exposure to flood, storm surge, landslide, and liquefaction. The higher the adaptive capacity score, the lesser flexibility there is in every facility to accommodate changes in the climate which entails more cost to the City Government and other related agencies to cope with the effects caused by the onslaught of hazards.

FLOOD

There are 285 structures identified to be exposed that are exposed to flood and of the total number, 143 bear the adaptive capacity of 1, which is considered to have a high adaptive capacity while 139 have a score of 2 or moderate and 3 structures receive the rating of 3 or low. These critical point facilities with low adaptive capacity are all single-storey day care centers located at Barangays 19-B, Lapu-Lapu, and Calinan. These three structures should avail resources from the government to mitigate impacts of flooding when the same occurs in the area.

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01001	1-A	Barangay Hall	1-A Brgy. Hall	87.28	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01001	1-A	BHS	Brgy 1-A Health Center	54.40	2	None	Brgy. MOOE	2
01001	1-A	day care center	Brgy. 1-A Day Care Center	80.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
01001	1-A	Secondary School	Binugao NHS	10000.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01002	2-A	Barangay Hall	2-A Brgy. Hall	100.00	2	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01002	2-A	BHS	Brgy. 2-A Health Center	118.87	2	None	Brgy. MOOE	2
01002	2-A	day care center	Project Hope DCC, Brgy 2-A	16.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
01005	5-A	day care center	Bankerohan Project Hope DCC 1, Brgy 5-A	36.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
01005	5-A	day care center	Bankerohan Project Hope DCC 2, Brgy 5-A	36.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
01005	5-A	day care center	Bankerohan Project Hope DCC 3, Brgy 5-A	36.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
01005	5-A	day care center	Bankerohan Project Hope DCC 4, Brgy 5-A	36.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01005	5-A	day care center	Bankerohan Project Hope DCC 5, Brgy 5-A	36.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
01005	5-A	Elementary School	Don Juan Dela Cruz CES	14985.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01008	8-A	day care center	Mother Ignacia DCC, Brgy 8-A	45.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
01015	15-B	day care center	Brgy.15-B, DCC	50.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
01019	19-B	day care center	El Rio DCC, Brgy 19-B	100.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	3
01019	19-B	day care center	Mineral Village DCC, Brgy 19-B	100.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01019	19-B	Elementary School	Dominga ES	20000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01019	19-B	RHU	EL Rio Vista Health Center (RHU)	367.83	1	None	CHO MOOE	1
01022	22-C	BHS	Brgy 22-C Health Center	278.75	2	None	Brgy. MOOE	2
01023	23-C	BHS	New BHS / Isla Verde Purok 3B	51.85	1	None	Brgy. MOOE	1
01023	23-C	day care center	Purok 4 b Home-Based I	80.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
01023	23-C	day care center	Badjao Home Based	60.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
01023	23-C	Elementary School	Zonta Elem. School	2681.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01024	24-C	BHS	Brgy 24-C Health Center	84.96	1	None	Brgy. MOOE	1
01027	27-C	UHC	Sta. Ana Health Center	550.00	1	None	CHO MOOE	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01037	37-D	day care center	Brgy. 37-D DCC	60.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
01037	37-D	Elementary School	Doña Soledad Dolor ES	15228.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01039	39-D	Barangay Hall	39-D Brgy. Hall	93.98	2	The structure of the barangays halls has no insurance coverage	LGU have no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01039	39-D	day care center	Brgy 39 D PHDCC	60.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
01040	40-D	Barangay Hall	Bago Aplaya Brgy. Hall	426.69	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02001	AGDAO PROPER	Barangay Hall	40-D Brgy. Hall	43.61	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02001	AGDAO PROPER	day care center	San Isidro DCC	65.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
02001	AGDAO PROPER	Elementary School	Agdao ES	1007.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
02001	AGDAO PROPER	RHU	Agdao Health Center	535.93	1	None	CHO MOOE	1
02002	W. AQUINO	Barangay Hall	Agdao Brgy. Hall	135.96	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
02002	W. AQUINO	BHS	Wilfredo Aquino Health Center	259.09	3	None	Brgy. MOOE	2
02002	W. AQUINO	day care center	W. Aquino 1	80.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
02003	P. BANGGOY	day care center	RGA DCC	80.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
02003	P. BANGGOY	day care center	Bagongbuhay DCC	80.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
02003	P. BAN-GOY	Paciano Bangoy Police Sub Station	Paciano Bangoy Police Sub Station	25.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counter-part funding from the LGU.	2
02004	R. CAS-TILLO	Barangay Hall	W. Aquino Brgy. Hall	101.81	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02004	UBALDE	Ubalde Police Sub Station	Ubalde Police Sub Station	25.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counter-part funding from the LGU.	2
02005	CENTRO	Barangay Hall	Ubalde Brgy. Hall	142.15	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02005	CENTRO	BHS	South San Juan Health Center	125.95	3	None	Brgy. MOOE	2
02005	CENTRO	day care center	South San Juan DCC	117.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
02005	CENTRO	day care center	North San Juan DCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
02005	CENTRO	day care center	San Miguel Centro DCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
02005	CENTRO	day care center	New Fatima DCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
02005	CENTRO	Elementary School	San Juan ES	2100.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
02006	V. DUTER-TE	day care center	Rotary Club DCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
02007	L. GARCIA SR.	Barangay Hall	Centro Brgy. Hall	144.23	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02007	L. GARCIA SR.	BHS	Leon Garcia Health Center	53.97	1	None	Brgy. MOOE	1
02007	L. GARCIA SR.	day care center	Baybay DCC	55.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
02007	L. GARCIA SR.	day care center	Gotamco DCC	80.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
02007	L. GARCIA SR.	Elementary School	Manuel M. Garcia ES	1807.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
02007	L. GARCIA SR.	Leon Garcia Police Sub Station	Leon Garcia Police Sub Station	25.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be sourced through BFP XI with possible counterpart funding from the LGU.	2
02007	L. GARCIA SR.	Secondary School	Leon Garcia Sr. NHS	1000.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
02007	L. GARCIA SR.	Task Force Davao (Task Group Agila)	Task Force Davao (Task Group Agila)	9990.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be sourced through BFP XI with possible counterpart funding from the LGU.	2
02008	LAPU-LAPU	day care center	Seaside DCC	200.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	3

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
02008	LAPU-LAPU	day care center	IKP DCC	84.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
02008	LAPU-LAPU	Elementary School	Lapu-lapu ES	4400.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
02009	T. MONTEVERDE	Barangay Hall	Leon Garcia Brgy. Hall	94.41	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02009	T. MONTEVERDE	BHS	Tomas Monteverde Health Center	87.71	1	None	Brgy. MOOE	1
02009	T. MONTEVERDE	day care center	KTM DCC	84.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
02009	T. MONTEVERDE	Tomas Monteverde Police Sub Station	Tomas Monteverde Police Sub Station	25.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be sourced through BFP XI with possible counterpart funding from the LGU.	2
03004	GUMALANG	Barangay Hall	T. Monteverde Brgy. Hall	89.50	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
03004	GUMALANG	BHS	Gumalang Health Center	141.13	1	None	Brgy. MOOE	2
03004	GUMALANG	day care center	Gumalang Proper DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
03004	GUMALANG	Secondary School	Governor V. Duterte NHS	4490.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
04002	BUHANGIN	day care center	Sandawa Phase 2 DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
04007	MANDUG	day care center	DDF Village Mandug DCC	400.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
04008	PAMPANGA	Barangay Hall	Gumalang Brgy. Hall	172.78	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
04008	PAMPANGA	BHS	Pampang Health Center	171.56	1	None	Brgy. MOOE	1
04008	PAMPANGA	BHS	New BHS	57.96	1	None	Brgy. MOOE	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
04009	SASA	day care center	St. Martin Day Care Center	120.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
04009	SASA	day care center	AHSAI Day Care Center	80.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
04009	SASA	day care center	Sunbeam Day Care Center	200.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
04009	SASA	Police Station 4 (Sasa)	Police Station 4 (Sasa)	600.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be sourced through BFP XI with possible counterpart funding from the LGU.	2
04009	SASA	Secondary School	Erico Nograles NHS-A	1816.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
04009	SASA	Secondary School	F. Bangoy NHS	2849.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
04010	TIGATTO	Barangay Hall	Pampanga Brgy. Hall	198.22	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
04010	TIGATTO	day care center	Uyanguren PHDCC 1	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
04010	TIGATTO	day care center	Uyanguren PHDCC 2	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
04010	TIGATTO	day care center	Jade Valley DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
04011	WAAN	day care center	Waan PHDCC	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
04012	A. ANGLIONGTO	Barangay Hall	Tigatto Brgy. Hall	225.54	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
04013	V. HIZON	Barangay Hall	Angliongto Brgy. Hall	114.82	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
04013	V. HIZON	Elementary School	V. Hizon Elem. Sch.	10001.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
04014	V. HIZON	BHS	Hizon Health Center	107.00	2	None	Brgy. MOOE	2
05001	BUNAWAN	day care center	DCPI 1&2 DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
05001	BUNAWAN	Elementary School	Bolton ES	10500.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
05004	LASANG	day care center	Tambongon DCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
05004	LASANG	day care center	Alfredo A. Aledia Day Care Center	110.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
05004	LASANG	Elementary School	AL Navarro CES	21984.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
05004	LASANG	Elementary School	Alfredo A. Aledia Elementary School	5000.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
05004	LASANG	Elementary School	Tambongon ES	9000.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
05007	PANACAN	Barangay Hall	V. Hizon Brgy. Hall	293.67	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
05007	PANACAN	Elementary School	Armed Forces of the Philippines Logistics Command Elementary School	3662980.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
05009	TI-BUNGCO	Barangay Hall	Panacan Brgy. Hall	167.45	2	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
06001	BIAO JOAQUIN	Barangay Hall	Tibungco Brgy. Hall	263.22	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
06001	BIAO JOAQUIN	BHS	Biao Joaquin Health Center	108.39	1	None	Brgy. MOOE	1
06001	BIAO JOAQUIN	day care center	Biao Joaquin PHDCC	200.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
06001	BIAO JOAQUIN	Elementary School	JL Escoda ES	2500.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06002	CALINAN	Barangay Hall	Biao Joaquin Brgy. Hall	191.78	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
06002	CALINAN	BHS	Calinan Subcenter	342.65	3	None	Brgy. MOOE	2
06002	CALINAN	Calinan Fire Station	Calinan Fire Station	1000.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
06002	CALINAN	Calinan Police Sub Station	Calinan Police Sub Station	30.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
06002	CALINAN	day care center	Sunflower PHDCC	180.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
06002	CALINAN	day care center	Waling-Waling PHDCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
06002	CALINAN	day care center	Isaguirre DCC	300.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	3

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
06002	CALINAN	day care center	Narcon DCC	300.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
06002	CALINAN	day care center	Anthurium PHDCC	200.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
06002	CALINAN	day care center	Sampaguita PHDCC	160.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
06002	CALINAN	day care center	Balite / San Pedro PHDCC	100.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
06002	CALINAN	day care center	Peñafino St. PHDCC	60.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
06002	CALINAN	day care center	San Roque DCC (Bagobo Vill)	120.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
06002	CALINAN	Elementary School	C.B. Bangoy ES	10000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06002	CALINAN	Elementary School	Calinan CES	18075.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06002	CALINAN	Elementary School	Lt C Villafuerte ES	60882.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06002	CALINAN	Police Station 10 (Calinan)	Police Station 10 (Calinan)	300.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be sourced through BFP XI with possible counterpart funding from the LGU.	1
06002	CALINAN	RHU	Calinan Pob. Rurak Health Unit	124.06	1	None	CHO MOOE	1
06004	DACUDAO	Barangay Hall	Calinan Brgy. Hall	199.89	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
06004	DACUDAO	BHS	Dacudao Health Center	136.67	1	None	Brgy. MOOE	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
06005	DALAG-DAG	Secondary School	Catalunan Pequeño NHS	27389.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06006	DOMINGA	Barangay Hall	Dacudao Brgy. Hall	194.16	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
06006	DOMINGA	Elementary School	Diego Silang ES	620.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06007	INAYANGAN	Elementary School	Popo ES	19900.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06008	LACSON	Task Group Falcon	Task Group Falcon	500.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
06009	LAMANAN	Elementary School	Lamanan ES	18000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06009	LAMANAN	Secondary School	Lamanan NHS	18967.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06013	RIVERSIDE	Barangay Hall	Dominga Brgy. Hall	193.22	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
06013	RIVERSIDE	BHS	Riverside Health Center	173.34	2	None	Brgy. MOOE	2
06013	RIVERSIDE	Elementary School	Riverside ES	16041.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06014	SALOY	Barangay Hall	Riverside Brgy. Hall	114.47	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
06014	SALOY	BHS	Saloy Health Center	109.81	1	None	Brgy. MOOE	1
06014	SALOY	Elementary School	Saloy ES	19241.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06015	SIRIB	Elementary School	Sirib ES	64470.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06015	SIRIB	Secondary School	Sirib NHS	69574.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06016	SUBASTA	Barangay Hall	Saloy Brgy. Hall	177.97	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
06016	SUBASTA	BHS	Subasta Health Center	233.63	1	None	Brgy. MOOE	1
06017	TALOMO RIVER	Barangay Hall	Subasta Brgy.Hall	196.88	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
06017	TALOMO RIVER	Elementary School	Quirino ES	9000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
07012	TAMUGAN	Barangay Hall	Talomo River Brgy. Hall	118.10	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
07012	TAMUGAN	BHS	Tamugan	75.00	1	None	Brgy. MOOE	1
07012	TAMUGAN	Elementary School	Lower Tamugan ES	20000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07012	TAMUGAN	Elementary School	Pagan Grande ES	2024.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07012	TAMUGAN	Elementary School	Siao ES	20000.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07012	TAMUGAN	Elementary School	Tagbaw ES	20000.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07012	TAMUGAN	Secondary School	Lower Tamugan NHS	20000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08001	COLOSAS	Elementary School	Apalili ES	6000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08012	SUMIMAO	Elementary School	Sumimao ES	18990.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
08012	SUMIMAO	Secondary School	Sumimao NHS	10000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09001	BAGO APLAYA	Barangay Hall	Tamugan Brgy. Hall	214.50	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09001	BAGO APLAYA	BHS	Bago Aplaya Health Center	51.20	1	None	Brgy. MOOE	1
09001	BAGO APLAYA	day care center	BLISS PHDCC	70.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09001	BAGO APLAYA	day care center	Sea side PHDCC	42.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09001	BAGO APLAYA	Elementary School	RC Quimpo ES	6000.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09002	BAGO GALLERA	BHS	Bago Gallera Health Center	51.20	1	None	Brgy. MOOE	1
09002	BAGO GALLERA	day care center	Bago Gallera De Oro Home Based	52.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09002	BAGO GALLERA	day care center	San Lorenzo PHDCC	48.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09002	BAGO GALLERA	Elementary School	San Lorenzo ES	3108.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09003	BALIOK	BHS	Purok 6, Ramonena	51.20	1	None	Brgy. MOOE	1
09004	BUCANA	Barangay Hall	Bucana Brgy. Hall	169.80	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09004	BUCANA	BHS	St. John Health Center	92.49	1	None	Brgy. MOOE	1
09004	BUCANA	BHS	Kabacan Health Center I	51.20	1	None	Brgy. MOOE	1
09004	BUCANA	day care center	Prk 7 PHDCC	148.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09004	BUCANA	day care center	Prk 6 PHDCC	120.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	BUCANA	day care center	Bilusa PHDCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09004	BUCANA	day care center	Kasilak PHDCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09004	BUCANA	day care center	Rosas DCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09004	BUCANA	day care center	St. John PHDCC II	85.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
09004	BUCANA	day care center	Prk 2 Bucana DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	BUCANA	day care center	Pebsa PHDCC	100.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
09004	BUCANA	day care center	Isla Suerte PHDCC 2/ SIR Phase I PHDCC 1	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09004	BUCANA	Elementary School	SIR ES	23215.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09004	BUCANA	Sandawa Mc Arthur Police Outpost	Sandawa Mc Arthur Police Outpost	8.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be sourced through BFP XI with possible counterpart funding from the LGU.	2
09004	BUCANA	Secondary School	Vicenta C. Nograles NHS	1200.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09004	BUCANA	SIR Fire Station	SIR Fire Station	155.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be sourced through BFP XI with possible counterpart funding from the LGU.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	BUCANA	TC	Teen Center	51.20	1	None	CHO MOOE	1
09005	CATALUNAN GRANDE	day care center	Bagahai DCC	56.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09006	CATALUNAN PEQUEÑO	Barangay Hall	Catalunan Pequeno Brgy. Hall	149.12	1	The structure of the barangays halls has no insurance coverage	LGU have no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09006	CATALUNAN PEQUEÑO	BHS	Catalunan Pequeño Health Center	133.19	3	None	Brgy. MOOE	2
09006	CATALUNAN PEQUEÑO	Secondary School	Calinan NHS	6000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09009	MA-A	Annex City Jail	Annex City Jail	198.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be sourced through BFP XI with possible counterpart funding from the LGU.	2
09009	MA-A	day care center	Don Julian PHDCC	56.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09009	MA-A	day care center	Prk 38 NHA PHDCC	250.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09009	MA-A	Elementary School	Gumalang ES	2000.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09009	MA-A	Female City Jail	Female City Jail	400.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be sourced through BFP XI with possible counterpart funding from the LGU.	2
09009	MA-A	Maa Police Sub Station	Maa Police Sub Station	20.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be sourced through BFP XI with possible counterpart funding from the LGU.	2
09009	MA-A	Main City Jail	Main City Jail	750.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be sourced through BFP XI with possible counterpart funding from the LGU.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09009	MA-A	UM Matina Police Outpost	UM Matina Police Outpost	6.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counter-part funding from the LGU.	2
09011	MATINA APLAYA	Barangay Hall	Matina Aplaya Brgy. Hall	258.72	1	The structure of the barangays halls has no insurance coverage	LGU have no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09011	MATINA APLAYA	BHS	Matina Aplaya Health Center(RHU)	109.00	1	None	Brgy. MOOE	1
09011	MATINA APLAYA	Bogser Police Outpost	Bogser Police Outpost	16.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counter-part funding from the LGU.	2
09011	MATINA APLAYA	day care center	Dumalag PHDCC	200.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09011	MATINA APLAYA	day care center	Malinawon DCC	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09011	MATINA APLAYA	day care center	Shanghai PHDCC	75.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09011	MATINA APLAYA	day care center	Dumalag PHDCC 3	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09011	MATINA APLAYA	day care center	Teachers Village PHDCC	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09011	MATINA APLAYA	Elementary School	Matina Aplaya ES	8474.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09011	MATINA APLAYA	Matina Aplaya Police Sub Station	Matina Aplaya Police Sub Station	8.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be sourced through BFP XI with possible counterpart funding from the LGU.	2
09011	MATINA APLAYA	Secondary School	Daniel R. Aguinaldo NHS	665881.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09012	MATINA CROSSING	Barangay Hall	Matina Crossing Brgy. Hall	404.94	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09012	MATINA CROSSING	BHS	Gravahan Health Center	21.00	3	None	Brgy. MOOE	2
09012	MATINA CROSSING	BHS	Matina Crossing Health Center	410.69	1	None	Brgy. MOOE	1
09012	MATINA CROSSING	Elementary School	Dalagdag ES	20000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09012	MATINA CROSSING	Elementary School	Matina CES	10737.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09012	MATINA CROSSING	Elementary School	New Matina ES	450.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09012	MATINA CROSSING	Police Station 3 (Talomo)	Police Station 3 (Talomo)	200.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
09013	MATINA PANGI	Barangay Hall	Matina Pangi Brgy. Hall	107.73	2	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09013	MATINA PANGI	BHS	Pangi Health Center	63.00	1	None	Brgy. MOOE	1
09013	MATINA PANGI	day care center	Km.8 Matina Pangi PHDCC	50.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09013	MATINA PANGI	Elementary School	Matina Pangi ES	5000.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09014	TALOMO	Barangay Hall	Talomo Brgy. Hall	334.32	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09014	TALOMO	BHS	NHA Relocation Health Center	57.59	1	None	Brgy. MOOE	1
09014	TALOMO	BHS	Royal Valley Health Center	63.00	1	None	Brgy. MOOE	1
09014	TALOMO	day care center	Kadayawan PHDCC	200.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09014	TALOMO	day care center	San Juan PHDCC	120.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09014	TALOMO	day care center	Christian Village, PHDCC	50.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09014	TALOMO	day care center	Taal Central Park PHDCC	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09014	TALOMO	day care center	NHA Relocation PHDCC	120.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09014	TALOMO	day care center	Talomo PHDCC	80.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09014	TALOMO	day care center	Talomo Barangay Hall 1	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09014	TALOMO	day care center	Kalambuan Home-based	30.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09014	TALOMO	Elementary School	A. Bonifacio Elem. School	10500.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09014	TALOMO	Elementary School	Dona Pilar Marfori ES	2600.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09014	TALOMO	Elementary School	Leon A. Garcia Sr. ES	2051.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09014	TALOMO	Elementary School	Talomo CES	10500.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09014	TALOMO	RHU	Puan Health Center	437.58	1	None	CHO MOOE	1
09014	TALOMO	Secondary School	F. Bangoy NHS - Annex	906.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09014	TALOMO	Secondary School	Talomo NHS	1200.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09014	TALOMO	Talomo Police Outpost	Talomo Police Outpost	12.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counter-part funding from the LGU.	2
09014	TALOMO	UHC	Talomo Urban Health Center	510.00	1	None	CHO MOOE	1
09014	TALOMO	Ulas Police Sub Station	Ulas Police Sub Station	50.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counter-part funding from the LGU.	2
10003	BANGKAS HEIGHTS	Elementary School	Batolusa ES	2275.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10008	BINUGAO	Barangay Hall	Binugao Brgy Hall	303.10	1	The structure of the barangays halls has no insurance coverage	LGU have no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
10008	BINUGAO	BHS	Binugao	198.71	1	None	Brgy. MOOE	1
10008	BINUGAO	Elementary School	Biao Joaquin ES	12000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10008	BINUGAO	Elementary School	Binugao CES	26267.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
10011	DALIAO	Elementary School	V.S. Bangoy ES	4437.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10016	LUBOGAN	BHS	Lubogan	147.19	1	None	Brgy. MOOE	1
10016	LUBOGAN	Elementary School	San Miguel Integrated School	19998.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10016	LUBOGAN	Lubogan Police Outpost	Lubogan Police Outpost	5.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
10017	MARAPAN GI	Barangay Hall	Marapangi Brgy. Hall	186.88	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
10017	MARAPAN GI	BHS	Marapangi	111.56	2	None	Brgy. MOOE	2
10017	MARAPAN GI	Elementary School	Bunawan Aplaya ES	3919.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10020	SIRAWAN	Elementary School	Sirawan Beach ES	40000.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
10020	SIRAWAN	Secondary School	Sirawan NHS(Toril NHS)	40867.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10024	TORIL	Elementary School	Don Francisco S. Dizon Sr.	8781.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
11001	ANGALAN	Barangay Hall	Angalan Brgy. Hall	230.70	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
11001	ANGALAN	BHS	Angalan Health Center	117.05	2	None	Brgy. MOOE	2
11001	ANGALAN	Elementary School	A. Barbarona ES	10000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
11003	BALENGA ENG	Barangay Hall	Balengaeng Brgy. Hall	153.15	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
11003	BALENGA ENG	BHS	Balingaeng	63.08	2	None	Brgy. MOOE	2
11003	BALENGA ENG	Elementary School	Balengaeng ES	20000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
11005	BIAO GUI-ANGA	Barangay Hall	Biao Guianga Brgy.Hall	179.93	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
11005	BIAO GUI-ANGA	BHS	Biao Guianga	72.74	2	None	Brgy. MOOE	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
11005	BIAO GUI-ANGA	Elementary School	Biao Guianga ES	10000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
11006	MATINA BIAO	Barangay Hall	Matina Biao Brgy. Hall	199.64	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
11006	MATINA BIAO	BHS	Matina Biao	150.60	2	None	Brgy. MOOE	2
11006	MATINA BIAO	Elementary School	Matina Biao ES	88508.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
11007	LOS AMIGOS	Barangay Hall	Los Amigos Brgy. Hall	120.27	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
11007	LOS AMIGOS	BHS	Los Amigos	112.13	1	None	Brgy. MOOE	1
11007	LOS AMIGOS	Elementary School	Los Amigos ES	15000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
11007	LOS AMIGOS	Los Amigos Police Sub Station	Los Amigos Police Sub Station	30.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
11007	LOS AMIGOS	Secondary School	Los Amigos NHS	8240.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
11007	LOS AMIGOS	UHC	Los Amigos New Urban Health Center	367.23	1	None	CHO MOOE	1
11009	MANUEL GUIANGA	Elementary School	Vinzons ES	30037.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
11010	MINTAL	Barangay Hall	Mintal Brgy. Hall	183.89	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
11010	MINTAL	BHS	Mintal	169.96	1	None	Brgy. MOOE	1
11010	MINTAL	Elementary School	Mintal Central ES	3167.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
11010	MINTAL	Mintal Fire Station	Mintal Fire Station	450.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
11010	MINTAL	Secondary School	Mintal Comprehensive NHS	4500.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
11012	NEW VALENIA	Elementary School	Luman ES	1000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
11014	TACUNAN	Tacunan Police Sub Station	Tacunan Police Sub Station	30.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
11015	TAGAKPAN	Barangay Hall	Tagakpan Brgy. Hall	183.06	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
11015	TAGAKPAN	BHS	Tagakpan	114.39	1	None	Brgy. MOOE	2
11015	TAGAKPAN	Elementary School	Tagakpan ES	67786.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
11015	TAGAKPAN	Secondary School	Tagakpan NHS	33371.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
11017	TUGBOK	Barangay Hall	Tugbok Brgy Hall	180.65	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
11017	TUGBOK	Elementary School	Tugbok Central ES SPED Center	44019.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-9. Critical Point Facilities, Adaptive Capacity to Flood, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
11017	TUGBOK	Police Station 9 (Tugbok)	Police Station 9 (Tugbok)	1000.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counter-part funding from the LGU.	1
11017	TUGBOK	RHU	Tugbok District Health Center	107.94	1	None	CHO MOOE	1
11017	MINTAL	Secondary School	Tugbok NHS	17000.00	1.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

STORM SURGE

Of the 310 critical point facilities identified to be susceptible to landslide, 184 are given the adaptive capacity of 1, while 107 facilities have moderate of adaptive capacity to take in change in the climate, while there are 19 with low capacity to adopt to impacts of climate change. The 19 structures are barangay halls (3), day care centers (6), elementary schools (8), and secondary schools (2). These structures are not covered by property damage insurance, thus, should consider adopting mitigating measures since these structures were also have a high degree of impact in the occurrence of storm surge in the areas where these are located.

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01001	1-A	Barangay Hall	1-A Brgy. Hall	87.277	3	The structure of the barangays halls has no insurance coverage	LGU have no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01001	1-A	BHS	Brgy 1-A Health Center	54.40	2	No	CHO MOOE	2
01001	1-A	BHS	City Health Office	350	1	Yes	Brgy. MOOE	1
01001	1-A	day care center	Bolton DCC	80	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01001	1-A	Elementary School	Bolton ES	10500	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01001	1-A	Elementary School	Magallanes ES	18943	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01002	2-A	Barangay Hall	2-A Brgy. Hall	100.004	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01002	2-A	BHS	Brgy. 2-A Health Center	118.87	2	No	Brgy. MOOE	2
01002	2-A	City Hall	City Hall (Main)	1951.641	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01002	2-A	City Hall	Sangguniang Panlungsod	3249.636	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01002	2-A	City Hall	City Hall Annex	391.441	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01002	2-A	day care center	Magallanes DCC	16	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
01003	3-A	Barangay Hall	3-A Brgy. Hall	64.248	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01004	4-A	Barangay Hall	4-A Brgy. Hall	96.764	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01004	4-A	BHS	Tomas Claudio Health Center	481.02	1	No	CHO MOOE	1
01004	4-A	BHS	Teen Center	120	1	No	CHO MOOE	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01004	4-A	day care center	Brgy 4-A DCC	36	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01004	4-A	Elementary School	Kapt. T. Monteverde Sr. CES	18870	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01005	5-A	Barangay Hall	5-A Brgy. Hall	172.16	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01005	5-A	BHS	Bankerohan Health Center	68.04	1	No	Brgy. MOOE	1
01005	5-A	day care center	Brgy 5-A DCC I	36	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01005	5-A	day care center	Brgy 5-A DCC II	36	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01005	5-A	day care center	Brgy 5-A DCC III	36	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01005	5-A	day care center	Brgy 5-A DCC IV	36	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01005	5-A	day care center	Brgy 5-A DCC V	36	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01007	7-A	Barangay Hall	7-A Brgy. Hall	149.037	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01009	9-A	Barangay Hall	9-A Brgy. Hall	115.481	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01009	9-a	BHS	Brgy.9-A Health Center	51.2	1	No	Brgy. MOOE	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01009	9-a	day care center	Camus DCC (Barangay 9-A)	60	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
01009	9-a	Elementary School	T. Palma Gil Elem. Sch.	6202	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01010	10-A	Secondary School	Davao City NHS	6222	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01011	11-B	Barangay Hall	11-B Brgy. Hall	58.64	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can be set and sourced through DRRM fund.	2
01012	12-B	Barangay Hall	12-B Brgy. Hall	101.626	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can be set and sourced through DRRM fund.	1
01012	12-B	BHS	Brgy. 12-B Health Center	41.83	2	No	Brgy. MOOE	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01012	12-B	day care center	V. Mapa DCC	120	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
01012	12-B	Elementary School	JP Laurel ES	807	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01013	13-B	Barangay Hall	13-B Barangay Hall	*	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can be set and sourced through DRRM fund.	3
01014	14-B	Barangay Hall	14-B Brgy. Hall	33.552	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can be set and sourced through DRRM fund.	1
01014	14-B	BHS	Brgy.14-B Health Center	11.04	2	No	Brgy. MOOE	2
01015	15-B	Barangay Hall	15-B Brgy. Hall	100.004	2	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can be set and sourced through DRRM fund.	2
01015	15-B	BHS	Brgy. 15-B Health Center	6.02	3	No	Brgy. MOOE	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01015	15-B	day care center	Brgy 15 B PHDCC	50	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01016	16-B	Barangay Hall	16-B Brgy. Hall	*	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	3
01017	17-B	Barangay Hall	17-B Brgy. Hall	51.376	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01018	18-B	Barangay Hall	18-B Brgy. Hall	122.104	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01018	18-B	BHS	Brgy.18-B Health Center	39.44	3	No	Brgy. MOOE	2
01018	18-B	day care center	Brgy. 18 DCC Little Angels DCC	120	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01020	20-B	Barangay Hall	20-B Brgy. Hall	141.156	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01020	20-B	BHS	Brgy.20-B Health Center	46.02	1	No	Brgy. MOOE	1
01020	20-B	day care center	Regina Comp. DCC	60	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
01020	20-B	Elementary School	E. Quirino ES	3500	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01020	20-B	Elementary School	San Roque CES	10500	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01021	21-C	Barangay Hall	21-C Brgy. Hall	45.417	2	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can be set and sourced through DRRM fund.	2
01021	21-C	BHS	Brgy.21-C Piapi Health Center	30	1	No	Brgy. MOOE	1
01021	21-C	day care center	Barangay 21-C PHDCC	150	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01022	22-C	Barangay Hall	22-C Brgy. Hall	270.716	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01022	22-C	BHS	Brgy 22-C Health Center	278.75	2	No	Brgy. MOOE	1
01022	22-C	day care center	Brgy 22-C DCC	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01023	23-C	Barangay Hall	23-C Brgy. Hall	134.647	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01023	23-C	BHS	Brgy 23-C Mini Forest Health Center	361.65	1	No	CHO MOOE	1
01023	23-C	BHS	New BHS / Isla Verde Purok 3B	51.85	1	No	Brgy. MOOE	1
01023	23-C	day care center	Mini-Forest DCC	60	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01023	23-C	Day care center (homebased)	Purok 2 Home-Based	50	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	3
01023	23-C	Day care center (homebased)	Purok 4 A Home-Based	50	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	3
01023	23-C	Day care center (homebased)	Kabingaag Home Based	80	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	3
01023	23-C	Day care center (homebased)	Purok 4 b Home-Based I	80	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	3

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01023	23-C	Day care center (homebased)	Purok 4 b Home-Based II	50	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	3
01023	23-C	Day care center (homebased)	Badjao Home Based	60	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	3
01023	23-C	Elementary School	Zonta Elem. School	2681	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	3
01023	23-C	Police Station	Police Station 1 (Sta. Ana)	300	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01023	23-c	Police Sub Station	23-C Police Sub Station	25	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
01024	24-C	Barangay Hall	24-C Brgy. Hall	84.686	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01024	24-C	BHS	Brgy 24-C Health Center	84.96	1	No	Brgy. MOOE	1
01025	25-C	Barangay Hall	25-C Brgy. Hall	25.847	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01025	25-C	BHS	Brgy.25-C Health Center	12.93	2	No	Brgy. MOOE	2
01026	26-C	Barangay Hall	26-C Brgy. Hall	116.913	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01026	26-C	BHS	Brgy.26-C Health Center	141.38	1	No	Brgy. MOOE	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01026	26-C	day care center	Silangan PHDCC	85	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01027	27-C	Barangay Hall	27-C Brgy. Hall	42.076	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01027	27-C	BHS	Brgy.27-C Health Center	21.66	1	No	Brgy. MOOE	1
01027	27-C	BHS	Sta. Ana Health Center	550	1	No	CHO MOOE	1
01027	27-C	day care center	China Town DCC	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01027	27-C	day care center	Brgy. 27-C PHDCC	40	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01028	28-C	Barangay Hall	28-C Brgy. Hall	107.563	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01028	28-C	BHS	Brgy.28-C Health Center	29.04	1	No	Brgy. MOOE	1
01028	28-C	day care center	Brgay 28 -C PHDCC	40	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01028	28-C	day care center	Rizal Day Care Center	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01028	28-C	Elementary School	Jose Rizal ES	9468	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01028	28-C	Elementary School	M. Quezon ES	9000	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01028	28-C	Elementary School	Manuel Roxas ES	3397	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01028	28-C	Elementary School	Sta. Ana CES	15013	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01028	28-C	Secondary School	Sta. Ana NHS	14023	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01028	28-C	Secondary School	Sta. Ana SHS-Annex	1224	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
01029	29-C	Barangay Hall	29-C Brgy. Hall	42.076	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01029	29-C	BHS	Brgy. 29-C Health Center	22.04	1	No	Brgy. MOOE	1
01030	30-C	Barangay Hall	30-C Brgy. Hall	118.664	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01030	30-C	BHS	Brgy.30-C Health Center	31.32	1	No	Brgy. MOOE	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01030	30-C	day care center	St. Anne DCC	33	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01031	31-D	Barangay Hall	31-D Brgy. Hall	81.604	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01031	31-D	BHS	Brgy. 31-D Health Center	38.71	1	No	Brgy. MOOE	1
01031	31-D	day care center	Roxas 1 DCC	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01031	31-D	day care center	Roxas 2 DCC	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01031	31-D	Police Sub Station	31-D Police Sub Station	100	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
01032	32-D	Barangay Hall	32-D Brgy. Hall	40.166	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01032	32-D	BHS	Brgy. 32-D Health Center	249.12	1	No	CHO MOOE	1
01032	32-D	BHS	Reproductive Health and Wellness Center	485.48	1	No	CHO MOOE	1
01032	32-D	day care center	Jacinto DCC	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01033	33-D	Barangay Hall	33-D Brgy. Hall	77.389	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01033	33-D	day care center	Mabini DCC	120	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01034	34-D	Barangay Hall	34-D Brgy. Hall	*	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	3
01035	35-D	Barangay Hall	35-D Brgy. Hall	89.74	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01035	35-D	BHS	Brgy. 35-D Health Center	11	3	No	Brgy. MOOE	2
01035	35-D	day care center	Brgy 35 D PHDCC	120	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
01036	36-D	Barangay Hall	36-D Brgy. Hall	109.071	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01036	36-D	BHS	Brgy. 36-D Health Center	38.88	1	No	Brgy. MOOE	1
01036	36-D	day care center	Brgy 36 Day Care Center	20	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
01037	37-D	Barangay Hall	37-D Brgy. Hall	128.702	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01037	37-D	BHS	Brgy. 37-D Health Center	94.12	1	No	Brgy. MOOE	1
01037	37-D	day care center	Brgy. 37-D DCC?	60	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01038	38-D	Barangay Hall	38-D Brgy. Hall	100.004	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01038	38-D	BHS	Brgy. 38-D Health Center	38.94	1	No	Brgy. MOOE	1
01038	38-D	day care center	Brgy 38 D PHDCC	60	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01038	38-D	Police Headquarters	Camp Captain Domingo E. Leonor	59629	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01038	38-D	residential facility	Paginhawaan Drop-In Center	300	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01038	38-D	residential facility	Quick Response Team for Children's Concern / Kean Gabriel	300	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01039	39-D	Barangay Hall	39-D Brgy. Hall	93.977	2	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01039	39-D	BHS	Brgy. 39-D Health Center	50.80	3	No	Brgy. MOOE	2
01039	39-D	day care center	Brgy 39 D PHDCC	60	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
01039	39-D	day care center	Child Minding Center	300	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01040	40-D	Barangay Hall	40-D Brgy. Hall	43.605	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01040	40-D	day care center	Brgy 40 D PHDCC	80	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
02001	AGDAO PROPER	Barangay Hall	Agdao Brgy. Hall	135.957	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02001	W. Aquino	Barangay Hall	W. Aquino Brgy. Hall	101.806	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
02001	Wilfredo Aquino	BHS	Wilfredo Aquino Health Center	259.09	3	No	Brgy. MOOE	2
02001	Agdao Proper	Elementary School	Agdao ES	1007	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
02001	Wilfredo Aquino	Elementary School	J. Porras ES	5000	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
02001	Agdao	Police Sub Station	Agdao Proper Police Sub Station	50	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
02001	Agdao	RHU	Agdao Health Center	250	1	No	CHO MOOE	1
02003	PACIANO BANGOY	Barangay Hall	P. Bangoy Brgy. Hall	165.226	2	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
02003	Paciano Bangoy	BHS	Paciano Bangoy Health Center	153.09	3	No	Brgy. MOOE	2
02003	Paciano Bangoy	Fire Station	Bangoy Fire Station	580	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
02004	RAFAEL CASTILLO	Barangay Hall	R. Castillo Brgy. Hall	142.147	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
02004	R. Castillo	BHS	R.Castillo Health Center	144.59	2	No	Brgy. MOOE	2
02005	CENTRO	Barangay Hall	Centro Brgy. Hall	144.227	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02005	Centro Ag-dao	BHS	New BHS	119.62	1	No	Brgy. MOOE	1
02005	Centro Ag-dao	BHS	South San Juan Health Center	125.95	1	No	Brgy. MOOE	1
02005	Centro	Elementary School	San Juan ES	2100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
02006	VICENTE DUTERTE	Barangay Hall	V. Duterte Brgy. Hall	400.243	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02006	Vicente Duterte	BHS	Vicente Duterte Health Center	345.27	1	No	Brgy. MOOE	1
02006	Vicente Duterte	Elementary School	Don Julian Rodriguez ES	1500	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
02007	LEON GARCIA SR.	Barangay Hall	Leon Garcia Brgy. Hall	94.406	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02007	Leon Garcia	BHS	Leon Garcia Health Center	68.74	1	No	Brgy. MOOE	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
02007	Leon Garcia	Elementary School	Manuel M. Garcia ES	1807	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
02007	Leon Garcia	Police Sub Station	Leon Garcia Police Sub Station	25	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
02007	Leon Garcia	Secondary School	Leon Garcia Sr. NHS	1000	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	3
02007	Leon Garcia	TFD Headquarters	Task Force Davao (Task Group Agila)	9990	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
02008	LAPU - LAPU	Barangay Hall	Lapu-Lapu Brgy. Hall	202.495	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
02008	Lapu-Lapu	BHS	Lapu-Lapu Health Center	142.88	2	No	Brgy. MOOE	2
02008	Lapu-Lapu	Elementary School	Lapu-lapu ES	4400	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
02009	TOMAS MONTE-VERDE	Barangay Hall	T. Monteverde Brgy. Hall	89.501	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02009	Tomas Monteverde	BHS	Tomas Monteverde Health Center	87.71	2	No	Brgy. MOOE	2
02009	Tomas Monteverde	Fire Station	Central Fire Station	1587	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
02009	Tomas Monteverde	Police Sub Station	Tomas Monteverde Police Sub Station	25	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
02010	SAN ANTONIO	Barangay Hall	San Antonio Brgy. Hall	121.555	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02010	San Antonio	BHS	San Antonio Health Center	113.82	3	No	Brgy. MOOE	2
02011	UBALDE	Barangay Hall	Ubalde Brgy. Hall	152.268	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02011	Ubalde	BHS	Ubalde Health Center	86.17	3	No	Brgy. MOOE	2
02011	Ubalde	Elementary School	Ubalde Elem. School	540	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
02011	Ubalde Agdao	Police Sub Station	Ubalde Police Sub Station	25	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
04002	Buhangin	Police Station	Police Station 5 (Buhangin)	400	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
04009	SASA	Barangay Hall	Sasa Brgy. Hall	359.48	2	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
04009	Sasa	BHS	Km.11 Sasa Subcenter	418.01	1	No	Brgy. MOOE	1
04009	Sasa	BHS	Landmark Sub Center	57.41	2	No	Brgy. MOOE	2
04009	Sasa	BHS	Beach Club Sub Center	622.27	2	No	Brgy. MOOE	2
04009	Sasa	Elementary School	F. Bangoy CES SPED Center	5000	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
04009	Sasa	Elementary School	Osmena ES	3851	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	3
04009	Sasa	Fire Station	Lanang Fire Station	500	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
04009	Sasa	RHU	Sasa Health Center	250	1	No	CHO MOOE	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
04009	Sasa	Secondary School	F. Bangoy NHS	2849	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
04009	Sasa	Secondary School	F. Bangoy NHS - Annex	906	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
04009	Sasa	Teen Center	Sasa Health Center	499.4	1	No	CHO MOOE	1
04012	Aliongto	Police Outpost	Damosa Police Outpost	5	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
04013	V. HIZON	Barangay Hall	V. Hizon Brgy. Hall	293.665	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
04013	V. Hizon	BHS	Hizon Health Center	107	2	No	Brgy. MOOE	2
04013	V. Hizon	Elementary School	V. Hizon Elem. Sch.	10001	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
05001	BUNAWAN	Barangay Hall	Bunawan Brgy. Hall	199.517	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
05001	Bunawan (Pob.)	day care center	Rhema DCC	75	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
05001	Bunawan (Pob.)	day care center	DCPI 1 & 2 DCC	150	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
05001	Bunawan (Pob.)	day care center	Damiana DCC	100	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
05001	Bunawan (Pob.)	day care center	Tesorero DCC	60	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
05001	Bunawan (Pob.)	day care center	Bunawan Aplaya DCC	60	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
05001	Bunawan	Elementary School	Bunawan Aplaya ES	3919	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	3
05001	Bunawan	Elementary School	Daniel M. Perez ES	19445	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
05001	Bunawan	Fire Station	Bunawan Fire Station	300	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
05001	Bunawan	Police Station	Police Station 6 (Bunawan)	300	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
05001	Bunawan	RHU	Bunawan Rural Health Unit	373.84	1	No	Brgy. MOOE	1
05003	ILANG	Barangay Hall	Ilang Brgy. Hall	214.066	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
05003	Ilang	day care center	Sto. Niño Homebase	80	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
05003	Ilang	day care center	Amparo Homes DCC	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
05003	Ilang	day care center	Ilang DCC Sampaguita Section	75	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
05003	Ilang	day care center	Ilang Riverview	75	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
05003	Ilang	Police Sub Station	Ilang Sub Police Station	80	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
05004	Lasang	BHS	Lasang Health Center	193.93	1	No	Brgy. MOOE	1
05004	Lasang	Elementary School	AL Navarro CES	21984	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
05004	Lasang	Elementary School	Alfredo A. Aledia Elementary School	5000	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
05004	Lasang	Elementary School	Tambongon ES	9000	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	3
05004	Lasang	Police Sub Station	Lasang Police Sub Station	100	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
05004	Lasang	Secondary School	AL Navarro NHS	21984	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
05004	Lasang	TFD Detachment	Task Group Lawin	2256	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
05007	PANACAN	Barangay Hall	Panacan Brgy. Hall	167.449	2	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
05007	Panacan	BHS	Panacan Proper Health Center	89.77	1	No	Brgy. MOOE	1
05007	Panacan	BHS	Panacan 13 Health Center	100.00	2	No	Brgy. MOOE	2
05007	Panacan	day care center	St. John DCC	70	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
05007	Panacan	day care center	F.L. Apostol DCC	150	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
05007	Panacan	day care center	Panacan Trece DCC	120	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
05007	Panacan	day care center	Lopez HB	70	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
05007	Panacan	day care center	Benjamin Hills DCC	70	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
05007	Panacan	day care center	Doña Mercedes DCC	100	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
05007	Panacan	Fire Station	Panacan Fire Station	155	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
05008	San Isidro	BHS	Kabacan Health Center II	51.2	1	No	CHO MOOE	1
05009	Tibungco	day care center	San Juan DCC	60	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
05009	Tibungco	day care center	Deles Perez DCC	100	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09001	BAGO APLA-YA	Barangay Hall	Bago Aplaya Brgy. Hall	426.687	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09002	Bago Aplaya	Elementary School	Dr. Jovito Francisco ES(Camilo Osias ES)	2037	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09003	Baliok Proper	BHS	Baliok Health Center	53.86	1	No	Brgy. MOOE	1
09003	Bago Aplaya	Elementary School	Generoso ES	5198	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	BUCANA	Barangay Hall	Bucana Brgy. Hall	98.661	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09004	BUCANA	Barangay Hall	Bucana Brgy. Hall	169.8	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
09004	Bucana	BHS	Teen Center	51.2	1	No	CHO MOOE	1
09004	Bucana	BHS	Bucana Health Center	47.89	2	No	Brgy. MOOE	2
09004	Bucana	BHS	St. John Health Center	92.49	1	No	Brgy. MOOE	1
09004	Bucana	BHS	Talomo North Health Center RHU	338.47	1	No	Brgy. MOOE	1
09004	Bucana	BHS	SIR Phase 2 Health Center	41.08	1	No	Brgy. MOOE	1
09004	Bucana	BHS	Times Beach Health Center	50.23	1	No	Brgy. MOOE	1
09004	Bucana	BHS	Kabacan Health Center I	51.2	1	No	Brgy. MOOE	1
09004	bucana	CDRRMO Headquarters	City Disaster Risk Reduction and Management Office	60	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	Bucana	day care center	Prk 7 PHDCC	148	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	Prk 6 PHDCC	120	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	Bilusa PHDCC	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	Kasilak PHDCC	150	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	Bucana	day care center	Rosas DCC	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	St. John PHDCC II	85	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	Prk 2 Bucana DCC	150	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	Pebsa PHDCC	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	Bucana	day care center	Kabacan Times Beach DCC	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	P 32 Holy Trinity DCC	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	S.I.R Phase 2 PHDCC 3	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	Sabroso Village PHDCC	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	Bucana	day care center	Kalubihan DCC	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	Savina DCC	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	SIR Phase 2 DCC 1	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	SIR Phase 2 DCC 2	100	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	Bago Aplaya	Elementary School	RC Quimpo ES	6000	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	3
09004	Bucana	Elementary School	Cesario Villa Abrille ES	4788	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09004	Bucana	Elementary School	Kabacan ES	1000	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09004	Bucana	Elementary School	SIR ES	23215	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09004	bucana	Fire Station	SIR Fire Station	155	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	bucana	Police Outpost	Sandawa Mc Arthur Police Outpost	8	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09004	bucana	Police Sub Station	Sandawa Police Sub Station	15	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09004	bucana	PSSCC Headquarters	Public Safety and Security Services	8138	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09004	Bucana	Secondary School	Vicenta C. Nograles NHS	1200	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09005	Bago Aplaya	Secondary School	Erico Nograles NHS-B	2456	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09006	Bago Aplaya	BHS	Bago Aplaya Health Center	51.2	1	No	Brgy. MOOE	1
09007	Bago Aplaya	BHS	Gulf View Health Center	51.2	1	No	Brgy. MOOE	1
09008	Bago Aplaya	day care center	D'Garden PHDCC	46	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09009	Bago Aplaya	day care center	Gulf View Subd. PHDCC	42	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09010	Bago Aplaya	day care center	BLISS PHDCC	70	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09011	MATINA APLAYA	Barangay Hall	Matina Aplaya Brgy. Hall	258.723	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09011	Matina Aplaya	BHS	Matina Aplaya Health Center	109	1	No	Brgy. MOOE	1
09011	Bago Aplaya	day care center	Sea side PHDCC	42	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09011	Matina Aplaya	day care center	Dumalag PHDCC	200	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
09011	Matina Aplaya	day care center	Cristina Village PHDCC	90	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09011	Matina Apla-ya	day care center	Malinawon DCC	40	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09011	Matina Apla-ya	day care center	Shanghai PHDCC	75	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09011	Matina Apla-ya	day care center	Dumalag PHDCC 3	40	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09011	Matina Apla-ya	day care center	Seaside II PHDCC	54	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09011	Matina Aplaya	day care center	Teacher's Village PHDCC	40	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09011	Matina Aplaya	Elementary School	Diego Silang ES	620	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	3
09011	Matina Aplaya	Elementary School	Matina Aplaya ES	8474	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09011	Matina Aplaya	Police Outpost	Bogser Police Outpost	16	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09011	MATINA APLAYA	Police Sub Station	Matina Aplaya Police Sub Station	8	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09012	Matina Crossing	BHS	Gravahan Health Center	21	2	No	Brgy. MOOE	2
09012	Bago Aplaya	day care center	BALAI, PHDCC	75	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09012	Matina Crossing	Elementary School	Don Manuel Gutierrez ES	13920	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09012	Matina Crossing	Elementary School	New Matina ES	450	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	3

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09012	Matina Crossing	Fire Station	Talomo Fire Station	300	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09012	Matina Crossing	Police Outpost	UM Matina Police Outpost	6	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09014	TALOMO	Barangay Hall	Talomo Brgy. Hall	334.318	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09014	Talomo Proper	BHS	NHA Relocation Health Center	57.59	1	No	Brgy. MOOE	1
09014	Talomo Proper	BHS	Talomo Cemento Health Center	56.21	1	No	Brgy. MOOE	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09014	Talomo (Pob.)	day care center	Kadayawan PHDCC	200	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09014	Talomo (Pob.)	day care center	San Juan PHDCC	120	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09014	Talomo (Pob.)	day care center	Christian Village, PHDCC	50	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09014	Talomo (Pob.)	day care center	Taal Central Park PHDCC	40	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09014	Talomo (Pob.)	day care center	NHA Relocation PHDCC	120	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09014	Talomo Poblacion	Elementary School	Leon A. Garcia Sr. ES	2051	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09014	Talomo Proper	Elementary School	A. Bonifacio Elem. School	10500	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09014	Talomo Proper	Elementary School	Doña Soledad Dolor ES	15228	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09014	Talomo Proper	Elementary School	Talomo CES	10500	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09014	Talomo	Police Outpost	Talomo Police Outpost	12	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09014	Talomo	Police Sub Station	Ulas Police Sub Station	50	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09014	Talomo Proper	Secondary School	Gov. V. Duterte NHS	4490	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09014	Talomo Proper	Secondary School	Talomo NHS	1200	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10011	DALIAO	Barangay Hall	Daliao Brgy Hall	188.398	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
10011	Daliao	BHS	Daliao Health Center	111.38	2	No	Brgy. MOOE	2

Table CP-10. Critical Point Facilities, Adaptive Capacity to Storm Surge, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
10011	Daliao	Elementary School	V.S. Bangoy ES	4437	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10015	Lizada	Elementary School	JV Ferriols ES	8000	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10015	Lizada	Secondary School	JV Ferriols NHS	4689	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10020	Sirawan	Elementary School	Sirawan Beach ES	40000	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	3
10020	Sirawan	Secondary School	Sirawan NHS(Toril NHS)	40867	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	3

LANDSLIDE

The number of critical point facilities susceptible to landslide total to 358 where 57 have high adaptive capacity, 267 facilities are determined to have moderate adaptive capacity, and 34 structures with low adaptive capacity. Of the 33 structures, 32 are day care centers and one barangay hall. These structures with low adaptive capacity do not have insurance coverage and no resources to mitigate the effects of landslide. Most of the 33 structures have high degree of impact, which implies fatalities in the event landslides will take place.

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
03006	TAMBO-BONG	Barangay Hall	Tambobong Brgy. Hall	184.667	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
04001	ACACIA	Barangay Hall	Acacia Brgy. Hall	111.403	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
05002	GATUNGAN	Barangay Hall	Gatungan Brgy. Hall	198.003	2	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
05006	MUDIANG	Barangay Hall	Mudiang Brgy. Hall	143.224	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
06007	INAYANGAN	Barangay Hall	Inayangan Brgy. Hall	167.876	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
06010	LAMPIANAO	Barangay Hall	Lampianao Brgy. Hall	56.607	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
06011	MEGKA-WAYAN	Barangay Hall	Megkawayan Brgy. Hall	183.715	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
07001	BAGANIHAN	Barangay Hall	Baganihan Brgy. Hall	200.835	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
07002	BANTOL	Barangay Hall	Bantol Brgy. Hall	193.175	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
07003	BUDA	Barangay Hall	Buda Brgy. Hall	196.615	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
07004	DALAG LUMOT	Barangay Hall	Dalag Lumot Brgy. Hall	198.44	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
07005	DATU SALUMAY	Barangay Hall	Datu Salumay Brgy. Hall	201.775	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
07007	MAGSAYSAY	Barangay Hall	Magsaysay Brgy. Hall	154.502	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
07008	MALAMBA	Barangay Hall	Malamba Brgy. Hall	224.093	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
07009	MARILOG	Barangay Hall	Marilog Brgy. Hall	81.587	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
07010	SALAYSAY	Barangay Hall	Salaysay Brgy. Hall	180.932	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
08001	COLOSAS	Barangay Hall	Colosas Brgy. Hall	100.007	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
08002	FATIMA	Barangay Hall	Fatima Brgy Hall	100.762	2	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
08003	LUMIAD	Barangay Hall	Lumiad Brgy Hall	100.008	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
08004	MABUHAY	Barangay Hall	MABUHAY Barangay Hall	153.091	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
08005	MALABOG	Barangay Hall	Malabog Brgy. Hall	101.466	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
08006	MAPULA	Barangay Hall	Mapula Brgy Hall	100.009	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
08007	PANDAITAN	Barangay Hall	Pandaitan Brgy Hall	100.006	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
08008	PAÑALUM	Barangay Hall	Panalum Brgy Hall	198.564	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
08010	PARADISE EMBAC	Barangay Hall	Paradise Embac Brgy Hall	100.007	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
08011	SALAPAWAN	Barangay Hall	Salapawan Brgy Hall	*	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	3
08012	SUMIMAO	Barangay Hall	Sumimao Brgy Hall	86.231	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09008	LANGUB	Barangay Hall	Langub Brgy. Hall	53.321	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
10002	ATAN-AWE	Barangay Hall	Atan-awe Brgy. Hall	154.914	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
10009	CAMANSI	Barangay Hall	Camansi Brgy. Hall	163.766	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
10012	DALIAON PLANTATION	Barangay Hall	Daliaon Plantation Brgy Hall	171.908	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
10013	EDEN	Barangay Hall	Eden Brgy. Hall	72.393	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
10019	SIBULAN	Barangay Hall	Sibulan Brgy. Hall	166.851	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
10023	TIBULOY	Barangay Hall	Tibuloy Brgy. Hall	176.301	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
11011	NEW CARMEN	Barangay Hall	New Carmen Brgy/. Hall	188.271	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
11016	TALANDANG	Barangay Hall	Pangyan Brgy Hall	182.292	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
04001	Acacia	BHS	Acacia Health Center	20,000	2	No	Brgy. MOOE	2
10002	Atan-Awe	BHS	Atan-Awe	1248	1	No	Brgy. MOOE	2
08002	Bantol	BHS	Bantol	396	1	No	Brgy. MOOE	1
10010	Catigan	BHS	Catigan	10000	2	No	Brgy. MOOE	2
07004	Dalag Lumot	BHS	Dalag	4000	1	No	Brgy. MOOE	1
10012	Daliaon Plantation	BHS	Daliaon Plantation	10000	2	No	Brgy. MOOE	2
08006	Mapula	BHS	Damilag BHS	7590	1	No	Brgy. MOOE	1
10013	Eden	BHS	Eden	70000	1	No	Brgy. MOOE	2
08002	Fatima	BHS	Fatima Health Center	25000	1	No	Brgy. MOOE	2
05002	Gatungan	BHS	Gatungan, Health Center	4,195	2	Yes	Brgy. MOOE	2
06007	Inayagan	BHS	Inayagan Health Center	19000	1	No	Brgy. MOOE	1
08011	Salapawan	BHS	Kinse-kinse Health Center	11156	1	No	CHO MOOE	1
09008	Langub	BHS	Langub Health Center	10000	2	No	Brgy. MOOE	2
08003	Lumiad	BHS	Lumiad Health Center	3000	2	No	Brgy. MOOE	2
07007	Magsaysay	BHS	Magsaysay	40000	3	No	Brgy. MOOE	2
09010	Magtuod	BHS	Magtuod Health Center	27048	1	No	Brgy. MOOE	1
05005	Mahayag	BHS	Mahayag Health Center	15000	1	Yes	CHO MOOE	1

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
07008	Malamba	BHS	Malamba	18000	1	No	Brgy. MOOE	2
08006	Mapula	BHS	Mapula Health Center	20831	1	No	Brgy. MOOE	1
07009	Marilog	BHS	Marilog Proper	60000	2	No	CHO MOOE	1
06011	Megkawayan	BHS	Megkawayan Health Center	40000	1	No	Brgy. MOOE	1
09008	Langub	BHS	Mojon BHS	20000	1	No	Brgy. MOOE	2
05006	Mudiang	BHS	Mudiang Health Center	2,000	2	No	Brgy. MOOE	2
11011	New Carmen	BHS	New Carmen	14400	2	No	Brgy. MOOE	2
08001	Colosas	BHS	Panaga Health Center	235	1	No	Brgy. MOOE	2
08007	Pandaitan	BHS	Pandaitan Health Center	15085	3	No	Brgy. MOOE	2
06012	Pangyan	BHS	Pangyan Health Center	1000	1	No	Brgy. MOOE	1
08010	Paradise Embak	BHS	Paradise Embac Health Center	20000	1	No	Brgy. MOOE	2
08011	Salapawan	BHS	Salapawan Health Center	1000	1	No	Brgy. MOOE	1
07010	Salaysay	BHS	Salaysay	4000	1	No	Brgy. MOOE	1
10019	Sibulan	BHS	Sibulan	2000	1	No	Brgy. MOOE	1
07005	Datu Salumay	BHS	Sitio Tagumpay BHS	36000	1	No	Brgy. MOOE	2
08012	Sumimao	BHS	Sumimao Health Center	35703	1	No	Brgy. MOOE	1
03006	Tambobong	BHS	Tambobong Health Center	20000	3	No	Brgy. MOOE	2
10023	TIBULOY	BHS	Tibuloy	55000	2	No	Brgy. MOOE	2
08005	Malabog	Birthing Home	Malabog Lying-In and RHU	1750	1	No	Brgy. MOOE	1
05009	Tibungco	Birthing Home	Tibungco Lying-In	20000	1	No	Brgy. MOOE	1
01019	19-B	day care center	19-B	10000	2	No	Yes	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
09008	Langub	day care center	Langub PHDCC	10000	2	No	Yes	2
09009	Ma-a	day care center	GASAI PHDCC	36000	2	No	Yes	2
09009	Ma-a	day care center	Nacilla PHDCC	2865	2	No	Yes	2
09010	Magtuod	day care center	Magtuod PHDCC	6623	3	No	Yes	2
04001	Acacia	day care center	Acacia PHDCC	20000	1	No	Yes	2
04001	Acacia	day care center	Upper Sta. Cruz	11880	2	No	Yes	2
04002	Buhangin (Pob.)	day care center	Buhangin Hills DCC	11200	1	No	Yes	2
04003	Cabantian	day care center	Greenland 2 DCC	2467	1	No	Yes	2
04003	Cabantian	day care center	Green Orchard Village DCC	40012	1	No	Yes	2
04004	Callawa	day care center	P14 Callawa DCC	30316	1	No	Yes	2
04003	Callawa	day care center	Manaklay DCC	500	2	No	Yes	2
04004	Callawa	day care center	P15 Callawa-IP HB	60000	1	No	No	3
04010	Tigatto	day care center	Pilar Rodriguez PHDCC	410	1	No	Yes	2
05005	Mahayag	day care center	Liloan DCC	11600	1	No	Yes	2
05005	Mahayag	day care center	Mahayag DCC	1500	2	No	Yes	2
08001	Colosas	day care center	Galacia DCC	20000	1	No	Yes	2
08001	Colosas	day care center	Panaga DCC	326	2	No	Yes	2
08001	Colosas	day care center	Surayan Day Care Center	10000	2	No	Yes	2
08001	Colosas	day care center	Surayan Day Care Center	10000	2	No	Yes	2
08001	Colosas	day care center	Colosas Proper DCC	50000	1	No	Yes	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
08002	Fatima (Benowang)	day care center	Fatima DCC	5000	2	No	Yes	2
08002	Fatima (Benowang)	day care center	San Pablo DCC	30000	1	No	Yes	2
08003	Lumiad	day care center	Lumiad DCC	40000	1	No	Yes	2
08004	Mabuhay	day care center	Mabuhay DCC	43056	1	No	Yes	2
08004	Mabuhay	day care center	Lawis DCC	24740	2	No	Yes	2
08005	Malabog	day care center	Malambo-on DCC	10000	2	No	Yes	2
08005	Malabog	day care center	Taloytoy HB	292	2	No	No	3
08005	Malabog	day care center	Quarry DCC	20000	2	No	Yes	2
08005	Malabog	day care center	Crossing Malabog DCC	12000	2	No	Yes	2
08005	Malabog	day care center	Binaton DCC	20850	2	No	Yes	2
08005	Malabog	day care center	Bal-ong Day Care Center	40000	2	No	Yes	2
08005	Malabog	day care center	Panulawan DCC	2500	2	No	Yes	2
08005	Malabog	day care center	Malabog DCC	5000	3	No	Yes	2
08005	Malabog	day care center	Malabog Project Hope DCC	50000	1	No	Yes	2
08005	Malabog	day care center	Cabonbon DCC	20000	1	No	Yes	2
08005	Malabog	day care center	Balugo Day Care Center	3000	2	No	Yes	2
08006	Mapula	day care center	Lower Mapula DCC	20000	1	No	Yes	2
08006	Mapula	day care center	Upper Mapula DCC	25890	1	No	Yes	2
08007	Pandaitan	day care center	Pegdalahan DCC	60000	1	No	No	2
08008	Pañalum	day care center	Pañalum DCC	40000	1	No	Yes	2
08009	Paquibato	day care center	Alfredo Degamo DCC	55000	2	No	No	2
08010	Paradise Embak	day care center	Paradise Embac DCC	21300	1	No	Yes	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
08010	Paradise Embak	day care center	Dela Cerna DCC	12500	2	No	No	2
08011	Salapawan	day care center	Balite DCC	20000	2	No	Yes	2
08012	Sumimao	day care center	Sumimao Day Care Center	2580	1	No	Yes	2
08012	Sumimao	day care center	Marcos T. Vistal DCC	745	2	No	Yes	2
08005	Malabog	day care center	KTC DCC	20214	2	No	Yes	2
08005	Malabog	day care center	Pamantawan Day Care Center	3218	2	No	Yes	2
06006	Dominga	day care center	Sitio Quiabaton HB	10000	2	No	No	3
06007	Inayangan	day care center	Inayangan Proper PHDCC	14000	2	No	Yes	2
06007	Inayangan	day care center	Sinagmacan PHDCC	60000	1	No	Yes	2
06007	Inayangan	day care center	Sitio Galao PHDCC	10000	2	No	Yes	2
06007	Inayangan	day care center	Pablo Sebuan PHDCC	10000	1	No	Yes	2
06008	Inayangan	day care center	Popo PHDCC	15540	2	No	Yes	2
06009	Lacson	day care center	Lacson Riverside PHDCC	10000	1	No	Yes	2
06009	Lamanan	day care center	Colabol / Darila PHDCC	17000	1	No	Yes	2
06009	Lamanan	day care center	Libongan PHDCC	10000	1	No	Yes	2
06009	Lamanan	day care center	Polokon PHDCC	2000	2	No	Yes	2
06011	Lamanan	day care center	Upper Libongan HB	25000	3	No	No	3
06011	Megkawayan	day care center	Megkawayan PHDCC	25000	2	No	Yes	2
06012	Megkawayan	day care center	Purok Mahayag Home Based	10590	3	No	No	3
06014	Pangyan	day care center	Pangyan DCC	28682	2	No	Yes	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
06014	Saloy	day care center	Purok Salome PHDCC	25191	1	No	Yes	2
06014	Saloy	day care center	Sitio Ulas HB	1028	1	No	No	3
06014	Saloy	day care center	P- Masaya HB	17000	3	No	No	3
06018	Saloy	day care center	P-Bagong Silang HB	20000	3	No	No	3
07004	Tamayong	day care center	Upper Tamayong PHDCC	40000	2	No	Yes	2
07004	Dalag	day care center	Dalag DCC	25000	2	No	Yes	2
07006	Dalag	day care center	Purok 3 Dalag HB (Dalag Lumot HB)	19900	3	No	No	2
07007	Gumitan	day care center	Kapatagan DCC (Kapatagan HB?)	227882000	1	No	No	2
07007	Magsaysay	day care center	Magsaysay DCC	20000	2	No	Yes	2
07007	Magsaysay	day care center	Sitio Imboy HB	5000	3	No	No	3
07008	Magsaysay	day care center	Sitio Lanao HB	10000	1	No	No	3
07008	Malamba	day care center	Titugop DCC	19994	1	No	Yes	2
07008	Malamba	day care center	Malamba DCC	10000	1	No	No	2
07008	Malamba	day care center	Lanitim DCC	20000	1	No	No	2
07008	Malamba	day care center	Sambunotan (AWID) DCC	2000	2	No	No	2
07009	Malamba	day care center	Lower Malungon HB	10000	1	No	No	3
07009	Marilog	day care center	Upper Kibalang DCC	20000	1	No	Yes	2
07009	Marilog	day care center	Balite DCC	8881	2	No	Yes	2
07009	Marilog	day care center	OSCC DCC, Kibalang	13000	1	No	Yes	2
07009	Marilog	day care center	Lomondao DCC	3500	1	No	Yes	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
07009	Marilog	day care center	Sto. Niño DCC	20000	1	No	Yes	2
07009	Marilog	day care center	Malikongkong HB	18990	3	No	No	3
07009	Marilog	day care center	Pataga Adonai HB	10000	3	No	No	3
07009	Marilog	day care center	East Marahan HB	11946	3	No	No	3
07009	Marilog	day care center	Namnam HB	10000	3	No	No	3
07009	Marilog	day care center	Mundo Hill HB	20000	3	No	No	3
07009	Marilog	day care center	Mabuhay HB	2000	3	No	No	3
07009	Marilog	day care center	Campo Santos HB	10000	3	No	No	3
07009	Marilog	day care center	Marilog Proper HB	9000	3	No	No	3
07009	Marilog	day care center	Panipasan HB	488	3	No	No	3
07009	Marilog	day care center	Matigsalog HB	21115	1	No	No	3
07009	Marilog	day care center	Quimasog DCC	77730	1	No	Yes	2
07009	Marilog	day care center	Upian DCC	30000	2	No	No	2
07009	Marilog	day care center	Magwawa DCC	24000	2	No	Yes	2
07009	Marilog	day care center	Sumilop DCC	30000	1	No	No	2
07010	Marilog	day care center	CSSDO Marilog District Office	35.00	1	No	Yes	1
07010	Salaysay	day care center	Salaysay DCC	81.34	2	No	No	2
07010	Salaysay	day care center	Sitio Ballah HB	136.09	2	No	No	3
07010	Salaysay	day care center	Masawang DCC	34.23	1	No	Yes	2
07010	Salaysay	day care center	Cantimon DCCC	171.88	2	No	Yes	2
07011	Salaysay	day care center	Mahalyang HB	101.58	1	No	No	3
07011	Suawan (Tuli)	day care center	Unapan DCC	100.00	1	No	Yes	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
07011	Suawan (Tuli)	day care center	Suawan DCC	62.54	2	No	Yes	2
07011	Suawan (Tuli)	day care center	Quirorom DCC	118.85	2	No	Yes	2
07011	Suawan (Tuli)	day care center	Lower Happy Valley DCC	349.23	2	No	Yes	2
07011	Suawan (Tuli)	day care center	Balite HB	59.15	2	No	No	3
07012	Suawan (Tuli)	day care center	Masicampo HB	123.69	3	No	No	3
07012	Tamugan	day care center	Lower Tamugan DCC	299.10	2	No	Yes	2
07012	Tamugan	day care center	Kanacan DCC	77.14	2	No	Yes	2
07012	Tamugan	day care center	Bagobo Village HB	72.03	3	No	No	3
07012	Tamugan	day care center	Pangyan DCC (Pangyan HB?)	137.54	1	No	Yes	2
07012	Tamugan	day care center	Siao DCC	76.60	2	No	Yes	2
07012	Tamugan	day care center	Lower Patag DCC	81.72	2	No	Yes	2
07012	Tamugan	day care center	Acacia HB	55.83	2	No	No	3
07012	Tamugan	day care center	Sabang HB	63.58	3	No	No	3
07012	Tamugan	day care center	Tagbao HB	266.79	3	No	No	3
07012	Tamugan	day care center	Sualon HB	1472.64	3	No	No	3
07012	Tamugan	day care center	Centro Tamugan DCC	143.36	2	No	Yes	2
10002	Tamugan	day care center	Sto. Niño DCC	137.99	2	No	Yes	2
10008	Atan-awe	day care center	Atan-awe DCC	75.61	1	No	Yes	2
10009	Binugao	day care center	Binugao PHDCC	51.20	1	No	Yes	2
10010	Camansi	day care center	Camansi DCC	103.84	1	No	Yes	2
100012	Catigan	day care center	Acacia DCC	36.71	1	No	Yes	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
100013	Daliaon Plantation	day care center	Daliaon Plantation DCC I	390.86	1	No	Yes	2
05003	Eden	day care center	Eden PHDCC I	279.49	1	No	Yes	2
05005	Ilang	day care center	Liloan DCC	76.09	1	No	Yes	2
05005	Mahayag	day care center	Mahayag DCC	75.40	1	No	Yes	2
05001	Mahayag	day care center	Mahayag Riverside DCC	202.97	1	No	Yes	2
05001	Bunawan	day care center	Mudiang DCC	41.58	1	No	Yes	2
08003	Bunawan	day care center	K-4 DCC	192.04	1	No	Yes	2
08013	Lumiad	day care center	Lumiad DCC	51.79	1	No	Yes	2
08013	Tapak	day care center	Tapak DCC	535.95	1	No	Yes	2
08013	Tapak	day care center	Tipakis HB	189.08	1	No	No	3
08013	Tapak	day care center	Butay DCC	138.64	1	No	Yes	2
08013	Tapak	day care center	Labo DCC	56.46	1	No	Yes	2
08013	Tapak	day care center	Paraiso DCC	60.00	2	No	Yes	2
08013	Tapak	day care center	Mangani Day Care HB	598.00	2	No	No	3
08013	Tapak	day care center	Napus-okan DCC	5621.00	2	No	Yes	2
08013	Tapak	day care center	Mirol-o HB	600	3	No	No	3
07001	Baganihan	Elementary	Bayanihan ES	120	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
07001	Baganihan	Elementary	Bayanihan ES	120	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07005	Buda	Elementary	Columbus ES	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07005	Datu Salumay	Elementary	Datu Salumay ES	200	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary	Ladian ES	85	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08013	Tapak	Elementary	Mangani ES	200	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07005	Datu Salumay	Elementary	Misuhumey ES	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
08013	Tapak	Elementary	Tapak ES	200	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
04001	Acacia	Elementary School	Acacia ES	50	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08005	Malabog	Elementary School	Alon ES	242	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10002	Atan-Awe	Elementary School	Atan-Owe ES	130	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08012	Sumimao	Elementary School	Bacsarpa ES	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07010	Salaysay	Elementary School	Balah Licosan ES	2684	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
11016	Talandang	Elementary School	Balderas ES	85	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
07009	Marilog	Elementary School	Balite ES	90	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08005	Malabog	Elementary School	Balugo ES	85	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
04003	Cabantian	Elementary School	Banganga ES	80	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07002	Bantol	Elementary School	Bantol ES	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10012	Daliaon Plantation	Elementary School	Baracayo Integrated School	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10005	Bato	Elementary School	Bato ES	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08005	Malabog	Elementary School	Betan ES	200	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
08002	Fatima	Elementary School	Binowang ES	84	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
05009	Tibungco	Elementary School	Buhisan ES	84	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08013	Tapak	Elementary School	Butay ES	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07011	Suawan	Elementary School	Cabagbahangan ES	120	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06006	Dominga	Elementary School	Cabagtukan ES	84	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
04003	Cabantian	Elementary School	Cabantian ES	110	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08005	Malabog	Elementary School	Cabonbon ES	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
11011	New Carmen	Elementary School	Carmen ES	120	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09012	Matina Crossing	Elementary School	Ciriaco Mariano ES	110	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08001	Colosas	Elementary School	Colosas ES	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08006	Mapula	Elementary School	Damilag PS	95	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07004	Dalag Lumot	Elementary School	Datu Duyan ES	84	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08001	Colosas	Elementary School	Datu Libayao ES	84	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Datu Lompipi ES	84	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
08011	Salapawan	Elementary School	Datu Manlangan ES	112	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08005	Malabog	Elementary School	Don Mariano Marcos ES	84	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07006	Gumitan	Elementary School	Dumalogdog ES	110	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08001	Colosas	Elementary School	Galacia ES	90	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
04007	Mandug	Elementary School	Galon ES	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
05002	Gatungan	Elementary School	Gatungan ES	111	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
09012	Matina Crossing	Elementary School	GSIS Heights ES	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
06007	Inayangan	Elementary School	Inayangan ES	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07012	Tamugan	Elementary School	Kanacan ES	200	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Kibalang ES	190	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07008	Malamba	Elementary School	Kibangay ES	130	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
03006	Tambobong	Elementary School	Kidali ES	130	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08013	Tapak	Elementary School	Labo ES	110	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Laho ES	160	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
06010	Lampianao	Elementary School	Lampianao ES	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Lapinig ES	40	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07004	Dalag Lumot	Elementary School	Lumatag ES	50	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08003	Lumiad	Elementary School	Lumiad ES	192	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Lumondao ES	400	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08005	Malabog	Elementary School	M. Guloman IS (Binaton ES)	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Mabuhay ES	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
07007	Magsaysay	Elementary School	Magsaysay ES	400	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08005	Malabog	Elementary School	Malabog CES	600	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07002	Bantol	Elementary School	Malakeba ES	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07008	Malamba	Elementary School	Malamba ES	400	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08005	Malabog	Elementary School	Malamboon Integrated School	600	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Malikongkong ES	200	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Maluan ES	32	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
07010	Salaysay	Elementary School	Manaong ES	250	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
03006	Tambobong	Elementary School	Mangas-as ES	80	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08005	Malabog	Elementary School	Mangmang & Canoy IS(Crossing Malabog ES)	60	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08006	Mapula	Elementary School	Mapula ES	300	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Marahan West ES	48	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is one through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Marilog CES	40	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07010	Salaysay	Elementary School	Masawang ES	40	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
07011	Suawan	Elementary School	Masicampo ES	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06011	Megkawayan	Elementary School	Megkawayan ES	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10019	Sibulan	Elementary School	Mt. Apo ES	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
05006	Mudiang	Elementary School	Mudiang ES	300	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Namnam ES	350	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07005	Datu Salunay	Elementary School	Nangalid ES	255	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	New Sabang ES	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
06007	Inayangan	Elementary School	Pablo Sebuan ES	400	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08005	Malabog	Elementary School	Pamantawan ES	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Pamuhatan ES	500	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08008	Pañalum	Elementary School	Panalum ES	600	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08007	Pandaitan	Elementary School	Pandaitan ES	40	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06012	Pangyan	Elementary School	Pangyan ES	500	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07012	Tamugan	Elementary School	Pangyan ES	200	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
07009	Marilog Proper	Elementary School	Panipasan ES	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08005	Malabog	Elementary School	Panulawan ES	400	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08010	Paradise Embac	Elementary School	Paradise Embac ES	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Patag ES	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
11016	Tamayong	Elementary School	Pedro P Rodriguez ES (Upper Tamayong ES)	40	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08007	Pandaitan	Elementary School	Pegdalahan ES	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06009	Lamanan	Elementary School	Polocon ES	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
06007	Inayangan	Elementary School	Popo ES	400	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10012	Daliaon Plan-tation	Elementary School	Quezon ES	500	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06006	Dominga	Elementary School	Quibatón ES	60	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10004	Baracatan	Elementary School	Rizal ES	120	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08011	Salapawan	Elementary School	Salapawan ES	300	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07010	Salaysay	Elementary School	Salaysay ES	500	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10013	Eden	Elementary School	San Jose ES	288	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
07009	Marilog Proper	Elementary School	San Jose ES	300	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08002	Fatima	Elementary School	San Pablo ES	340	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07012	Tamugan	Elementary School	Siao ES	168	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
04002	Buhangin Proper	Elementary School	St. Jude ES	300	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08002	Fatima	Elementary School	Sta. Maria ES	300	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Sto. Niño ES	300	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Sumilop ES	300	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
08012	Sumimao	Elementary School	Sumimao ES	80	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08001	Colosas	Elementary School	Surayan ES	96	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07008	Malamba	Elementary School	Taga-ibo ES	300	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
03006	Tambobong	Elementary School	Tambobong ES	300	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10023	Tibuloy	Elementary School	Tibuloy ES	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07008	Malamba	Elementary School	Titogop ES	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Elementary School	Upian ES	144	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
07010	Salaysay	Elementary School	Upper Masawang ES	200	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08005	Malabog	Elementary School	V. Bontilao Sr. IS (Kapihan ES)	800	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
04003	Cabantian	Fire Station	Cabantian Fire Station	200	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
08005	Malabog	Police Station	Police Station 7 (Paquibato)	100	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
07009	Marilog	Police Station	Police Station 12 (Marilog)	360	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
04003	Indangan	Police Sub Station	North Town Sub Station	70	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
07009	Marilog	Primary Hospital	Marilog District Infirmary	88	1	No	Brgy. MOOE	1
04003	Cabantian	residential facility	Balay Dangupan Crisis Intervention Center	40	1	Yes	Yes	1
07008	Marilog	RHU	Marahan RHU with Birthing	40	1	No	CHO MOOE	1
08008	Pañalum	RHU	Pañalum Health Center	300	1	No	Brgy. MOOE	1
07005	Buda	Secondary	Buda NHS	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
08005	Malabog	Secondary	Cabonbon NHS	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07005	Datu Salumay	Secondary	Marilog HS of Agr'l	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
04001	Acacia	Secondary School	Acacia NHS	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08002	Fatima	Secondary School	Binowang NHS	250	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10013	Eden	Secondary School	Elias Lopez Memorial NHS	100	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07008	Malamba	Secondary School	G Astila SNCM HS	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06007	Inayangan	Secondary School	Inayangan NHS	180	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
08013	Tapak	Secondary School	Labo NHS	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08007	Pandaitan	Secondary School	Lorenzo Latawan NHS	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08005	Malabog	Secondary School	Malabog NHS	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08005	Malabog	Secondary School	Malabog NHS-Annex	150	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Secondary School	Marahan NHS	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog Proper	Secondary School	Marilog NHS	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
10019	Sibulan	Secondary School	Mt. Apo NHS	110	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2

Table CP-11. Critical Point Facilities, Adaptive Capacity to Landslide, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
08001	Colosas	Secondary School	Panaga NHS	100	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08010	Paradise Embac	Secondary School	Paradise Embac NHS	84	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07010	Salaysay	Secondary School	Salaysay NHS	95	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08012	Sumimao	Secondary School	Sumimao NHS	85	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
06011	Megkawayan	Secondary School	T. Singson NHS	84	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
03006	Tambobong	Secondary School	Tambobong NHS	90	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
08013	Tapak	Secondary School	Tapak NHS	90	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and national government.	2
07009	Marilog	UHC	Marilog Urban Health Center	70	1	No	CHO MOOE	1

LIQUEFACTION

There are 405 critical point facilities susceptible to liquefaction, 216 have high adaptive capacity, 175 moderate, and 14 are given the score of low. The 14 structures are barangay halls (3), barangay health stations (5), day care centers (3), elementary schools (2), and a secondary school. These structures are not covered by insurance. As to the improvement of the structure so as to increase its adaptive capacity, funds for retrofitting can be sourced from the disaster risk reduction and management fund of the city government.

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01001	1-A	Barangay Hall	1-A Brgy. Hall	87.28	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01001	1-A	BHS	Brgy 1-A Health Center	54.40	2	None	Brgy. MOOE	1
01001	1-A	day care center	Bolton DCC	36.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
01001	1-A	Elementary School	Magallanes ES	18943.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
01002	2-A	Barangay Hall	2-A Brgy. Hall	100.00	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01002	2-A	BHS	Brgy. 2-A Health Center	118.87	2	None	Brgy. MOOE	1
01002	2-A	City Hall	City Hall (Main)	1951.64	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01002	2-A	City Hall	City Hall Annex	3249.64	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01002	2-A	City Hall	Sangguniang Panlungsod	391.44	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01002	2-A	day care center	Magallanes DCC	36.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
01002	2-A	Elementary School	Bolton ES	10500.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
01003	3-A	Barangay Hall	3-A Brgy. Hall	64.25	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01004	4-A	Barangay Hall	4-A Brgy. Hall	96.76	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01004	4-A	BHS	Teen Center	120.00	1	None	CHO MOOE	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01004	4-A	day care center	Brgy 4-A DCC	36.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01004	4-A	Elementary School	Kapt. T. Monte-verde Sr. CES	18870.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
01004	4-A	RHU	Tomas Claudio Health Center	481.02	1	None	CHO MOOE	1
01005	5-A	Barangay Hall	5-A Brgy. Hall	172.16	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01005	5-A	BHS	Bankerohan Health Center	68.04	1	None	Brgy. MOOE	1
01005	5-A	day care center	Brgy 5-A DCC I	36.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01005	5-A	day care center	Brgy 5-A DCC II	36.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
01005	5-A	day care center	Brgy 5-A DCC III	36.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01005	5-A	day care center	Brgy 5-A DCC IV	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
01005	5-A	day care center	Brgy 5-A DCC V	60.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01005	5-A	Elementary School	Dona Pilar Marfori ES	2600.00	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
01007	7-A	Barangay Hall	7-A Brgy. Hall	149.04	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can be set and sourced through DRRM fund.	2
01007	7-A	day care center	Malvar DCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
01009	9-A	Barangay Hall	9-A Brgy. Hall	115.48	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can be set and sourced through DRRM fund.	2
01009	9-A	BHS	Brgy.9-A Health Center	51.20	1	None	Brgy. MOOE	1
01009	9-A	day care center	Camus DCC (Barangay 9-A)	80.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01009	9-A	day care center	DUHA DCC	120.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
01009	9-A	day care center	San Rafael Day Care Center	50.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01009	9-A	Elementary School	T. Palma Gil Elem. Sch.	6202.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	3
01012	11-B	Barangay Hall	11-B Brgy. Hall	58.64	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01012	12-B	Barangay Hall	12-B Brgy. Hall	101.63	2	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01012	12-B	BHS	Brgy. 12-B Health Center	41.83	2	None	Brgy. MOOE	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01012	12-B	day care center	V. Mapa DCC	120.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01013	13-B	Barangay Hall	13-B Brgy. Hall	*	3	The structure of the barangays halls has no insurance coverage	Since the barangay rented a privately owned facility the LGU is not accountable for retrofitting.	1
01014	14-B	Barangay Hall	14-B Brgy. Hall	33.55	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01014	14-B	BHS	Brgy.14-B Health Center	11.04	3	None	Brgy. MOOE	2
01015	15-B	Barangay Hall	15-B Brgy. Hall	100.00	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01015	15-B	BHS	Brgy. 15-B Health Center	6.02	3	None	Brgy. MOOE	2
01015	15-B	day care center	Brgy 15 B PHDCC	150.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01016	16-B	Barangay Hall	16-B Brgy. Hall	*	3	The structure of the barangays halls has no insurance coverage	Since the barangay rented a privately owned facility the LGU is not accountable for retrofitting.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01017	17-B	Barangay Hall	17-B Brgy. Hall	51.38	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01018	18-B	Barangay Hall	18-B Brgy. Hall	122.10	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01018	18-B	BHS	Brgy.18-B Health Center	39.44	3	None	Brgy. MOOE	1
01018	18-B	day care center	Brgy. 18 DCC Little Angels DCC	60.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	3
01019	19-B	day care center	El Rio Vista DCC	150.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
01019	19-B	RHU	El Rio Vista Health Center	46.02	1	None	CHO MOOE	2
01020	20-B	Barangay Hall	20-B Brgy. Hall	141.16	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01020	20-B	BHS	Brgy.20-B Health Center	46.02	1	None	Brgy. MOOE	3

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01020	20-B	day care center	Regina Comp. DCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
01020	20-B	Elementary School	E. Quirino ES	3500.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
01020	20-B	Elementary School	San Roque CES	10500.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
01021	21-C	Barangay Hall	21-C Brgy. Hall	45.42	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01021	21-C	BHS	Brgy.21-C Piapi Health Center	30.00	1	None	Brgy. MOOE	2
01021	21-C	day care center	Barangay 21-C PHDCC	60.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01022	22-C	Barangay Hall	22-C Brgy. Hall	270.72	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01022	22-C	BHS	Brgy 22-C Health Center	278.75	2	None	Brgy. MOOE	3
01022	22-C	day care center	Brgy 22-C DCC	85.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01023	23-C	Barangay Hall	23-C Brgy. Hall	134.65	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01023	23-C	BHS	New BHS / Isla Verde Purok 3B	51.85	1	None	Brgy. MOOE	1
01023	23-C	day care center	Mini-Forest DCC	100.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01023	23-C	Day care center (homebased)	Badjao Home Based	100.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01023	23-C	Day care center (homebased)	Kabingaag Home Based	150.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01023	23-C	Day care center (homebased)	Purok 2 Home-Based	300.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01023	23-C	Day care center (homebased)	Purok 4 A Home-Based	300.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
01023	23-C	Day care center (homebased)	Purok 4 b Home-Based I	50.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01023	23-C	Elementary School	Zonta Elem. School	2681.00	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
01023	23-C	Police Station	Police Station 1 (Sta. Ana)	300.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be sourced through BFP XI with possible counterpart funding from the LGU.	2
01023	23-C	Police Sub Station	23-C Police Sub Station	25.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be sourced through BFP XI with possible counterpart funding from the LGU.	1
01023	23-C	RHU	Brgy 23-C Mini Forest Health Center	361.65	1	None	CHO MOOE	1
01024	24-C	Barangay Hall	24-C Brgy. Hall	84.69	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can be set and sourced through DRRM fund.	2
01024	24-C	BHS	Brgy 24-C Health Center	84.96	1	None	Brgy. MOOE	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01025	25-C	Barangay Hall	25-C Brgy. Hall	25.85	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01025	25-C	BHS	Brgy.25-C Health Center	12.93	3	None	Brgy. MOOE	2
01026	26-C	Barangay Hall	26-C Brgy. Hall	116.91	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01026	26-C	BHS	Brgy.26-C Health Center	141.38	1	None	Brgy. MOOE	1
01026	26-C	day care center	Silangan PHDCC	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01027	27-C	Barangay Hall	27-C Brgy. Hall	42.08	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01027	27-C	BHS	Brgy.27-C Health Center	167.03	1	None	Brgy. MOOE	1
01027	27-C	day care center	Brgy. 27-C PHDCC	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01027	27-C	day care center	China Town DCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
01027	27-C	UHC	Sta. Ana Health Center	550.00	1	None	CHO MOOE	2
01028	28-C	Barangay Hall	28-C Brgy. Hall	107.56	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01028	28-C	BHS	Brgy.28-C Health Center	29.04	1	None	Brgy. MOOE	2
01028	28-C	day care center	Brgay 28 -C PHDCC	33.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01028	28-C	day care center	Rizal Day Care Center	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01028	28-C	Elementary School	Jose Rizal ES	9468.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
01028	28-C	Elementary School	M. Quezon ES	9000.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
01028	28-C	Elementary School	Manuel Roxas ES	15013.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
01028	28-C	Elementary School	Sta. Ana CES	3397.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
01028	28-C	Secondary School	Sta. Ana NHS	14023.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01028	28-C	Secondary School	Sta. Ana SHS-Annex	1224.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	3
01029	29-C	Barangay Hall	29-C Brgy. Hall	*	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01029	29-C	BHS	Brgy. 29-C Health Center	22.04	1	None	Brgy. MOOE	3
01030	30-C	Barangay Hall	30-C Brgy. Hall	118.66	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01030	30-C	BHS	Brgy.30-C Health Center	31.32	1	None	Brgy. MOOE	2
01030	30-C	day care center	St. Anne DCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01031	31-D	Barangay Hall	31-D Brgy. Hall	81.60	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
01031	31-D	BHS	Brgy. 31-D Health Center	38.71	1	None	Brgy. MOOE	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01031	31-D	day care center	Roxas 1 DCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01031	31-D	day care center	Roxas 2 DCC	120.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01031	31-D	Police Sub Station	31-D Police Sub Station	100.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
01032	32-D	Barangay Hall	32-D Brgy. Hall	40.17	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	3
01032	32-D	BHS	Reproductive Health and Wellness Center	485.48	1	None	Brgy. MOOE	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01032	32-D	day care center	Jacinto DCC	120.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01032	32-D	RHU	Brgy. 32-D Health Center	249.12	1	None	CHO MOOE	1
01033	33-D	Barangay Hall	33-D Brgy. Hall	77.39	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01033	33-D	day care center	Mabini DCC	20.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01034	34-D	Barangay Hall	34-D Brgy. Hall	*	3	The structure of the barangays halls has no insurance coverage	Since the barangay rented a privately owned facility the LGU is not accountable for retrofitting.	2
01035	35-D	Barangay Hall	35-D Brgy. Hall	89.74	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01035	35-D	BHS	Brgy. 35-D Health Center	11.00	3	None	Brgy. MOOE	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01035	35-D	day care center	Brgy 35 D PHDCC	60.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	3
01036	36-D	Barangay Hall	36-D Brgy. Hall	109.07	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01036	36-D	BHS	Brgy. 36-D Health Center	38.88	1	None	Brgy. MOOE	1
01036	36-D	day care center	Brgy 36 Day Care Center	60.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01037	37-D	Barangay Hall	37-D Brgy. Hall	128.70	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	3
01037	37-D	BHS	Brgy. 37-D Health Center	94.12	1	None	Brgy. MOOE	3
01037	37-D	day care center	Brgy. 37-D DCC?	60.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	3

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01038	38-D	Barangay Hall	38-D Brgy. Hall	100.00	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	3
01038	38-D	BHS	Brgy. 38-D Health Center	38.94	1	None	Brgy. MOOE	2
01038	38-D	day care center	Brgy 38 D PHDCC	200.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01038	38-D	Police Headquarters	Camp Captain Domingo E. Leonor	59629.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
01038	38-D	Police Station	Police Station 2 (San Pedro)	640.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01038	38-D	residential facility	Paginhawaan Drop-In Center	200.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
01038	38-D	residential facility	Quick Response Team for Children's Concern / Kean Gabriel	200.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
01039	39-D	Barangay Hall	39-D Brgy. Hall	93.98	2	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01039	39-D	BHS	Brgy. 39-D Health Center	50.80	3	None	Brgy. MOOE	2
01039	39-D	day care center	Brgy 39 D PHDCC	60.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
01039	39-D	day care center	Child-Minding Center	68.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
01040	40-D	Barangay Hall	40-D Brgy. Hall	43.61	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
01040	40-D	day care center	Brgy 40 D PHDCC	35.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
02001	AGDAO PROPER	Barangay Hall	Agdao Brgy. Hall	135.96	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02001	Agdao Proper	day care center	San Isidro DCC	65.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
02001	Agdao Proper	day care center	San Miguel DCC	40.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
02001	Agdao Proper	day care center	Sta. Cruz DCC	45.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
02001	Agdao Proper	Elementary School	Agdao ES	1007.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
02001	Agdao	RHU	Agdao Health Center	278.11	1	None	CHO MOOE	2
02002	W. Aquino	BHS	Vicente Duterte Health Center	345.27	1	None	Brgy. MOOE	1
02002	Wilfredo Aquino	BHS	Wilfredo Aquino Health Center	259.09	3	None	Brgy. MOOE	2
02002	Wilfredo Aquino	day care center	Waan PHDCC	80.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
02003	PACIANO BANGOY	Barangay Hall	P. Bangoy Brgy. Hall	165.23	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can be set and sourced through DRRM fund.	1
02003	Paciano Bangoy	BHS	Paciano Bangoy Health Center	153.09	3	None	Brgy. MOOE	3
02003	Paciano Bangoy	day care center	Bagong Buhay DCC	30.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
02003	Paciano Bangoy	day care center	Cory Village DCC	80.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
02003	Paciano Bangoy	day care center	RGA DCC	100.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
02003	Wilfredo Aquino	day care center	W. Aquino DCC I	72.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
02003	Wilfredo Aquino	Elementary School	J. Porras ES	5000.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	3
02003	Paciano Bangoy	Fire Station	Bangoy Fire Station	580.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
02003	Agdao Proper	Police Sub Station	Agdao Proper Police Sub Station	50.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
02004	R. Castillo	Barangay Hall	R. Castillo Brgy. Hall	142.15	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
02004	R. Castillo	BHS	R.Castillo Health Center	144.59	2	None	Brgy. MOOE	1
02004	Rafael Castillo	day care center	R. Castillo DCC	117.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
02005	CENTRO	Barangay Hall	Centro Brgy. Hall	144.23	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02005	Centro	BHS	New BHS	384.46	1	None	Brgy. MOOE	1
02005	Centro	BHS	North San Juan Health Center	119.62	2	None	Brgy. MOOE	2
02005	Centro	BHS	South San Juan Health Center	125.95	3	None	Brgy. MOOE	1
02005	Centro	day care center	New Fatima DCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
02005	Centro	day care center	North San Juan DCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
02005	Centro	day care center	San Miguel DCC	35.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
02005	Centro	day care center	Sta. Lucia DCC	150.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
02005	Centro	day care center	Sto. Niño Pelayo DCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
02005	Centro	Elementary School	San Juan ES	2100.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
02006	VICENTE DUTERTE	Barangay Hall	V. Duterte Brgy. Hall	400.24	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
02006	Vicente Duterte	BHS	Vetran Hills Health Center	51.20	1	None	Brgy. MOOE	2
02006	Vicente Duterte	day care center	Rotary Club DCC	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
02006	Vicente Duterte	Elementary School	Don Julian Rodriguez ES	1500.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
02007	LEON GARCIA SR.	Barangay Hall	Leon Garcia Brgy. Hall	94.41	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02007	Leon Garcia	BHS	Leon Garcia Health Center	68.74	1	None	Brgy. MOOE	1
02007	Leon Garcia	day care	St. Luke DCC	80.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
02007	Leon Garcia	day care center	GOTAMCO DCC	80.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
02007	Leon Garcia	daycare center	Baybay DCC	50.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
02007	Leon Garcia	Elementary School	Manuel M. Garcia ES	1807.00	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
02007	Leon Garcia	Police Sub Station	Leon Garcia Police Sub Station	25.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
02007	Leon Garcia	Secondary School	Leon Garcia Sr. NHS	1000.00	2.5	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
02007	Leon Garcia	TFD Headquarters	Task Force Davao (Task Group Agila)	9990.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
02008	LAPU - LAPU	Barangay Hall	Lapu-Lapu Brgy. Hall	202.50	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
02008	Lapu-Lapu	BHS	Lapu-Lapu Health Center	142.88	2	None	Brgy. MOOE	2
02008	Lapu-Lapu	day care	Seaside DCC	16.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
02008	Lapu-Lapu	day care center	IKP DCC	70.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
02008	Lapu-Lapu	day care center	Isla Noah DCC	150.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
02008	Lapu-Lapu	day care center	Lapu-Lapu DCC	38.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
02008	Lapu-Lapu	Elementary School	Lapu-lapu ES	4400.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
02009	Tomas Monteverde	Barangay Hall	T. Monteverde Brgy. Hall	89.50	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
02009	Tomas Monteverde	BHS	Times Beach Health Center	50.23	1	None	Brgy. MOOE	1
02009	Tomas Monteverde	day care center	KTM DCC	84.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
02009	Tomas Monteverde	Fire Station	Central Fire Station	1587.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
02009	Tomas Monteverde	Police Sub Station	Tomas Monteverde Police Sub Station	25.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
02010	SAN ANTONIO	Barangay Hall	San Antonio Brgy. Hall	121.56	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
02010	San Antonio	BHS	San Antonio Health Center	113.82	3	None	Brgy. MOOE	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
02010	San Antonio	day care center	Ibula DCC	30.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
02010	San Antonio	day care center	San Antonio (NHA) DCC	84.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
02010	San Antonio	day care center	Sto. Niño DCC	250.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
02011	Ubalde	Barangay Hall	Ubalde Brgy. Hall	152.27	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
02011	Ubalde	BHS	Ubalde Health Center	86.17	3	None	Brgy. MOOE	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
02011	V. HIZON	day care center	Ubalde DCC	42.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
02011	Ubalde	Elementary School	Ubalde Elem. School	540.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
02011	Ubalde Agdao	Police Sub Station	Ubalde Police Sub Station	25.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
02011	Ubalde	Secondary School	Dona Carmen Denia NHS	19550.00	2.5	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
04009	SASA	Barangay Hall	Sasa Brgy. Hall	359.48	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
04009	Sasa	day care center	Fatima DCC	128.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
04009	Sasa	day care center	Km 11 Sasa PHDCC	174.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
04009	Sasa	day care center	San Isidro DCC	70.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
04009	Sasa	daycare center	Bayview DCC	80.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
04009	Sasa	daycare center	ICSAMA DCC	80.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
04009	Sasa	Elementary School	F. Bangoy CES SPED Center	5000.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
04009	Sasa	Elementary School	Osmena ES	3851.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
04009	Sasa	Fire Station	Lanang Fire Station	500.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
04009	Sasa	Police Station	Police Station 4 (Sasa)	600.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
04009	Sasa	RHU	Sasa Health Center	250.00	1	None	CHO MOOE	1
04009	Sasa	Secondary School	F. Bangoy NHS	2849.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
04009	Sasa	Secondary School	F. Bangoy NHS - Annex	906.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
04009	Sasa	Teen Center	Sasa Health Center	499.40	1	None	CHO MOOE	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
04010	Tigatto	day care center	Jade Valley PHDCC	90.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
04010	Tigatto	day care center	Juliville PHDCC	60.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
04010	Tigatto	day care center	Uyanguren PHDCC I	256.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
04010	Tigatto	day care center	Uyanguren PHDCC II	50.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
04010	Tigatto	Police Sub Station	Tigatto Police Sub Station	80.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
04011	Waan	Barangay Hall	W. Aquino Brgy. Hall	101.81	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
04012	Aliongto	Police Outpost	Damosa Police Outpost	5.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
04013	V. HIZON	Barangay Hall	V. Hizon Brgy. Hall	293.67	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
04013	V, Hizon	BHS	Hizon Health Center	107.00	2	None	Brgy. MOOE	1
04013	V, Hizon	day care center	ALSONS DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
04013	V, Hizon	Elementary School	V. Hizon Elem. Sch.	10001.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
05001	BUNAWAN	Barangay Hall	Bunawan Brgy. Hall	199.52	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can be set and sourced through DRRM fund.	1
05001	Bunawan	day care center	Bunawan Aplaya DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
05001	Bunawan	day care center	Damiana DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
05001	Bunawan	day care center	DCPI 1 & 2 DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
05001	Bunawan	day care center	Rhema DCC	100.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
05001	Bucana	day care center	SIR Phase 2 DCC 2	70.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
05001	Bunawan	day care center	Tesorero DCC	75.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
05001	Bunawan	Elementary School	Bunawan Aplaya ES	3919.00	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
05001	Bunawan	Elementary School	Daniel M. Perez ES	19445.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
05001	Bunawan	Fire Station	Bunawan Fire Station	300.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
05001	Bunawan	Police Station	Police Station 6 (Bunawan)	300.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
05001	Bunawan	RHU	Bunawan Rural Health Unit	373.84	1	None	CHO MOOE	1
05003	Ilang	Elementary School	Sixto Babao ES	5021.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
05003	Ilang	Police Sub Station	Ilang Police Sub Station	80.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
05004	LASANG	Barangay Hall	Lasang Brgy. Hall	212.89	3	The structure of the barangays halls has no insurance coverage	LGU have no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
05004	Lasang	BHS	Lasang Health Center	193.93	1	None	Brgy. MOOE	1
05004	A. Navarro (Lasang)	day care center	Aledia DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
05004	A. Navarro (Lasang)	day care center	Sto. Niño DCC	100.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
05004	A. Navarro (Lasang)	day care center	Tambongon DCC	60.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
05004	Lasang	Elementary School	AL Navarro CES	5000.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
05004	Lasang	Elementary School	Alfredo A. Aledia Elementary School	9000.00	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
05004	Lasang	Elementary School	Dacudao Sr. ES	21984.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
05004	Lasang	Elementary School	Tambongon ES	1345.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
05004	Lasang	Secondary School	AL Navarro NHS	21984.00	2.5	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
05004	Lasang	TFD Detachment	Task Group Lawin	2256.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
05007	PANACAN	Barangay Hall	Panacan Brgy. Hall	167.45	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can be set and sourced through DRRM fund.	1
05007	Panacan	BHS	Panacan 13 Health Center	89.77	2	None	Brgy. MOOE	2
05007	Panacan	BHS	Panacan Proper Health Center	100.00	2	None	Brgy. MOOE	2
05007	Panacan	day care center	F.L. Apostol DCC	60.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
05007	Panacan	day care center	Panacan Trece DCC	100.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1
05007	Panacan	day care center	St. John DCC	110.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Available Local Government Resources	Adaptive Capacity Score
05007	Panacan	Elementary School	Armed Forces of the Philippines Logistics Command Elementary School	3662980.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
05007	Panacan	Fire Station	Panacan Fire Station	155.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be sourced through BFP XI with possible counterpart funding from the LGU.	1
05008	SAN ISIDRO	Barangay Hall	San Isidro Brgy. Hall	146.60	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can be set and sourced through DRRM fund.	2
05008	San Isidro	BHS	Kabacan Health Center II	51.20	1	None	CHO MOOE	1
05008	San Isidro	BHS	Lasang Health Center	193.93	2	None	Brgy. MOOE	2
05008	San Isidro (Licanan)	day care center	New Millenium DCC	90.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be sourced through the regional office.	2
05008	San Isidro	Elementary School	Pablo M. Piatos ES	16500.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09001	BAGO APLA-YA	Barangay Hall	Bago Aplaya Brgy. Hall	426.69	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
09001	Bago Aplaya	BHS	Bago Aplaya Health Center	51.20	1	None	Brgy. MOOE	2
09001	Bago Aplaya	BHS	Gulf View Health Center	51.20	1	None	Brgy. MOOE	1
09001	Bago Aplaya	day care center	Bago Sea side PHDCC	70.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
09001	Bago Aplaya	day care center	BALAI, PHDCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
09001	Bago Aplaya	day care center	BLISS PHDCC	120.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09001	Bago Aplaya	day care center	D'Garden PHDCC	150.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
09001	Bago Aplaya	day care center	Gulf View Subd. PHDCC	46.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
09001	Bago Aplaya	day care center	LORAMPCO PHDCC	42.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09001	Bago Aplaya	Elementary School	Dr. Jovito Francisco ES(Camilo Osias ES)	6000.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
09001	Bago Aplaya	Elementary School	Generoso ES	2037.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09001	Bago Aplaya	Elementary School	RC Quimpo ES	5198.00	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
09001	Bago Aplaya	Secondary School	Erico Nograles NHS-B	2456.00	2.5	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09002	Bago Gallera	day care center	Bago Gallera De Oro Home Based	70.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09003	Baliok Proper	BHS	Baliok Health Center	53.86	1	None	Brgy. MOOE	1
09003	Centro	day care center	South San Juan DCC	42.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	BUCANA	Barangay Hall	Bucana Brgy. Hall	98.66	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
09004	BUCANA	Barangay Hall	Bucana Brgy. Hall	169.80	3	The structure of the barangays halls has no insurance coverage	LGU have no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09004	Bucana	BHS	Bucana Health Center	51.20	2	None	Brgy. MOOE	1
09004	Bucana	BHS	Kabacan Health Center I	47.89	1	None	Brgy. MOOE	0
09004	Bucana	BHS	SIR Phase 2 Health Center	92.49	1	None	Brgy. MOOE	1
09004	Bucana	BHS	St. John Health Center	338.47	1	None	Brgy. MOOE	1
09004	Bucana	BHS	Talomo North Health Center RHU	41.08	1	None	CHO MOOE	1
09004	bucana	CDRRMO Headquarters	City Disaster Risk Reduction and Management Office	60.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
09004	Bucana	day care center	Bilusa PHDCC	75.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	Bucana	day care center	Kabacan Times Beach DCC	40.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	Kasilak PHDCC	100.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	P 32 Holy Trinity DCC	148.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	Pebsa PHDCC	120.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	Bucana	day care center	Prk 2 Bucana DCC	100.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	Prk 6 PHDCC	150.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
09004	Bucana	day care center	Prk 7 PHDCC	100.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	Rosas DCC	85.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	Bucana	day care center	S.I.R Phase 2 PHDCC 3	150.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
09004	Bucana	day care center	Sabroso Village PHDCC	100.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	day care center	Savina DCC	36.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
09004	Bucana	day care center	SIR Phase 2 DCC 1	30.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	Bucana	day care center	St. John PHDCC II	64.00	2	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	bucana	day care center	W. Aquino DCC 2	56.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	daycare center	Deca Homes Esperanza	60.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09004	Bucana	Elementary School	Cesario Villa Abrille ES	4788.00	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
09004	Bucana	Elementary School	Kabacan ES	450.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	Bucana	Elementary School	New Matina ES	23215.00	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
09004	Bucana	Elementary School	SIR ES	1000.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
09004	bucana	Fire Station	SIR Fire Station	155.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
09004	bucana	Police Outpost	Sandawa Mc Arthur Police Outpost	8.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	bucana	Police Sub Station	Sandawa Police Sub Station	15.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
09004	bucana	PSSCC Headquarters	Public Safety and Security Services	8138.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
09004	Bucana	residential facility	Sidlakan Women Crisis Center	200.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
09004	Bucana	Secondary School	Vicenta C. Nograles NHS	1200.00	2.5	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09004	Bucana	TC	Teen Center	51.20	1	None	CHO MOOE	2
09009	Ma-a	day care center	DIHO IV PHDCC	45.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09009	Ma-a	day care center	Don Julian PHDCC	36.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
09009	Ma-a	day care center	Maharlika PHDCC	36.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
09009	Ma-a	day care center	New Washington PHDCC	65.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09009	Ma-a	day care center	P34 South Villa PHDCC	56.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09009	Ma-a	day care center	Prk 38 NHA PHDCC	48.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09009	Ma-a	day care center	Purok 16 St. Michael DCC	56.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
09009	Maa	Elementary School	JL Escoda ES	2500.00	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings are done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09009	Ma-a	Jail Facility	Annex City Jail	750.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09009	Ma-a	Jail Facility	Female City Jail	400.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09009	Ma-a	Jail Facility	Main City Jail	198.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09011	MATINA APLAYA	Barangay Hall	Matina Aplaya Brgy. Hall	258.72	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09011	Matina Aplaya	BHS	Matina Aplaya Health Center	109.00	1	None	Brgy. MOOE	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09011	Matina Aplaya	day care center	Cristina Village PHDCC	250.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09011	Matina Aplaya	day care center	Dumalag PHDCC	380.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09011	Matina Aplaya	day care center	Dumalag PHDCC 3	147.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09011	Matina Aplaya	day care center	Malinawon DCC	250.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09011	Matina Aplaya	day care center	Seaside II PHDCC	200.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09011	Matina Aplaya	day care center	Shanghai PHDCC	90.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
09011	Matina Aplaya	day care center	Teacher's Village PHDCC	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09011	Matina Aplaya	Elementary School	Diego Silang ES	620.00	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
09011	Matina Aplaya	Elementary School	Matina Aplaya ES	8474.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09011	MATINA APLAYA	Police Outpost	Bogser Police Outpost	16.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09011	MATINA APLAYA	Police Sub Station	Matina Aplaya Police Sub Station	8.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09012	MATINA CROSSING	Barangay Hall	Matina Crossing Brgy. Hall	404.94	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09012	Matina Crossing	BHS	Gravahan Health Center	21.00	3	None	Brgy. MOOE	2
09012	Matina Crossing	BHS	Matina Crossing Health Center	410.69	1	None	Brgy. MOOE	1
09012	Matina Crossing	Elementary School	Bayanihan ES	13920.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09012	Matina Crossing	Elementary School	Don Manuel Gutierrez ES	10737.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
09012	Matina Crossing	Elementary School	Matina CES	2800.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
09012	Matina Crossing	Police Outpost	UM Matina Police Outpost	6.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09012	Matina Crossing	Police Station	Police Station 3 (Talomo)	200.00	1	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09012	Matina Crossing	Secondary School	Daniel R. Aguinaldo NHS	665881.00	2.5	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
09013	MATINA PANGI	Barangay Hall	Matina Pangi Brgy. Hall	107.73	3	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09013	Matina Pangi	BHS	Pangi Health Center	63.00	1	None	Brgy. MOOE	0
09013	Matina Pangi	day care center	Km.8 Matina Pangi PHDCC	75.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buidlings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09014	TALOMO	Barangay Hall	Talomo Brgy. Hall	334.32	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	1
09014	TALOMO	BHS	NHA Relocation Health Center	57.59	2	None	Brgy. MOOE	2
09014	TALOMO	BHS	Royal Valley Health Center	63.00	1	None	Brgy. MOOE	1
09014	TALOMO	BHS	Talomo Cemento Health Center	56.21	1	None	Brgy. MOOE	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09014	TALOMO	day care center	Christian Village, PHDCC	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
09014	TALOMO	day care center	Gabay Kabataan DCC	54.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09014	TALOMO	day care center	Kadayawan PHDCC	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09014	TALOMO	day care center	Kalambuan Home-based	50.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09014	TALOMO	day care center	Mushville PHDC	200.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09014	TALOMO	day care center	NHA Relocation PHDCC	120.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09014	TALOMO	day care center	San Juan PHDCC	50.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09014	TALOMO	day care center	Taal Central Park PHDCC	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09014	TALOMO	day care center	Talomo Barangay Hall 1	120.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09014	TALOMO	day care center	Talomo PHDCC	80.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
09014	TALOMO	Elementary School	A. Bonifacio Elem. School	15228.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
09014	TALOMO	Elementary School	A. Mabini ES	10500.00	2	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
09014	TALOMO	Elementary School	Dona Soledad Dolor ES	10500.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09014	TALOMO	Elementary School	Leon A. Garcia Sr. ES	2051.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
09014	TALOMO	Elementary School	Talomo CES	10000.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
09014	Talomo	Police Outpost	Talomo Police Outpost	12.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09014	Talomo	Police Sub Station	Ulas Police Sub Station	50.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
09014	TALOMO	Secondary School	Gov. V. Duterte NHS	4490.00	2.5	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09014	TALOMO	Secondary School	Mabini NHS	1200.00	2	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
09014	TALOMO	Secondary School	Talomo NHS	5892.00	2.5	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
10008	BINUGAO	Barangay Hall	Binugao Brgy Hall	303.10	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
10008	Binugao	day care center	Central Binugao HB	40.00	3	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
10008	Binugao	Elementary School	Binugao CES	26267.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
10008	Binugao	Secondary School	Binugao NHS	10000.00	2.5	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	2
10011	DALIAO	Barangay Hall	Daliao Brgy Hall	188.40	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
10011	Daliao	day care center	Daliao Beach DCC	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay Code	Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
10011	Daliao	day care center	Daliao Proper DCC	40.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
10011	Daliao	day care center	Doña Rosa I DCC	30.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
10011	Daliao	day care center	FESA DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
10011	Daliao	day care center	Lipadas DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
Daliao	day care center	Prudential DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
Daliao	day care center	Rovical DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
Daliao	day care center	San Jose DCC	180.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
Daliao	day care center	St. Jude DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
Daliao	Elementary School	Ramon F. Magsaysay ES	4437.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
Daliao	Elementary School	Sta. Clara ES	5036.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
Daliao	Elementary School	V.S. Bangoy ES	20273.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
LIZADA	Barangay Hall	Lizada Brgy Hall	168.33	1	The structure of the barangays halls has no insurance coverage	LGU has no available resources for retrofitting and relocation. However, funds can set and sourced through DRRM fund.	2
Lizada	day care center	`KASAMA DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
Lizada	day care center	Lizada Proper DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
Lizada	day care center	Maharlika DCC	180.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
Lizada	day care center	New Lizada DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
Lizada	day care center	NLPL DCC	200.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	1
Lizada	Elementary School	JV Ferriols ES	8000.00	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1
Sirawan	Elementary School	Sirawan Beach ES	40000.00	3	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
Lizada	Secondary School	JV Ferriols NHS	4689.00	2.5	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
Sirawan	day care center	NRDP	160.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
Sirawan	day care center	Sirawan Beach DCC	138.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2
Sirawan	Secondary School	Sirawan NHS(Toril NHS)	40867.00	2.5	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1

Table CP-12. Critical Point Facilities, Adaptive Capacity to Liquefaction, Davao City

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Insurance Coverage	Avail Local Government Resources	Adaptive Capacity Score
Toril	Police Outpost	Shell Toril Police Outpost	5.00	3	Exposed critical points are not covered by property damage insurance	LGU does not have available resources for retrofitting and relocation. However, funds can be set aside for such purposes but it may affect the implementation of other local development programs and projects. Funds for planned adaptation (i.e. retrofitting and relocation) can be coursed through BFP XI with possible counterpart funding from the LGU.	1
Toril Poblacion	BHS	Tomas Monteverde Health Center	87.71	1	None	Brgy. MOOE	2
Toril Poblacion	Elementary School	Don Juan Dela Cruz CES	14985.00	2.5	School buildings are not covered by property damage insurance.	Risk mitigation of school buildings is done through Brigada Eskwela, school MOOE, adopt - a - school program and repairs funded by local and National Government.	2
Lizada	day care center	Curvada DCC	150.00	1	All of the social welfare facilities are not covered by property damage insurance	Resources for mitigating measures of LGU-owned buildings have not been allocated. However funds can be set aside and sourced from the DRRM fund. Nationally-owned buildings are managed by the Department of Social Welfare and Development. Adaptation plans can be coursed through the regional office.	2

VULNERABILITY

In the assessment of the degree of vulnerability of critical point facilities in the onslaught of hazards, the determination of the vulnerability index will give the City Government of Davao the capability to determine the appropriate interventions to be infused in improving the conditions of the facilities. Moreover, the LGU will be provided with the data necessary for the identification of structures that are in urgent need of assistance.

FLOOD

The table shows the vulnerability categories of critical point facilities exposed to flood based on the vulnerability index. A qualitative equivalent indicates the vulnerability category which describes the state of every facility. There are only 3 facilities under the “high” category which can be interpreted as structures where expected impact of the flooding hazard is high and said structures have low capacity to take in said impacts. The structures are day care centers in Barangay Lapu-Lapu, Calinan, and 19-B.

Table CP– 13. Critical Points Facilities Vulnerability, Flood Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
1-A	Barangay Hall	1-A Brgy. Hall	87	3	2	6	Moderate
1-A	BHS	Brgy 1-A Health Center	54.40	2	2	4	Moderate
1-A	day care center	Brgy. 1-A Day Care Center	80	2	2	4	Moderate
1-A	Elementary School	Bolton ES	10500	2	2	4	Moderate
2-A	BHS	Brgy 1-A Health Center	54	2	2	4	Moderate
2-A	BHS	Brgy. 2-A Health Center	118.87	2	2	4	Moderate
2-A	day care center	Project Hope DCC, Brgy 2-A	16	1	1	1	Low
5-A	day care center	Bankerohan Project Hope DCC 1, Brgy 5-A	36	1	1	1	Low
5-A	day care center	Bankerohan Project Hope DCC 2, Brgy 5-A	36	1	1	1	Low
5-A	day care center	Bankerohan Project Hope DCC 3, Brgy 5-A	36	1	1	1	Low
5-A	day care center	Bankerohan Project Hope DCC 4, Brgy 5-A	36	1	1	1	Low
5-A	day care center	Bankerohan Project Hope DCC 5, Brgy 5-A	36	1	1	1	Low
5-A	Elementary School	Dalagdag ES	20000	2.5	2	5	Moderate
8-A	day care center	Mother Ignacia DCC, Brgy 8-A	45	2	2	4	Moderate
15-B	day care center	Brgy.15-B, DCC	50	2	2	4	Moderate
19-B	day care center	El Rio DCC, Brgy 19-B	100	3	3	9	High
19-B	day care center	Mineral Village DCC, Brgy 19-B	100	2	2	4	Moderate
19-B	Elementary School	San Juan ES	2100	1.5	2	3	Low
19-B	RHU	EL Rio Vista Health Center (RHU)	367.83	1	1	1	Low

Table CP– 13. Critical Points Facilities Vulnerability, Flood Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
22-C	BHS	Brgy 22-C Health Center	278.75	2	2	4	Moderate
23-C	BHS	New BHS / Isla Verde Purok 3B	51.85	1	1	1	Low
23-C	day care center	Purok 4 b Home-Based I	80	2	2	4	Moderate
23-C	day care center	Badjao Home Based	60	2	2	4	Moderate
23-C	Secondary School	Tugbok NHS	17000	2	2	4	Moderate
24-C	BHS	Brgy 24-C Health Center	84.96	1	1	1	Low
27-C	UHC	Sta. Ana Health Center	550	1	1	1	Low
37-D	day care center	Brgy. 37-D DCC	60	2	2	4	Moderate
37-D	Elementary School	Dominga ES	20000	2	2	4	Moderate
39-D	day care center	Brgy. 1-A Day Care Center	80	2	2	4	Moderate
39-D	day care center	Brgy 39 D PHDCC	60	1	1	1	Low
40-D	day care center	Brgy. 37-D DCC	60	2	2	4	Moderate
AGDAO PROPER	Elementary School	Bolton ES	10,500	2	2	4	Moderate
AGDAO PROPER	day care center	San Isidro DCC	65	1	1	1	Low
AGDAO PROPER	Elementary School	RC Quimpo ES	6000	1.5	2	3	Low
AGDAO PROPER	RHU	Agdao Health Center	535.93	1	1	1	Low
W. AQUINO	Barangay Hall	2-A Brgy. Hall	100	2	2	4	Moderate
W. AQUINO	BHS	Wilfredo Aquino Health Center	259.09	3	2	6	Moderate
W. AQUINO	day care center	W. Aquino 1	80	1	1	1	Low
P. BANGOY	day care center	RGA DCC	80	1	1	1	Low
P. BANGOY	day care center	Bagongbuhay DCC	80	1	1	1	Low
P. BANGOY	Police Sub Station	Paciano Bangoy Police Sub Station	25	3	2	6	Moderate
R. CASTILLO	BHS	Brgy. 2-A Health Center	119	2	2	4	Moderate
UBALDE	Police Sub Station	Ubalde Police Sub Station	25	3	2	6	Moderate
CENTRO	day care center	Project Hope DCC, Brgy 2-A	16	1	1	1	Low
CENTRO	BHS	South San Juan Health Center	125.95	3	2	6	Moderate
CENTRO	day care center	South San Juan DCC	117	1	1	1	Low
CENTRO	day care center	North San Juan DCC	100	1	1	1	Low
CENTRO	day care center	San Miguel Centro DCC	100	1	1	1	Low
CENTRO	day care center	New Fatima DCC	100	1	1	1	Low
CENTRO	Secondary School	F. Bangoy NHS - Annex	906	1.5	2	3	Low
V. DUTERTE	day care center	Rotary Club DCC	100	1	1	1	Low
L. GARCIA SR.	day care center	Bankerohan Project Hope DCC 1, Brgy 5-A	36	1	1	1	Low

Table CP– 13. Critical Points Facilities Vulnerability, Flood Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
L. GARCIA SR.	BHS	Leon Garcia Health Center	53.97	1	1	1	Low
L. GARCIA SR.	day care center	Baybay DCC	55	1	1	1	Low
L. GARCIA SR.	day care center	Gotamco DCC	80	1	1	1	Low
L. GARCIA SR.	Elementary School	Diego Silang ES	620	2	2	4	Moderate
L. GARCIA SR.	Police Sub Station	Leon Garcia Police Sub Station	25	3	2	6	Moderate
L. GARCIA SR.	Secondary School	Leon Garcia Sr. NHS	1000	2	2	4	Moderate
L. GARCIA SR.	TFD Headquarters	Task Force Davao (Task Group Agila)	9990	2	2	4	Moderate
LAPU-LAPU	day care center	Seaside DCC	200	3	3	9	High
LAPU-LAPU	day care center	IKP DCC	84	1	1	1	Low
LAPU-LAPU	Elementary School	AL Navarro CES	21984	2	2	4	Moderate
T. MONTEVERDE	day care center	Bankerohan Project Hope DCC 2, Brgy 5-A	36	1	1	1	Low
T. MONTEVERDE	BHS	Tomas Monteverde Health Center	87.71	1	1	1	Low
T. MONTEVERDE	day care center	KTM DCC	84	1	1	1	Low
T. MONTEVERDE	Police Sub Station	Tomas Monteverde Police Sub Station	25	3	2	6	Moderate
GUMALANG	day care center	Bankerohan Project Hope DCC 3, Brgy 5-A	36	1	1	1	Low
GUMALANG	BHS	Gumalang Health Center	141.13	3	2	6	Moderate
GUMALANG	day care center	Gumalang Proper DCC	150	1	1	1	Low
GUMALANG	Elementary School	Lamanan ES	18000	1.5	2	3	Low
BUHANGIN	day care center	Sandawa Phase 2 DCC	150	1	1	1	Low
MANDUG	day care center	DDF Village Mandug DCC	400	1	1	1	Low
PAMPANGA	day care center	Bankerohan Project Hope DCC 4, Brgy 5-A	36	1	1	1	Low
PAMPANGA	BHS	Pampanga Health Center	171.56	1	1	1	Low
PAMPANGA	BHS	New BHS	57.96	1	1	1	Low
SASA	day care center	St. Martin Day Care Center	120	1	1	1	Low
SASA	day care center	AHSAI Day Care Center	80	1	1	1	Low
SASA	day care center	Sunbeam Day Care Center	200	1	1	1	Low
SASA	Elementary School	Gumalang ES	2000	1.5	2	3	Low
SASA	Elementary School	V. Hizon Elem. Sch.	10001	1.5	2	3	Low
SASA	Police Station	Police Station 4 (Sasa)	600	2	2	4	Moderate
TIGATTO	day care center	Bankerohan Project Hope DCC 5, Brgy 5-A	36	1	1	1	Low
TIGATTO	day care center	Uyanguren PHDCC 1	150	1	1	1	Low

Table CP– 13. Critical Points Facilities Vulnerability, Flood Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
TIGATTO	day care center	Uyanguren PHDCC 2	150	1	1	1	Low
TIGATTO	day care center	Jade Valley DCC	150	1	1	1	Low
WAAN	day care center	Waan PHDCC	40	1	1	1	Low
A. ANGLIONGTO	Elementary School	Dona Pilar Marfori ES	2,600	2.5	2	5	Moderate
V. HIZON	day care center	Mother Ignacia DCC, Brgy 8-A	45	2	2	4	Low
V. HIZON	Elementary School	Siao ES	20000	1.5	2	3	Low
V. HIZON	BHS	Hizon Health Center	107	1	2	2	Low
BUNAWAN	day care center	DCPI 1&2 DCC	150	1	1	1	Low
BUNAWAN	Secondary School	Erico Nograles NHS-A	1816	2.5	2	5	Moderate
LASANG	day care center	Tambongon DCC	100	1	1	1	Low
LASANG	day care center	Alfredo A. Aledia Day Care Center	110	1	1	1	Low
LASANG	Elementary School	San Lorenzo ES	3108	1.5	2	3	Low
LASANG	Elementary School	Balengaeng ES	20000	2.5	2	5	Moderate
LASANG	Elementary School	Lower Tamugan ES	20000	2	2	4	Moderate
PANACAN	day care center	Brgy.15-B, DCC	50	2	2	4	Low
PANACAN	Elementary School	Biao Guianga ES	10000	2	2	4	Moderate
TIBUNGCO	day care center	Mineral Village DCC, Brgy 19-B	100	2	3	6	Moderate
BIAO JOAQUIN	day care center	El Rio DCC, Brgy 19-B	100	3	2	6	Moderate
BIAO JOAQUIN	BHS	Biao Joaquin Health Center	108.39	1	1	1	Low
BIAO JOAQUIN	day care center	Biao Joaquin PHDCC	200	1	1	1	Low
BIAO JOAQUIN	Elementary School	Lapu-lapu ES	4400	1.5	2	3	Low
CALINAN	Elementary School	Don Francisco S. Dizon Sr.	8,781	1.5	2	3	Low
CALINAN	BHS	Calinan Subcenter	342.65	3	2	6	Moderate
CALINAN	day care center	Sunflower PHDCC	180	1	1	1	Low
CALINAN	day care center	Waling-Waling PHDCC	150	1	1	1	Low
CALINAN	day care center	Isaguirre DCC	300	3	3	9	High
CALINAN	day care center	Narcon DCC	300	1	1	1	Low
CALINAN	day care center	Anthurium PHDCC	200	1	1	1	Low
CALINAN	day care center	Sampaguita PHDCC	160	2	2	4	Moderate
CALINAN	day care center	Balite / San Pedro PHDCC	100	2	2	4	Moderate
CALINAN	day care center	Peñafino St. PHDCC	60	2	2	4	Moderate
CALINAN	day care center	San Roque DCC (Bagobo Vill)	120	2	2	4	Moderate

Table CP– 13. Critical Points Facilities Vulnerability, Flood Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
CALINAN	Elementary School	SIR ES	23215	1.5	2	3	Low
CALINAN	Elementary School	Vinzons ES	30037	1.5	2	3	Low
CALINAN	Fire Station	Calinan Fire Station	1000	2	2	4	Moderate
CALINAN	Police Station	Police Station 10 (Calinan)	300	1	1	1	Low
CALINAN	Police Sub Station	Calinan Police Sub Station	30	1	1	1	Low
CALINAN	RHU	Calinan Pob. Rurak Health Unit	124.06	1	1	1	Low
CALINAN	Secondary School	Vicenta C. Nograles NHS	1200	1.5	2	3	Low
DACUDAO	RHU	EL Rio Vista Health Center (RHU)	51	1	1	1	Low
DACUDAO	BHS	Dacudao Health Center	136.67	1	1	1	Low
DALAGDAG	Elementary School	Calinan CES	18075	1.5	2	3	Low
DOMINGA	BHS	Brgy 22-C Health Center	279	2	2	4	Moderate
DOMINGA	Secondary School	Catalunan Pequeño NHS	27389	1.5	2	3	Low
INAYANGAN	Elementary School	Luman ES	1000	1.5	2	3	Low
LACSON	TFD Detachment	Task Group Falcon	500	2	2	4	Moderate
LAMANAN	Elementary School	Alfredo A. Aledia Elementary School	5000	1.5	2	3	Low
LAMANAN	Elementary School	Tambongon ES	9000	1.5	2	3	Low
RIVERSIDE	BHS	Brgy 23-C Health Center	52	1	1	1	Low
RIVERSIDE	BHS	Riverside Health Center	173.34	2	2	4	Moderate
RIVERSIDE	Elementary School	Saloy ES	19241	2	2	4	Moderate
SALOY	day care center	Purok 4 b Home-Based I	80	2	2	4	Moderate
SALOY	BHS	Saloy Health Center	109.81	1	1	1	Low
SALOY	Secondary School	F. Bangoy NHS	2849	1.5	2	3	Low
SIRIB	Elementary School	Tagakpan ES	67786	1.5	2	3	Low
SIRIB	Secondary School	Tagakpan NHS	33371	1.5	2	3	Low
SUBASTA	day care center	Badjao Home Based	60	2	2	4	Moderate
SUBASTA	BHS	Subasta Health Center	233.63	1	1	1	Low
TALOMO RIVER	Elementary School	Zonta Elem. School	2,681	2	2	4	Moderate
TALOMO RIVER	Elementary School	Armed Forces of the Philippines Logistics Command Elementary School	3662980	1.5	2	3	Low
TAMUGAN	BHS	Brgy 24-C Health Center	85	1	1	1	Low
TAMUGAN	BHS	Tamugan	75	1	1	1	Low

Table CP– 13. Critical Points Facilities Vulnerability, Flood Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
TAMUGAN	Elementary School	San Miguel Integrated School	19998	1.5	2	3	Low
TAMUGAN	Elementary School	JL Escoda ES	2500	1.5	2	3	Low
TAMUGAN	Elementary School	Sirib ES	64470	2	2	4	Moderate
TAMUGAN	Secondary School	Mintal Comprehensive NHS	4500	1.5	2	3	Low
TAMUGAN	Secondary School	Talomo NHS	1200	2	2	4	Moderate
COLOSAS	Elementary School	Batolusa ES	2275	1.5	2	3	Low
SUMIMAO	Elementary School	Leon A. Garcia Sr. ES	2051	1.5	2	3	Low
SUMIMAO	Secondary School	Governor V. Duterte NHS	4490	1.5	2	3	Low
BAGO APLAYA	UHC	Sta. Ana Health Center	30	1	1	1	Low
BAGO APLAYA	BHS	Bago Aplaya Health Center	51.2	1	1	1	Low
BAGO APLAYA	day care center	BLISS PHDCC	70	1	1	1	Low
BAGO APLAYA	day care center	Sea side PHDCC	42	1	1	1	Low
BAGO APLAYA	Elementary School	Riverside ES	16041	2	2	4	Moderate
BAGO GALLERA	BHS	Bago Gallera Health Center	51.2	1	1	1	Low
BAGO GALLERA	day care center	Bago Gallera De Oro Home Based	52	1	1	1	Low
BAGO GALLERA	day care center	San Lorenzo PHDCC	48	1	1	1	Low
BAGO GALLERA	Elementary School	Sirawan Beach ES	40000	1.5	2	3	Low
BALIOK	BHS	Purok 6, Ramonena	51.2	1	1	1	Low
BUCANA	Secondary School	Erico Nograles NHS-A	450	2	2	4	Moderate
BUCANA	BHS	St. John Health Center	92.49	1	1	1	Low
BUCANA	BHS	Kabacan Health Center I	51.2	1	1	1	Low
BUCANA	day care center	Prk 7 PHDCC	148	1	1	1	Low
BUCANA	day care center	Prk 6 PHDCC	120	1	1	1	Low
BUCANA	day care center	Bilusa PHDCC	100	1	1	1	Low
BUCANA	day care center	Kasilak PHDCC	150	1	1	1	Low
BUCANA	day care center	Rosas DCC	100	1	1	1	Low
BUCANA	day care center	St. John PHDCC II	85	2	2	4	Moderate
BUCANA	day care center	Prk 2 Bucana DCC	150	1	1	1	Low
BUCANA	day care center	Pebsa PHDCC	100	2	2	4	Moderate
BUCANA	day care center	Isla Suerte PHDCC 2/SIR Phase I PHDCC 1	150	1	1	1	Low
BUCANA	Elementary School	Don Juan Dela Cruz CES	14985	1.5	2	3	Low

Table CP– 13. Critical Points Facilities Vulnerability, Flood Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
BUCANA	Fire Station	SIR Fire Station	155	3	2	6	Moderate
BUCANA	Police Outpost	Sandawa Mc Arthur Police Outpost	8	2	2	4	Moderate
BUCANA	Secondary School	Sirib NHS	69574	1.5	2	3	Low
BUCANA	TC	Teen Center	51.2	1	1	1	Low
CATALUNAN GRANDE	day care center	Bagahai DCC	56	1	1	1	Low
CATALUNAN PEQUEÑO	Barangay Hall	39-D Brgy. Hall	94	2	2	4	Moderate
CATALUNAN PEQUEÑO	BHS	Catalunan Pequeño Health Center	133.19	3	2	6	Moderate
CATALUNAN PEQUEÑO	Elementary School	Bunawan Aplaya ES	3919	1.5	2	3	Low
MA-A	day care center	Don Julian PHDCC	56	1	1	1	Low
MA-A	day care center	Prk 38 NHA PHDCC	250	1	1	1	Low
MA-A	Jail Facility	Main City Jail	750	2	2	4	Moderate
MA-A	Jail Facility	Female City Jail	400	2	2	4	Moderate
MA-A	Jail Facility	Annex City Jail	198	2	2	4	Moderate
MA-A	Police Outpost	UM Matina Police Outpost	6	2	2	4	Moderate
MA-A	Police Sub Station	Maa Police Sub Station	20	2	2	4	Moderate
MA-A	Secondary School	Lamanan NHS	18967	2.5	2	5	Moderate
MATINA APLAYA	day care center	Brgy 39 D PHDCC	60	1	1	1	Low
MATINA APLAYA	BHS	Matina Aplaya Health Center(RHU)	109	1	1	1	Low
MATINA APLAYA	day care center	Dumalag PHDCC	200	1	1	1	Low
MATINA APLAYA	day care center	Malinawon DCC	40	1	1	1	Low
MATINA APLAYA	day care center	Shanghai PHDCC	75	1	1	1	Low
MATINA APLAYA	day care center	Dumalag PHDCC 3	40	1	1	1	Low
MATINA APLAYA	day care center	Teachers Village PHDCC	40	1	1	1	Low
MATINA APLAYA	Elementary School	Matina Aplaya ES	8474	1.5	2	3	Low
MATINA APLAYA	Police Outpost	Bogser Police Outpost	16	2	2	4	Moderate
MATINA APLAYA	Police Sub Station	Matina Aplaya Police Sub Station	8	2	2	4	Moderate
MATINA APLAYA	Secondary School	Calinan NHS	6000	2.5	2	5	Moderate
MATINA CROSSING	Barangay Hall	40-D Brgy. Hall	44	1	1	1	Low
MATINA CROSSING	BHS	Gravahan Health Center	21	3	2	6	Moderate
MATINA CROSSING	BHS	Matina Crossing Health Center	410.69	1	1	1	Low
MATINA CROSSING	Elementary School	Lt C Villafuerte ES	60882	1.5	2	3	Low

Table CP– 13. Critical Points Facilities Vulnerability, Flood Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
MATINA CROSSING	Elementary School	Matina CES	10737	2	2	4	Moderate
MATINA CROSSING	Elementary School	Mintal Central ES	3167	2.5	2	5	Moderate
MATINA CROSSING	Police Station	Police Station 3 (Talomo)	200	1	1	1	Low
MATINA PANGI	Barangay Hall	Agdao Brgy. Hall	136	1	1	1	Low
MATINA PANGI	BHS	Pangi Health Center	63	1	1	1	Low
MATINA PANGI	day care center	Km.8 Matina Pangi PHDCC	50	1	1	1	Low
MATINA PANGI	Secondary School	Daniel R. Aguinaldo NHS	665881	2	2	4	Moderate
TALOMO	day care center	San Isidro DCC	65	1	1	1	Low
TALOMO	BHS	NHA Relocation Health Center	57.59	1	1	1	Low
TALOMO	BHS	Royal Valley Health Center	63	1	1	1	Low
TALOMO	day care center	Kadayawan PHDCC	200	1	1	1	Low
TALOMO	day care center	San Juan PHDCC	120	1	1	1	Low
TALOMO	day care center	Christian Village, PHDCC	50	1	1	1	Low
TALOMO	day care center	Taal Central Park PHDCC	40	1	1	1	Low
TALOMO	day care center	NHA Relocation PHDCC	120	1	1	1	Low
TALOMO	day care center	Talomo PHDCC	80	1	1	1	Low
TALOMO	day care center	Talomo Barangay Hall 1	40	1	1	1	Low
TALOMO	day care center	Kalambuan Home-based	30	1	1	1	Low
TALOMO	Elementary School	Quirino ES	9000	1.5	2	3	Low
TALOMO	Elementary School	A. Barbarona ES	10000	2	2	4	Moderate
TALOMO	Elementary School	V.S. Bangoy ES	4437	2	2	4	Moderate
TALOMO	Elementary School	Popo ES	19900	2	2	4	Moderate
TALOMO	Elementary School	Manuel M. Garcia ES	1807	2	2	4	Low
TALOMO	Elementary School	Doña Soledad Dolor ES	15228	2	2	4	Moderate
TALOMO	Police Outpost	Talomo Police Outpost	12	2	2	4	Moderate
TALOMO	Police Sub Station	Ulas Police Sub Station	50	2	2	4	Moderate
TALOMO	RHU	Puan Health Center	437.58	1	1	1	Low
TALOMO	UHC	Talomo Urban Health Center	510	1	1	1	Low
BANGKAS HEIGHTS	Elementary School	Binugao CES	26267	1.5	2	3	Low
BINUGAO	Elementary School	Agdao ES	1,007	1.5	2	3	Low
BINUGAO	BHS	Binugao	198.71	1	1	1	Low

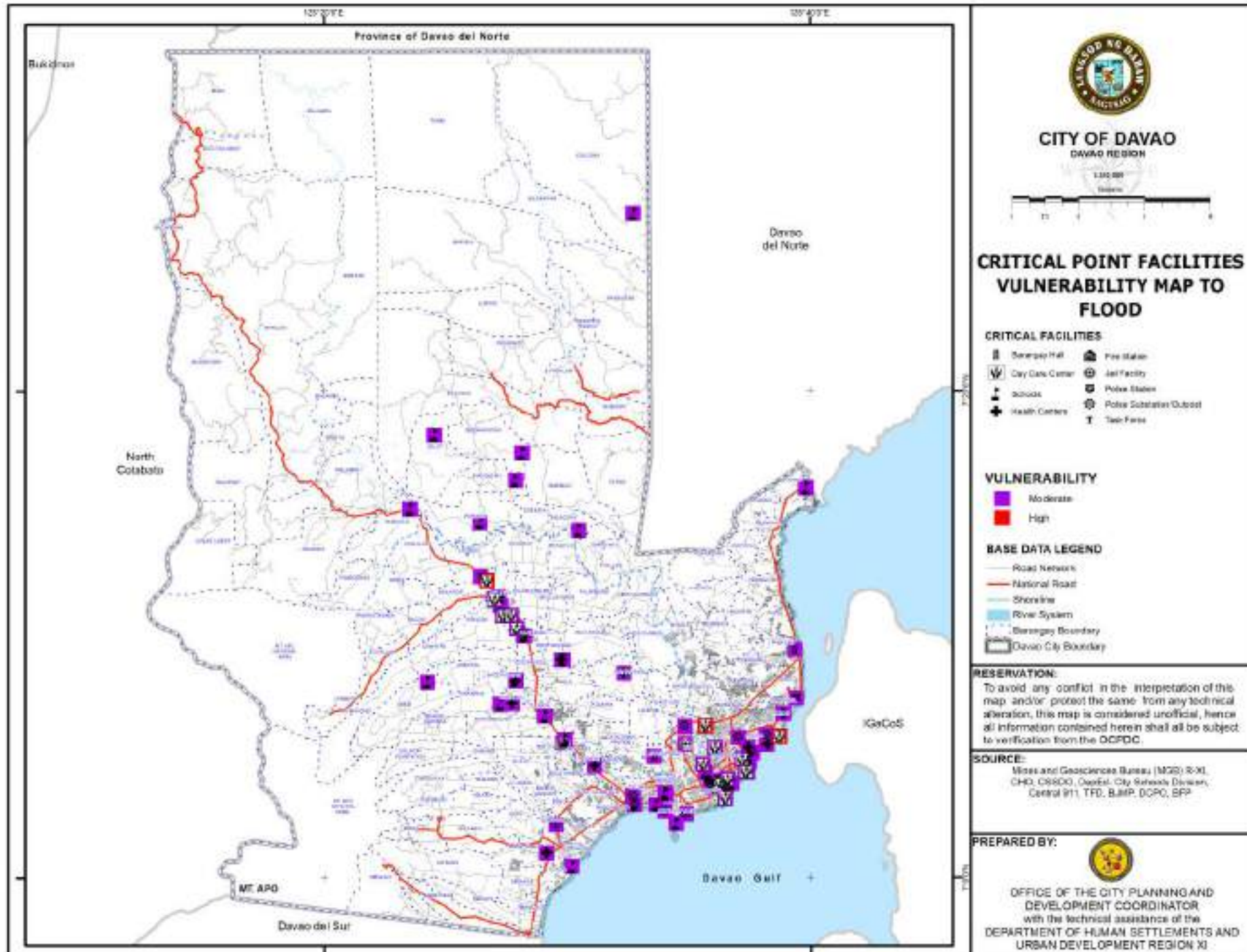
Table CP– 13. Critical Points Facilities Vulnerability, Flood Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
BINUGAO	Elementary School	Don Francisco S. Dizon Sr.	8781	1.5	2	3	Low
BINUGAO	Elementary School	Zonta Elem. School	2681	1.5	2	3	Low
DALIAO	Elementary School	Tagbaw ES	20000	1.5	2	3	Low
LUBOGAN	BHS	Lubogan	147.19	1	1	1	Low
LUBOGAN	Police Outpost	Lubogan Police Outpost	5	3	2	6	Moderate
LUBOGAN	Secondary School	Sirawan NHS(Toril NHS)	40867	1.5	2	3	Low
MARAPANGI	RHU	Agdao Health Center	550	1	1	1	Low
MARAPANGI	BHS	Marapangi	111.56	2	2	4	Moderate
MARAPANGI	Elementary School	Dona Pilar Marfori ES	2600	1.5	2	3	Low
SIRAWAN	Elementary School	Sumimao ES	18990	2	2	4	Low
SIRAWAN	Secondary School	Sumimao NHS	10000	1.5	2	3	Low
TORIL	Elementary School	Apalili ES	6000	2	2	4	Moderate
ANGALAN	Barangay Hall	W. Aquino Brgy. Hall	102	3	2	6	Moderate
ANGALAN	BHS	Angalan Health Center	117.05	2	2	4	Moderate
ANGALAN	Elementary School	Agdao ES	1007	1.5	2	3	Low
BALENGAENG	BHS	Wilfredo Aquino Health Center	259	3	2	6	Moderate
BALENGAENG	BHS	Balingaeng	63.08	2	2	4	Moderate
BALENGAENG	Elementary School	Biao Joaquin ES	12000	1.5	2	3	Low
BIAO GUIANGA	day care center	W. Aquino 1	80	1	1	1	Low
BIAO GUIANGA	BHS	Biao Guianga	72.74	2	2	4	Moderate
BIAO GUIANGA	Secondary School	Binugao NHS	10000	1.5	2	3	Low
MATINA BIAO	day care center	RGA DCC	80	1	1	1	Low
MATINA BIAO	BHS	Matina Biao	150.60	2	2	4	Moderate
MATINA BIAO	Elementary School	Matina Biao ES	88508	1.5	2	3	Low
LOS AMIGOS	day care center	Bagongbuhay DCC	80	1	1	1	Low
LOS AMIGOS	BHS	Los Amigos	112.13	1	1	1	Low
LOS AMIGOS	Elementary School	Los Amigos ES	15000	1.5	2	3	Low
LOS AMIGOS	Police Sub Station	Los Amigos Police Sub Station	30	1	1	1	Low
LOS AMIGOS	Secondary School	Los Amigos NHS	8240	1.5	2	3	Low
LOS AMIGOS	UHC	Los Amigos New Urban Health Center	367.23	1	1	1	Low
MANUEL GUIANGA	Elementary School	Tugbok Central ES SPED Center	44019	1.5	2	3	Low

Table CP– 13. Critical Points Facilities Vulnerability, Flood Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
MINTAL	Police Sub Station	Paciano Bangoy Police Sub Station	665,881	3	2	6	Moderate
MINTAL	BHS	Mintal	169.96	1	1	1	Low
MINTAL	Elementary School	New Matina ES	450	1.5	2	3	Low
MINTAL	Elementary School	Matina Pangi ES	5000	1.5	2	3	Low
MINTAL	Fire Station	Mintal Fire Station	450	2	2	4	Moderate
NEW VALENCIA	Elementary School	C.B. Bangoy ES	10000	1.5	2	3	Low
TACUNAN	Police Sub Station	Tacunan Police Sub Station	30	1	1	1	Low
TAGAKPAN	Barangay Hall	Ubalde Brgy. Hall	142	1	1	1	Low
TAGAKPAN	BHS	Tagakpan	114.39	1	2	2	Low
TAGAKPAN	Elementary School	A. Bonifacio Elem. School	10500	1.5	2	3	Low
TAGAKPAN	Elementary School	Talomo CES	10500	1.5	2	3	Low
TUGBOK	Police Sub Station	Ubalde Police Sub Station	1,200	3	2	6	Moderate
TUGBOK	Elementary School	Pagan Grande ES	2024	1.5	2	3	Low
TUGBOK	Police Station	Police Station 9 (Tugbok)	1000	1	1	1	Low
TUGBOK	RHU	Tugbok District Health Center	107.94	1	1	1	Low
MINTAL	Secondary School	Lower Tamugan NHS	20000	1.5	2	3	Low

Map 3.5 Critical Points Facilities Vulnerability Map to Flood, Davao City



STORM SURGE

There are 19 critical point facilities with high vulnerability to storm surge, which are barangay halls (3), day care centers (6), elementary schools (8), secondary schools (2). These structures have high vulnerability and low adaptive capacity in the occurrence of storm surge in their respective areas wherein the degree of impact is foreseen to be fatal to the structures.

Table CP– 14. Critical Points Facilities Vulnerability, Storm Surge Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
1-A	Barangay Hall	1-A Brgy. Hall	87.277	3	2	6	Moderate
1-A	BHS	Brgy 1-A Health Center	54.39716	2	2	4	Moderate
1-A	BHS	City Health Office	350	1	1	1	Low
1-A	day care center	Bolton DCC	80	2	1	2	Low
1-A	Elementary School	Bolton ES	10500	2.5	2	5	Moderate
1-A	Elementary School	Magallanes ES	18943	2.5	2	5	Moderate
2-A	Barangay Hall	2-A Brgy. Hall	100.004	1	1	1	Low
2-A	BHS	Brgy. 2-A Health Center	118.8741	2	2	4	Moderate
2-A	City Hall	City Hall (Main)	1951.641	1	1	1	Low
2-A	City Hall	Sangguniang Panlungsod	3249.636	1	1	1	Low
2-A	City Hall	City Hall Annex	391.441	1	1	1	Low
2-A	day care center	Magallanes DCC	16	2	1	2	Low
3-A	Barangay Hall	3-A Brgy. Hall	64.248	1	1	1	Low
4-A	Barangay Hall	4-A Brgy. Hall	96.764	1	1	1	Low
4-A	BHS	Tomas Claudio Health Center	481.02	1	1	1	Low
4-A	BHS	Teen Center	120	1	1	1	Low
4-A	day care center	Brgy 4-A DCC	36	1	1	1	Low
4-A	Elementary School	Kapt. T. Monteverde Sr. CES	18870	2.5	2	5	Moderate
5-A	Barangay Hall	5-A Brgy. Hall	172.16	1	1	1	Low
5-A	BHS	Bankerohan Health Center	68.04	1	1	1	Low
5-A	day care center	Brgy 5-A DCC I	36	1	1	1	Low
5-A	day care center	Brgy 5-A DCC II	36	1	1	1	Low
5-A	day care center	Brgy 5-A DCC III	36	1	1	1	Low
5-A	day care center	Brgy 5-A DCC IV	36	1	1	1	Low
5-A	day care center	Brgy 5-A DCC V	36	1	1	1	Low
7-A	Barangay Hall	7-A Brgy. Hall	149.037	1	1	1	Low

Table CP– 14. Critical Points Facilities Vulnerability, Storm Surge Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
9-A	Barangay Hall	9-A Brgy. Hall	115.481	1	1	1	Low
9-a	BHS	Brgy.9-A Health Center	51.2	1	1	1	Low
9-a	day care center	Camus DCC (Barangay 9-A)	60	1	1	1	Low
9-a	Elementary School	T. Palma Gil Elem. Sch.	6202	2.5	2	5	Moderate
10-A	Secondary School	Davao City NHS	6222	2.5	2	5	Moderate
11-B	Barangay Hall	11-B Brgy. Hall	58.64	3	2	6	Moderate
12-B	Barangay Hall	12-B Brgy. Hall	101.626	1	1	1	Low
12-B	BHS	Brgy. 12-B Health Center	41.83	2	2	4	Moderate
12-B	day care center	V. Mapa DCC	120	1	1	1	Low
12-B	Elementary School	JP Laurel ES	807	2.5	2	5	Moderate
13-B	Barangay Hall	13-B Barangay Hall	*	3	3	9	High
14-B	Barangay Hall	14-B Brgy. Hall	33.552	1	1	1	Low
14-B	BHS	Brgy.14-B Health Center	11.04	2	2	4	Moderate
15-B	Barangay Hall	15-B Brgy. Hall	100.004	2	2	4	Moderate
15-B	BHS	Brgy. 15-B Health Center	6.02	3	2	6	Moderate
15-B	day care center	Brgy 15 B PHDCC	50	3	1	3	Low
16-B	Barangay Hall	16-B Brgy. Hall	*	3	3	9	High
17-B	Barangay Hall	17-B Brgy. Hall	51.376	3	2	6	Moderate
18-B	Barangay Hall	18-B Brgy. Hall	122.104	1	1	1	Low
18-B	BHS	Brgy.18-B Health Center	39.44	3	2	6	Moderate
18-B	day care center	Brgy. 18 DCC Little Angels DCC	120	2	1	2	Low
20-B	Barangay Hall	20-B Brgy. Hall	141.156	1	1	1	Low
20-B	BHS	Brgy.20-B Health Center	46.02	1	1	1	Low
20-B	day care center	Regina Comp. DCC	60	1	1	1	Low
20-B	Elementary School	E. Quirino ES	3500	2.5	2	5	Moderate
20-B	Elementary School	San Roque CES	10500	2.5	2	5	Moderate
21-C	Barangay Hall	21-C Brgy. Hall	45.417	2	2	4	Moderate
21-C	BHS	Brgy.21-C Piapi Health Center	30	1	1	1	Low
21-C	day care center	Barangay 21-C PHDCC	150	2	1	2	Low
22-C	Barangay Hall	22-C Brgy. Hall	270.716	1	1	1	Low
22-C	BHS	Brgy 22-C Health Center	278.7451	2	1	2	Low
22-C	day care center	Brgy 22-C DCC	100	2	1	2	Low

Table CP– 14. Critical Points Facilities Vulnerability, Storm Surge Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
23-C	Barangay Hall	23-C Brgy. Hall	134.647	1	1	1	Low
23-C	BHS	Brgy 23-C Mini Forest Health Center	361.65	1	1	1	Low
23-C	BHS	New BHS / Isla Verde Purok 3B	51.85	1	1	1	Low
23-C	day care center	Mini-Forest DCC	60	2	1	2	Low
23-C	Day care center (homebased)	Purok 2 Home-Based	50	3	3	9	High
23-C	Day care center (homebased)	Purok 4 A Home-Based	50	3	3	9	High
23-C	Day care center (homebased)	Kabingaag Home Based	80	3	3	9	High
23-C	Day care center (homebased)	Purok 4 b Home-Based I	80	3	3	9	High
23-C	Day care center (homebased)	Purok 4 b Home-Based II	50	3	3	9	High
23-C	Day care center (homebased)	Badjao Home Based	60	3	3	9	High
23-C	Elementary School	Zonta Elem. School	2681	3	3	9	High
23-C	Police Station	Police Station 1 (Sta. Ana)	300	1	1	1	Low
23-c	Police Sub Station	23-C Police Sub Station	25	3	2	6	Moderate
24-C	Barangay Hall	24-C Brgy. Hall	84.686	1	1	1	Low
24-C	BHS	Brgy 24-C Health Center	84.95513	1	1	1	Low
25-C	Barangay Hall	25-C Brgy. Hall	25.847	1	1	1	Low
25-C	BHS	Brgy.25-C Health Center	12.92537	2	2	4	Moderate
26-C	Barangay Hall	26-C Brgy. Hall	116.913	1	1	1	Low
26-C	BHS	Brgy.26-C Health Center	141.3849	1	1	1	Low
26-C	day care center	Silangan PHDCC	85	2	1	2	Low
27-C	Barangay Hall	27-C Brgy. Hall	42.076	1	1	1	Low
27-C	BHS	Brgy.27-C Health Center	21.66	1	1	1	Low
27-C	BHS	Sta. Ana Health Center	550	1	1	1	Low
27-C	day care center	China Town DCC	100	2	1	2	Low
27-C	day care center	Brgy. 27-C PHDCC	40	2	1	2	Low
28-C	Barangay Hall	28-C Brgy. Hall	107.563	1	1	1	Low
28-C	BHS	Brgy.28-C Health Center	29.04	1	1	1	Low
28-C	day care center	Brgay 28 -C PHDCC	40	2	1	2	Low
28-C	day care center	Rizal Day Care Center	100	2	1	2	Low
28-C	Elementary School	Jose Rizal ES	9468	2.5	2	5	Moderate
28-C	Elementary School	M. Quezon ES	9000	2.5	2	5	Moderate
28-C	Elementary School	Manuel Roxas ES	3397	2.5	2	5	Moderate

Table CP– 14. Critical Points Facilities Vulnerability, Storm Surge Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
28-C	Elementary School	Sta. Ana CES	15013	2.5	2	5	Moderate
28-C	Secondary School	Sta. Ana NHS	14023	2.5	2	5	Moderate
28-C	Secondary School	Sta. Ana SHS-Annex	1224	2.5	2	5	Moderate
29-C	Barangay Hall	29-C Brgy. Hall	42.076	1	1	1	Low
29-C	BHS	Brgy. 29-C Health Center	22.04	1	1	1	Low
30-C	Barangay Hall	30-C Brgy. Hall	118.664	1	1	1	Low
30-C	BHS	Brgy.30-C Health Center	31.32	1	1	1	Low
30-C	day care center	St. Anne DCC	33	2	1	2	Low
31-D	Barangay Hall	31-D Brgy. Hall	81.604	1	1	1	Low
31-D	BHS	Brgy. 31-D Health Center	38.71	1	1	1	Low
31-D	day care center	Roxas 1 DCC	100	2	1	2	Low
31-D	day care center	Roxas 2 DCC	100	2	1	2	Low
31-D	Police Sub Station	31-D Police Sub Station	100	1	1	1	Low
32-D	Barangay Hall	32-D Brgy. Hall	40.166	3	2	6	Moderate
32-D	BHS	Brgy. 32-D Health Center	249.12	1	1	1	Low
32-D	BHS	Reproductive Health and Wellness Center	485.48	1	1	1	Low
32-D	day care center	Jacinto DCC	100	2	1	2	Low
33-D	Barangay Hall	33-D Brgy. Hall	77.389	1	1	1	Low
33-D	day care center	Mabini DCC	120	2	1	2	Low
34-D	Barangay Hall	34-D Brgy. Hall	*	3	3	9	High
35-D	Barangay Hall	35-D Brgy. Hall	89.74	1	1	1	Low
35-D	BHS	Brgy. 35-D Health Center	11	3	2	6	Moderate
35-D	day care center	Brgy 35 D PHDCC	120	2	1	2	Low
36-D	Barangay Hall	36-D Brgy. Hall	109.071	1	1	1	Low
36-D	BHS	Brgy. 36-D Health Center	38.88	1	1	1	Low
36-D	day care center	Brgy 36 Day Care Center	20	2	1	2	Low
37-D	Barangay Hall	37-D Brgy. Hall	128.702	1	1	1	Low
37-D	BHS	Brgy. 37-D Health Center	94.12	1	1	1	Low
37-D	day care center	Brgy. 37-D DCC?	60	2	1	2	Low
38-D	Barangay Hall	38-D Brgy. Hall	100.004	3	2	6	Moderate
38-D	BHS	Brgy. 38-D Health Center	38.94	1	1	1	Low
38-D	day care center	Brgy 38 D PHDCC	60	2	1	2	Low

Table CP– 14. Critical Points Facilities Vulnerability, Storm Surge Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
38-D	Police Headquarters	Camp Captain Domingo E. Leonor	59629	3	1	3	Low
38-D	residential facility	Paginhawaan Drop-In Center	300	1	1	1	Low
38-D	residential facility	Quick Response Team for Children's Concern / Kean Gabriel	300	1	1	1	Low
39-D	Barangay Hall	39-D Brgy. Hall	93.977	2	2	4	Moderate
39-D	BHS	Brgy. 39-D Health Center	50.79661	3	2	6	Moderate
39-D	day care center	Brgy 39 D PHDCC	60	1	1	1	Low
39-D	day care center	Child Minding Center	300	3	1	3	Low
40-D	Barangay Hall	40-D Brgy. Hall	43.605	1	1	1	Low
40-D	day care center	Brgy 40 D PHDCC	80	2	1	2	Low
AGDAO PROPER	Barangay Hall	Agdao Brgy. Hall	135.957	1	1	1	Low
W. Aquino	Barangay Hall	W. Aquino Brgy. Hall	101.806	3	2	6	Moderate
Wilfredo Aquino	BHS	Wilfredo Aquino Health Center	259.0923	3	2	6	Moderate
Agdao Proper	Elementary School	Agdao ES	1007	2.5	2	5	Moderate
Wilfredo Aquino	Elementary School	J. Porras ES	5000	2.5	2	5	Moderate
Agdao	Police Sub Station	Agdao Proper Police Sub Station	50	1	1	1	Low
Agdao	RHU	Agdao Health Center	250	1	1	1	Low
PACIANO BANGOY	Barangay Hall	P. Bangoy Brgy. Hall	165.226	2	2	4	Moderate
Paciano Bangoy	BHS	Paciano Bangoy Health Center	153.0926	3	2	6	Moderate
Paciano Bangoy	Fire Station	Bangoy Fire Station	580	3	2	6	Moderate
RAFAEL CASTILLO	Barangay Hall	R. Castillo Brgy. Hall	142.147	1	1	1	Low
R. Castillo	BHS	R.Castillo Health Center	144.5922	2	2	4	Moderate
CENTRO	Barangay Hall	Centro Brgy. Hall	144.227	1	1	1	Low
Centro Agdao	BHS	New BHS	119.6229	1	1	1	Low
Centro Agdao	BHS	South San Juan Health Center	125.9471	1	1	1	Low
Centro	Elementary School	San Juan ES	2100	2.5	2	5	Moderate
VICENTE DUTERTE	Barangay Hall	V. Duterte Brgy. Hall	400.243	1	1	1	Low
Vicente Duterte	BHS	Vicente Duterte Health Center	345.2684	1	1	1	Low
Vicente Duterte	Elementary School	Don Julian Rodriguez ES	1500	2	2	4	Moderate
LEON GARCIA SR.	Barangay Hall	Leon Garcia Brgy. Hall	94.406	1	1	1	Low
Leon Garcia	BHS	Leon Garcia Health Center	68.74091	1	1	1	Low
Leon Garcia	Elementary School	Manuel M. Garcia ES	1807	3	2	6	Moderate
Leon Garcia	Police Sub Station	Leon Garcia Police Sub Station	25	3	2	6	Moderate

Table CP– 14. Critical Points Facilities Vulnerability, Storm Surge Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Leon Garcia	Secondary School	Leon Garcia Sr. NHS	1000	3	3	9	High
Leon Garcia	TFD Headquarters	Task Force Davao (Task Group Agila)	9990	2	2	4	Moderate
LAPU - LAPU	Barangay Hall	Lapu-Lapu Brgy. Hall	202.495	1	1	1	Low
Lapu-Lapu	BHS	Lapu-Lapu Health Center	142.8783	2	2	4	Moderate
Lapu-Lapu	Elementary School	Lapu-lapu ES	4400	2.5	2	5	Moderate
TOMAS MONTEVERDE	Barangay Hall	T. Monteverde Brgy. Hall	89.501	1	1	1	Low
Tomas Monteverde	BHS	Tomas Monteverde Health Center	87.70864	2	2	4	Moderate
Tomas Monteverde	Fire Station	Central Fire Station	1587	3	2	6	Moderate
Tomas Monteverde	Police Sub Station	Tomas Monteverde Police Sub Station	25	3	2	6	Moderate
SAN ANTONIO	Barangay Hall	San Antonio Brgy. Hall	121.555	1	1	1	Low
San Antonio	BHS	San Antonio Health Center	113.8187	3	2	6	Moderate
UBALDE	Barangay Hall	Ubalde Brgy. Hall	152.268	1	1	1	Low
Ubalde	BHS	Ubalde Health Center	86.17315	3	2	6	Moderate
Ubalde	Elementary School	Ubalde Elem. School	540	2.5	2	5	Moderate
Ubalde Agdao	Police Sub Station	Ubalde Police Sub Station	25	3	2	6	Moderate
Buhangin	Police Station	Police Station 5 (Buhangin)	400	1	2	2	Low
SASA	Barangay Hall	Sasa Brgy. Hall	359.48	2	2	4	Moderate
Sasa	BHS	Km.11 Sasa Subcenter	418.0125	1	1	1	Low
Sasa	BHS	Landmark Sub Center	57.40918	2	2	4	Moderate
Sasa	BHS	Beach Club Sub Center	622.2674	2	2	4	Moderate
Sasa	Elementary School	F. Bangoy CES SPED Center	5000	2.5	2	5	Moderate
Sasa	Elementary School	Osmena ES	3851	2.5	3	7.5	High
Sasa	Fire Station	Lanang Fire Station	500	2	2	4	Moderate
Sasa	RHU	Sasa Health Center	250	1	1	1	Low
Sasa	Secondary School	F. Bangoy NHS	2849	2.5	2	5	Moderate
Sasa	Secondary School	F. Bangoy NHS - Annex	906	2.5	2	5	Moderate
Sasa	Teen Center	Sasa Health Center	499.4	1	1	1	Low
Aliongto	Police Outpost	Damosa Police Outpost	5	3	2	6	Moderate
V. HIZON	Barangay Hall	V. Hizon Brgy. Hall	293.665	1	1	1	Low
V. Hizon	BHS	Hizon Health Center	107	2	2	4	Moderate
V. Hizon	Elementary School	V. Hizon Elem. Sch.	10001	2.5	2	5	Moderate
BUNAWAN	Barangay Hall	Bunawan Brgy. Hall	199.517	1	1	1	Low

Table CP– 14. Critical Points Facilities Vulnerability, Storm Surge Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Bunawan (Pob.)	day care center	Rhema DCC	75	1	1	1	Low
Bunawan (Pob.)	day care center	DCPI 1 & 2 DCC	150	1	1	1	Low
Bunawan (Pob.)	day care center	Damiana DCC	100	1	1	1	Low
Bunawan (Pob.)	day care center	Tesorero DCC	60	1	1	1	Low
Bunawan (Pob.)	day care center	Bunawan Aplaya DCC	60	2	1	2	Low
Bunawan	Elementary School	Bunawan Aplaya ES	3919	3	3	9	High
Bunawan	Elementary School	Daniel M. Perez ES	19445	2.5	2	5	Moderate
Bunawan	Fire Station	Bunawan Fire Station	300	3	2	6	Moderate
Bunawan	Police Station	Police Station 6 (Bunawan)	300	1	1	1	Low
Bunawan	RHU	Bunawan Rural Health Unit	373.84	1	1	1	Low
ILANG	Barangay Hall	Ilang Brgy. Hall	214.066	1	1	1	Low
Ilang	day care center	Sto. Niño Homebase	80	1	1	1	Low
Ilang	day care center	Amparo Homes DCC	100	2	1	2	Low
Ilang	day care center	Ilang DCC Sampaguita Section	75	3	1	3	Low
Ilang	day care center	Ilang Riverview	75	3	1	3	Low
Ilang	Police Sub Station	Ilang Sub Police Station	80	1	1	1	Low
Lasang	BHS	Lasang Health Center	193.9275	1	1	1	Low
Lasang	Elementary School	AL Navarro CES	21984	2.5	2	5	Moderate
Lasang	Elementary School	Alfredo A. Aledia Elementary School	5000	3	2	6	Moderate
Lasang	Elementary School	Tambongon ES	9000	2.5	3	7.5	High
Lasang	Police Sub Station	Lasang Police Sub Station	100	1	1	1	Low
Lasang	Secondary School	AL Navarro NHS	21984	2.5	2	5	Moderate
Lasang	TFD Detachment	Task Group Lawin	2256	2	2	4	Moderate
PANACAN	Barangay Hall	Panacan Brgy. Hall	167.449	2	2	4	Moderate
Panacan	BHS	Panacan Proper Health Center	89.76952	1	1	1	Low
Panacan	BHS	Panacan 13 Health Center	100	2	2	4	Moderate
Panacan	day care center	St. John DCC	70	1	1	1	Low
Panacan	day care center	F.L. Apostol DCC	150	1	1	1	Low
Panacan	day care center	Panacan Trece DCC	120	2	1	2	Low
Panacan	day care center	Lopez HB	70	1	1	1	Low
Panacan	day care center	Benjamin Hills DCC	70	1	1	1	Low
Panacan	day care center	Doña Mercedes DCC	100	3	1	3	Low
Panacan	Fire Station	Panacan Fire Station	155	3	2	6	Moderate

Table CP– 14. Critical Points Facilities Vulnerability, Storm Surge Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
San Isidro	BHS	Kabacan Health Center II	51.2	1	1	1	Low
Tibungco	day care center	San Juan DCC	60	1	1	1	Low
Tibungco	day care center	Deles Perez DCC	100	1	1	1	Low
BAGO APLAYA	Barangay Hall	Bago Aplaya Brgy. Hall	426.687	1	1	1	Low
Bago Aplaya	Elementary School	Dr. Jovito Francisco ES(Camilo Osias ES)	2037	2.5	2	5	Moderate
Baliok Proper	BHS	Baliok Health Center	53.86312	1	1	1	Low
Bago Aplaya	Elementary School	Generoso ES	5198	2.5	2	5	Moderate
BUCANA	Barangay Hall	Bucana Brgy. Hall	98.661	1	1	1	Low
BUCANA	Barangay Hall	Bucana Brgy. Hall	169.8	3	2	6	Moderate
Bucana	BHS	Teen Center	51.2	1	1	1	Low
Bucana	BHS	Bucana Health Center	47.89	2	2	4	Moderate
Bucana	BHS	St. John Health Center	92.49	1	1	1	Low
Bucana	BHS	Talomo North Health Center RHU	338.47	1	1	1	Low
Bucana	BHS	SIR Phase 2 Health Center	41.08	1	1	1	Low
Bucana	BHS	Times Beach Health Center	50.22925	1	1	1	Low
Bucana	BHS	Kabacan Health Center I	51.2	1	1	1	Low
bucana	CDRRMO Headquarters	City Disaster Risk Reduction and Management Office	60	3	2	6	Moderate
Bucana	day care center	Prk 7 PHDCC	148	2	1	2	Low
Bucana	day care center	Prk 6 PHDCC	120	2	1	2	Low
Bucana	day care center	Bilusa PHDCC	100	2	1	2	Low
Bucana	day care center	Kasilak PHDCC	150	2	1	2	Low
Bucana	day care center	Rosas DCC	100	2	1	2	Low
Bucana	day care center	St. John PHDCC II	85	2	1	2	Low
Bucana	day care center	Prk 2 Bucana DCC	150	2	1	2	Low
Bucana	day care center	Pebsa PHDCC	100	2	1	2	Low
Bucana	day care center	Kabacan Times Beach DCC	100	2	1	2	Low
Bucana	day care center	P 32 Holy Trinity DCC	100	2	1	2	Low
Bucana	day care center	S.I.R Phase 2 PHDCC 3	100	2	1	2	Low
Bucana	day care center	Sabroso Village PHDCC	100	2	1	2	Low
Bucana	day care center	Kalubihan DCC	100	2	1	2	Low
Bucana	day care center	Savina DCC	100	2	1	2	Low
Bucana	day care center	SIR Phase 2 DCC 1	100	2	1	2	Low

Table CP– 14. Critical Points Facilities Vulnerability, Storm Surge Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Bucana	day care center	SIR Phase 2 DCC 2	100	2	1	2	Low
Bago Aplaya	Elementary School	RC Quimpo ES	6000	3	3	9	High
Bucana	Elementary School	Cesario Villa Abrille ES	4788	3	2	6	Moderate
Bucana	Elementary School	Kabacan ES	1000	2.5	2	5	Moderate
Bucana	Elementary School	SIR ES	23215	2.5	2	5	Moderate
bucana	Fire Station	SIR Fire Station	155	3	2	6	Moderate
bucana	Police Outpost	Sandawa Mc Arthur Police Outpost	8	2	2	4	Moderate
bucana	Police Sub Station	Sandawa Police Sub Station	15	2	2	4	Moderate
bucana	PSSCC Headquarters	Public Safety and Security Services	8138	3	2	6	Moderate
Bucana	Secondary School	Vicenta C. Nograles NHS	1200	2.5	2	5	Moderate
Bago Aplaya	Secondary School	Erico Nograles NHS-B	2456	2.5	2	5	Moderate
Bago Aplaya	BHS	Bago Aplaya Health Center	51.2	1	1	1	Low
Bago Aplaya	BHS	Gulf View Health Center	51.2	1	1	1	Low
Bago Aplaya	day care center	D'Garden PHDCC	46	2	1	2	Low
Bago Aplaya	day care center	Gulf View Subd. PHDCC	42	2	1	2	Low
Bago Aplaya	day care center	BLISS PHDCC	70	2	1	2	Low
MATINA APLAYA	Barangay Hall	Matina Aplaya Brgy. Hall	258.723	1	1	1	Low
Matina Aplaya	BHS	Matina Aplaya Health Center	109	1	1	1	Low
Bago Aplaya	day care center	Sea side PHDCC	42	2	1	2	Low
Matina Aplaya	day care center	Dumalag PHDCC	200	3	1	3	Low
Matina Aplaya	day care center	Cristina Village PHDCC	90	2	1	2	Low
Matina Aplaya	day care center	Malinawon DCC	40	1	1	1	Low
Matina Aplaya	day care center	Shanghai PHDCC	75	1	1	1	Low
Matina Aplaya	day care center	Dumalag PHDCC 3	40	1	1	1	Low
Matina Aplaya	day care center	Seaside II PHDCC	54	2	1	2	Low
Matina Aplaya	day care center	Teacher's Village PHDCC	40	1	1	1	Low
Matina Aplaya	Elementary School	Diego Silang ES	620	3	3	9	High
Matina Aplaya	Elementary School	Matina Aplaya ES	8474	2.5	2	5	Moderate
Matina Aplaya	Police Outpost	Bogser Police Outpost	16	2	2	4	Moderate
MATINA APLAYA	Police Sub Station	Matina Aplaya Police Sub Station	8	2	2	4	Moderate
Matina Crossing	BHS	Gravahan Health Center	21	2	2	4	Moderate
Bago Aplaya	day care center	BALAI, PHDCC	75	2	1	2	Low

Table CP– 14. Critical Points Facilities Vulnerability, Storm Surge Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Matina Crossing	Elementary School	Don Manuel Gutierrez ES	13920	2.5	2	5	Moderate
Matina Crossing	Elementary School	New Matina ES	450	3	3	9	High
Matina Crossing	Fire Station	Talomo Fire Station	300	3	2	6	Moderate
Matina Crossing	Police Outpost	UM Matina Police Outpost	6	2	2	4	Moderate
TALOMO	Barangay Hall	Talomo Brgy. Hall	334.318	1	1	1	Low
Talomo Proper	BHS	NHA Relocation Health Center	57.59	1	1	1	Low
Talomo Proper	BHS	Talomo Cemento Health Center	56.21	1	1	1	Low
Talomo (Pob.)	day care center	Kadayawan PHDCC	200	1	1	1	Low
Talomo (Pob.)	day care center	San Juan PHDCC	120	1	1	1	Low
Talomo (Pob.)	day care center	Christian Village, PHDCC	50	1	1	1	Low
Talomo (Pob.)	day care center	Taal Central Park PHDCC	40	2	1	2	Low
Talomo (Pob.)	day care center	NHA Relocation PHDCC	120	2	1	2	Low
Talomo Poblacion	Elementary School	Leon A. Garcia Sr. ES	2051	2.5	2	5	Moderate
Talomo Proper	Elementary School	A. Bonifacio Elem. School	10500	2.5	2	5	Moderate
Talomo Proper	Elementary School	Doña Soledad Dolor ES	15228	2.5	2	5	Moderate
Talomo Proper	Elementary School	Talomo CES	10500	2.5	2	5	Moderate
Talomo	Police Outpost	Talomo Police Outpost	12	2	2	4	Moderate
Talomo	Police Sub Station	Ulas Police Sub Station	50	2	2	4	Moderate
Talomo Proper	Secondary School	Gov. V. Duterte NHS	4490	2.5	2	5	Moderate
Talomo Proper	Secondary School	Talomo NHS	1200	2.5	2	5	Moderate
DALIAO	Barangay Hall	Daliao Brgy Hall	188.398	1	1	1	Low
Daliao	BHS	Daliao Health Center	111.3826	2	2	4	Moderate
Daliao	Elementary School	V.S. Bangoy ES	4437	2.5	2	5	Moderate
Lizada	Elementary School	JV Ferriols ES	8000	2.5	2	5	Moderate
Lizada	Secondary School	JV Ferriols NHS	4689	2.5	2	5	Moderate
Sirawan	Elementary School	Sirawan Beach ES	40000	3	3	9	High
Sirawan	Secondary School	Sirawan NHS(Toril NHS)	40867	3	3	9	High

LANDSLIDE

Under the “High” category are 21 critical point facilities wherein 20 are single-storey day care centers and one barangay hall. Mostly are located in the southern part of the city, particularly, Marilog, Tamugan, Saloy, Megkawayan, Salapawan, Lamanan, and Tapak in the north.

Table CP– 15. Critical Points Facilities Vulnerability, Landslide Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
TAMBOBONG	Barangay Hall	Tambobong Brgy. Hall	184.667	1	1	1	Low
ACACIA	Barangay Hall	Acacia Brgy. Hall	111.403	1	1	1	Low
GATUNGAN	Barangay Hall	Gatungan Brgy. Hall	198.003	2	2	4	Moderate
MUDIANG	Barangay Hall	Mudiang Brgy. Hall	143.224	1	1	1	Low
INAYANGAN	Barangay Hall	Inayangan Brgy. Hall	167.876	1	1	1	Low
LAMPIANAO	Barangay Hall	Lampianao Brgy. Hall	56.607	1	1	1	Low
MEGKAWAYAN	Barangay Hall	Megkawayan Brgy. Hall	183.715	1	1	1	Low
BAGANIHAN	Barangay Hall	Baganihan Brgy. Hall	200.835	1	1	1	Low
BANTOL	Barangay Hall	Bantol Brgy. Hall	193.175	1	1	1	Low
BUDA	Barangay Hall	Buda Brgy. Hall	196.615	1	1	1	Low
DALAG LUMOT	Barangay Hall	Dalag Lumot Brgy. Hall	198.44	1	1	1	Low
DATU SALUMAY	Barangay Hall	Datu Salumay Brgy. Hall	201.775	1	1	1	Low
MAGSAYSAY	Barangay Hall	Magsaysay Brgy. Hall	154.502	1	1	1	Low
MALAMBA	Barangay Hall	Malamba Brgy. Hall	224.093	1	1	1	Low
MARILOG	Barangay Hall	Marilog Brgy. Hall	81.587	1	1	1	Low
SALAYSAY	Barangay Hall	Salaysay Brgy. Hall	180.932	1	1	1	Low
COLOSAS	Barangay Hall	Colosas Brgy. Hall	100.007	1	1	1	Low
FATIMA	Barangay Hall	Fatima Brgy Hall	100.762	2	2	4	Moderate
LUMIAD	Barangay Hall	Lumiad Brgy Hall	100.008	3	2	6	Moderate
MABUHAY	Barangay Hall	MABUHAY Barangay Hall	153.091	1	1	1	Low
MALABOG	Barangay Hall	Malabog Brgy. Hall	101.466	1	1	1	Low
MAPULA	Barangay Hall	Mapula Brgy Hall	100.009	1	1	1	Low
PANDAITAN	Barangay Hall	Pandaitan Brgy Hall	100.006	3	2	6	Moderate
PAÑALUM	Barangay Hall	Panalum Brgy Hall	198.564	1	1	1	Low
PARADISE EMBAC	Barangay Hall	Paradise Embac Brgy Hall	100.007	1	1	1	Low

Table CP– 15. Critical Points Facilities Vulnerability, Landslide Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
TAMBOBONG	Barangay Hall	Tambobong Brgy. Hall	184.667	1	1	1	Low
ACACIA	Barangay Hall	Acacia Brgy. Hall	111.403	1	1	1	Low
GATUNGAN	Barangay Hall	Gatungan Brgy. Hall	198.003	2	2	4	Moderate
MUDIANG	Barangay Hall	Mudiang Brgy. Hall	143.224	1	1	1	Low
INAYANGAN	Barangay Hall	Inayangan Brgy. Hall	167.876	1	1	1	Low
LAMPIANOAO	Barangay Hall	Lampianao Brgy. Hall	56.607	1	1	1	Low
MEGKAWAYAN	Barangay Hall	Megkawayan Brgy. Hall	183.715	1	1	1	Low
BAGANIHAN	Barangay Hall	Baganihan Brgy. Hall	200.835	1	1	1	Low
BANTOL	Barangay Hall	Bantol Brgy. Hall	193.175	1	1	1	Low
BUDA	Barangay Hall	Buda Brgy. Hall	196.615	1	1	1	Low
DALAG LUMOT	Barangay Hall	Dalag Lumot Brgy. Hall	198.44	1	1	1	Low
DATU SALUMAY	Barangay Hall	Datu Salumay Brgy. Hall	201.775	1	1	1	Low
MAGSAYSAY	Barangay Hall	Magsaysay Brgy. Hall	154.502	1	1	1	Low
MALAMBA	Barangay Hall	Malamba Brgy. Hall	224.093	1	1	1	Low
MARILOG	Barangay Hall	Marilog Brgy. Hall	81.587	1	1	1	Low
SALAYSAY	Barangay Hall	Salaysay Brgy. Hall	180.932	1	1	1	Low
COLOSAS	Barangay Hall	Colosas Brgy. Hall	100.007	1	1	1	Low
FATIMA	Barangay Hall	Fatima Brgy Hall	100.762	2	2	4	Moderate
LUMIAD	Barangay Hall	Lumiad Brgy Hall	100.008	3	2	6	Moderate
MABUHAY	Barangay Hall	MABUHAY Barangay Hall	153.091	1	1	1	Low
MALABOG	Barangay Hall	Malabog Brgy. Hall	101.466	1	1	1	Low
MAPULA	Barangay Hall	Mapula Brgy Hall	100.009	1	1	1	Low
PANDAITAN	Barangay Hall	Pandaitan Brgy Hall	100.006	3	2	6	Moderate
PAÑALUM	Barangay Hall	Panalum Brgy Hall	198.564	1	1	1	Low
PARADISE EMBAC	Barangay Hall	Paradise Embac Brgy Hall	100.007	1	1	1	Low
SALAPAWAN	Barangay Hall	Salapawan Brgy Hall	*	3	3	9	High
SUMIMAO	Barangay Hall	Sumimao Brgy Hall	86.231	1	1	1	Low
LANGUB	Barangay Hall	Langub Brgy. Hall	53.321	1	1	1	Low
ATAN-AWE	Barangay Hall	Atan-awe Brgy. Hall	154.914	1	1	1	Low
CAMANSI	Barangay Hall	Camansi Brgy. Hall	163.766	1	1	1	Low

Table CP– 15. Critical Points Facilities Vulnerability, Landslide Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
DALIAON PLANTATION	Barangay Hall	Daliaon Plantation Brgy Hall	171.908	1	1	1	Low
EDEN	Barangay Hall	Eden Brgy. Hall	72.393	1	1	1	Low
SIBULAN	Barangay Hall	Sibulan Brgy. Hall	166.851	1	1	1	Low
TIBULOY	Barangay Hall	Tibuloy Brgy. Hall	176.301	1	1	1	Low
NEW CARMEN	Barangay Hall	New Carmen Brgy/. Hall	188.271	1	1	1	Low
TALANDANG	Barangay Hall	Pangyan Brgy Hall	182.292	1	1	1	Low
Acacia	Elementary School	Acacia ES	20,000	2	2	4	Moderate
Acacia	Secondary School	Acacia NHS	1248	2.5	2	5	Moderate
Malabog	Elementary School	Alon ES	396	2.5	2	5	Moderate
Atan-Awe	Elementary School	Atan-Owe ES	10000	2.5	2	5	Moderate
Sumimao	Elementary School	Bacsarpa ES	4000	2.5	2	5	Moderate
Salaysay	Elementary School	Balah Licosan ES	10000	3	2	6	Moderate
Talandang	Elementary School	Balderas ES	7590	2.5	2	5	Moderate
Marilog	Elementary School	Balite ES	70000	2.5	2	5	Moderate
Malabog	Elementary School	Balugo ES	25000	2	2	4	Moderate
Cabantian	Elementary School	Banganga ES	4,195	2.5	2	5	Moderate
Bantol	Elementary School	Bantol ES	19000	2.5	2	5	Moderate
Daliaon Plantation	Elementary School	Baracayo Integrated School	11156	2.5	2	5	Moderate
Bato	Elementary School	Bato ES	10000	2.5	2	5	Moderate
Baganihan	Elementary	Bayanihan ES	3000	2.5	2	5	Moderate
Malabog	Elementary School	Betan ES	40000	2.5	2	5	Moderate
Fatima	Elementary School	Binowang ES	27048	2.5	2	5	Moderate
Fatima	Secondary School	Binowang NHS	15000	2.5	2	5	Moderate
Buda	Secondary	Buda NHS	18000	2.5	2	5	Moderate
Tibungco	Elementary School	Buhisan ES	20831	2.5	2	5	Moderate
Tapak	Elementary School	Butay ES	60000	2.5	2	5	Moderate
Suawan	Elementary School	Cabagbahangan ES	40000	2.5	2	5	Moderate
Dominga	Elementary School	Cabagtukan ES	20000	2.5	2	5	Moderate
Cabantian	Elementary School	Cabantian ES	2,000	2.5	2	5	Moderate
Malabog	Elementary School	Cabonbon ES	14400	2.5	2	5	Moderate
Malabog	Secondary	Cabonbon NHS	235	2.5	2	5	Moderate

Table CP– 15. Critical Points Facilities Vulnerability, Landslide Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
New Carmen	Elementary School	Carmen ES	15085	2.5	2	5	Moderate
Matina Crossing	Elementary School	Ciriaco Mariano ES	1000	2.5	2	5	Moderate
Colosas	Elementary School	Colosas ES	20000	2.5	2	5	Moderate
Buda	Elementary	Columbus ES	1000	2.5	2	5	Moderate
Mapula	Elementary School	Damilag PS	4000	2.5	2	5	Moderate
Dalag Lumot	Elementary School	Datu Duyan ES	2000	2.5	2	5	Moderate
Colosas	Elementary School	Datu Libayao ES	36000	2.5	2	5	Moderate
Marilog Proper	Elementary School	Datu Lompipi ES	35703	3	2	6	Moderate
Salapawan	Elementary School	Datu Manlangan ES	20000	2.5	2	5	Moderate
Datu Salumay	Elementary	Datu Salumay ES	55000	2.5	2	5	Moderate
Malabog	Elementary School	Don Mariano Marcos ES	1750	3	2	6	Moderate
Gumitan	Elementary School	Dumalogdog ES	20000	3	2	6	Moderate
Eden	Secondary School	Elias Lopez Memorial NHS	10000	3	2	6	Moderate
Malamba	Secondary School	G Astila SNCM HS	10000	2.5	2	5	Moderate
Colosas	Elementary School	Galacia ES	36000	2.5	2	5	Moderate
Mandug	Elementary School	Galon ES	2865	2.5	2	5	Moderate
Gatungan	Elementary School	Gatungan ES	6623	2.5	2	5	Moderate
Matina Crossing	Elementary School	GSIS Heights ES	20000	2.5	2	5	Moderate
Inayangan	Elementary School	Inayangan ES	11880	2.5	2	5	Moderate
Inayangan	Secondary School	Inayangan NHS	11200	2.5	2	5	Moderate
Tamugan	Elementary School	Kanacan ES	2467	2.5	2	5	Moderate
Marilog Proper	Elementary School	Kibalang ES	40012	3	2	6	Moderate
Malamba	Elementary School	Kibangay ES	30316	2.5	2	5	Moderate
Tambobong	Elementary School	Kidali ES	500	2.5	2	5	Moderate
Tapak	Elementary School	Labo ES	60000	2.5	2	5	Moderate
Tapak	Secondary School	Labo NHS	410	2.5	2	5	Moderate
Marilog Proper	Elementary	Ladian ES	11600	2.5	2	5	Moderate
Marilog Proper	Elementary School	Laho ES	1500	2.5	2	5	Moderate
Lampianao	Elementary School	Lampianao ES	20000	2.5	2	5	Moderate
Marilog Proper	Elementary School	Lapinig ES	326	2.5	2	5	Moderate
Pandaitan	Secondary School	Lorenzo Latawan NHS	10000	2.5	2	5	Moderate
Dalag Lumot	Elementary School	Lumatag ES	10000	3	2	6	Moderate
Lumiad	Elementary School	Lumiad ES	50000	3	2	6	Moderate

Table CP– 15. Critical Points Facilities Vulnerability, Landslide Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Marilog Proper	Elementary School	Lumondao ES	5000	2.5	2	5	Moderate
Malabog	Elementary School	M. Guloman IS(Binaton ES)	30000	2.5	2	5	Moderate
Marilog Proper	Elementary School	Mabuhay ES	40000	2.5	2	5	Moderate
Magsaysay	Elementary School	Magsaysay ES	43056	2.5	2	5	Moderate
Malabog	Elementary School	Malabog CES	24740	2.5	2	5	Moderate
Malabog	Secondary School	Malabog NHS	10000	2.5	2	5	Moderate
Malabog	Secondary School	Malabog NHS-Annex	292	2.5	2	5	Moderate
Bantol	Elementary School	Malakeba ES	20000	2.5	2	5	Moderate
Malamba	Elementary School	Malamba ES	12000	2.5	2	5	Moderate
Malabog	Elementary School	Malamboon Integrated School	20850	2.5	2	5	Moderate
Marilog Proper	Elementary School	Malikongkong ES	40000	2.5	2	5	Moderate
Marilog Proper	Elementary School	Maluan ES	2500	2.5	2	5	Moderate
Salaysay	Elementary School	Manaong ES	5000	2.5	2	5	Moderate
Tapak	Elementary	Mangani ES	50000	2.5	2	5	Moderate
Tambobong	Elementary School	Mangas-as ES	20000	2.5	2	5	Moderate
Malabog	Elementary School	Mangmang & Canoy IS(Crossing Malabog ES)	3000	2.5	2	5	Moderate
Mapula	Elementary School	Mapula ES	20000	2.5	2	5	Moderate
Marilog Proper	Secondary School	Marahan NHS	25890	2.5	2	5	Moderate
Marilog Proper	Elementary School	Marahan West ES	60000	2.5	2	5	Moderate
Marilog Proper	Elementary School	Marilog CES	40000	2.5	2	5	Moderate
Datu Salumay	Secondary	Marilog HS of Agr'l	55000	2.5	2	5	Moderate
Marilog Proper	Secondary School	Marilog NHS	21300	2.5	2	5	Moderate
Salaysay	Elementary School	Masawang ES	12500	2.5	2	5	Moderate
Suawan	Elementary School	Masicampo ES	20000	2.5	2	5	Moderate
Megkawayan	Elementary School	Megkawayan ES	2580	2.5	2	5	Moderate
Datu Salumay	Elementary	Misuhumey ES	745	2.5	2	5	Moderate
Sibulan	Elementary School	Mt. Apo ES	20214	2.5	2	5	Moderate
Sibulan	Secondary School	Mt. Apo NHS	3218	2.5	2	5	Moderate
Mudiang	Elementary School	Mudiang ES	10000	2.5	2	5	Moderate
Marilog Proper	Elementary School	Namnam ES	14000	2.5	2	5	Moderate
Datu Salumay	Elementary School	Nangalid ES	60000	2.5	2	5	Moderate

Table CP– 15. Critical Points Facilities Vulnerability, Landslide Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Marilog Proper	Elementary School	New Sabang ES	10000	2.5	2	5	Moderate
Inayangan	Elementary School	Pablo Sebulan ES	10000	2.5	2	5	Moderate
Malabog	Elementary School	Pamantawan ES	15540	2.5	2	5	Moderate
Marilog Proper	Elementary School	Pamuhatan ES	10000	2.5	2	5	Moderate
Colosas	Secondary School	Panaga NHS	17000	2.5	2	5	Moderate
Pañalum	Elementary School	Panalum ES	10000	2.5	2	5	Moderate
Pandaitan	Elementary School	Pandaitan ES	2000	2.5	2	5	Moderate
Pangyan	Elementary School	Pangyan ES	25000	2.5	2	5	Moderate
Tamugan	Elementary School	Pangyan ES	25000	2.5	2	5	Moderate
Marilog Proper	Elementary School	Panipasan ES	10590	2.5	2	5	Moderate
Malabog	Elementary School	Panulawan ES	28682	2.5	2	5	Moderate
Paradise Embac	Elementary School	Paradise Embac ES	25191	2.5	2	5	Moderate
Paradise Embac	Secondary School	Paradise Embac NHS	1028	2.5	2	5	Moderate
Marilog Proper	Elementary School	Patag ES	17000	2.5	2	5	Moderate
Tamayong	Elementary School	Pedro P Rodriguez ES (Upper Tamayong ES)	20000	2.5	2	5	Moderate
Pandaitan	Elementary School	Pegdalahan ES	40000	2.5	2	5	Moderate
Lamanan	Elementary School	Polocon ES	25000	2.5	2	5	Moderate
Inayangan	Elementary School	Popo ES	19900	2.5	2	5	Moderate
Daliaon Plantation	Elementary School	Quezon ES	227882000	2.5	2	5	Moderate
Dominga	Elementary School	Quibaton ES	20000	2.5	2	5	Moderate
Baracatan	Elementary School	Rizal ES	5000	2.5	2	5	Moderate
Salapawan	Elementary School	Salapawan ES	10000	2.5	2	5	Moderate
Salaysay	Elementary School	Salaysay ES	19994	2.5	2	5	Moderate
Salaysay	Secondary School	Salaysay NHS	10000	2.5	2	5	Moderate
Eden	Elementary School	San Jose ES	20000	2.5	2	5	Moderate
Marilog Proper	Elementary School	San Jose ES	2000	2.5	2	5	Moderate
Fatima	Elementary School	San Pablo ES	10000	2.5	2	5	Moderate
Tamugan	Elementary School	Siao ES	20000	2.5	2	5	Moderate
Buhangin Proper	Elementary School	St. Jude ES	8881	2.5	2	5	Moderate
Fatima	Elementary School	Sta. Maria ES	13000	2.5	2	5	Moderate
Marilog Proper	Elementary School	Sto. Niño ES	3500	2.5	2	5	Moderate

Table CP– 15. Critical Points Facilities Vulnerability, Landslide Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Marilog Proper	Elementary School	Sumilop ES	20000	2.5	2	5	Moderate
Sumimao	Elementary School	Sumimao ES	18990	2.5	2	5	Moderate
Sumimao	Secondary School	Sumimao NHS	10000	2.5	2	5	Moderate
Colosas	Elementary School	Surayan ES	11946	2.5	2	5	Moderate
Megkawayan	Secondary School	T. Singson NHS	10000	2.5	2	5	Moderate
Malamba	Elementary School	Taga-ibo ES	20000	2.5	2	5	Moderate
Tambobong	Elementary School	Tambobong ES	2000	2.5	2	5	Moderate
Tambobong	Secondary School	Tambobong NHS	10000	2.5	2	5	Moderate
Tapak	Elementary	Tapak ES	9000	2.5	2	5	Moderate
Tapak	Secondary School	Tapak NHS	488	2.5	2	5	Moderate
Tibuloy	Elementary School	Tibuloy ES	21115	2.5	2	5	Moderate
Malamba	Elementary School	Titogop ES	77730	2.5	2	5	Moderate
Marilog Proper	Elementary School	Upian ES	30000	2.5	2	5	Moderate
Salaysay	Elementary School	Upper Masawang ES	24000	2.5	2	5	Moderate
Malabog	Elementary School	V. Bontilao Sr. IS (Kapihan ES)	30000	2.5	2	5	Moderate
Acacia	BHS	Acacia Health Center	35.00	2	2	4	Moderate
Atan-Awe	BHS	Atan-Awe	81.34	1	2	2	Low
Bantol	BHS	Bantol	136.09	1	1	1	Low
Catigan	BHS	Catigan	34.23	2	2	4	Moderate
Dalag Lumot	BHS	Dalag	171.88	1	1	1	Low
Daliaon Plantation	BHS	Daliaon Plantation	101.58	2	2	4	Moderate
Mapula	BHS	Damilag BHS	100.00	1	1	1	Low
Eden	BHS	Eden	62.54	1	2	2	Low
Fatima	BHS	Fatima Health Center	118.85	1	2	2	Low
Gatungan	BHS	Gatungan, Health Center	349.23	2	2	4	Moderate
Inayagan	BHS	Inayagan Health Center	59.15	1	1	1	Low
Salapawan	BHS	Kinse-kinse Health Center	123.69	1	1	1	Low
Langub	BHS	Langub Health Center	299.10	2	2	4	Moderate
Lumiad	BHS	Lumiad Health Center	77.14	2	2	4	Moderate
Magsaysay	BHS	Magsaysay	72.03	3	2	6	Moderate
Magtuod	BHS	Magtuod Health Center	137.54	1	1	1	Low

Table CP– 15. Critical Points Facilities Vulnerability, Landslide Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Mahayag	BHS	Mahayag Health Center	76.60	1	1	1	Low
Malabog	Birthing Home	Malabog Lying-In and RHU	81.72	1	1	1	Low
Malamba	BHS	Malamba	55.83	2	2	4	Moderate
Mapula	BHS	Mapula Health Center	63.58	1	1	1	Low
Marilog	RHU	Marahan RHU with Birthing	266.79	1	1	1	Low
Marilog	Primary Hospital	Marilog District Infirmery	1472.64	1	1	1	Low
Marilog	BHS	Marilog Proper	143.36	2	1	2	Low
Marilog	UHC	Marilog Urban Health Center	137.99	1	1	1	Low
Megkawayan	BHS	Megkawayan Health Center	75.61	1	1	1	Low
Langub	BHS	Mojon BHS	51.20	1	2	2	Low
Mudiang	BHS	Mudiang Health Center	103.84	2	2	4	Moderate
New Carmen	BHS	New Carmen	36.71	2	2	4	Moderate
Colosas	BHS	Panaga Health Center	390.86	1	2	2	Low
Pañalum	RHU	Pañalum Health Center	279.49	1	1	1	Low
Pandaitan	BHS	Pandaitan Health Center	76.09	3	2	6	Moderate
Pangyan	BHS	Pangyan Health Center	75.40	1	1	1	Low
Paradise Embak	BHS	Paradise Embac Health Center	202.97	1	2	2	Low
Salapawan	BHS	Salapawan Health Center	41.58	1	1	1	Low
Salaysay	BHS	Salaysay	192.04	1	1	1	Low
Sibulan	BHS	Sibulan	51.79	1	1	1	Low
Datu Salumay	BHS	Sitio Tagumpay BHS	535.95	1	2	2	Low
Sumimao	BHS	Sumimao Health Center	189.08	1	1	1	Low
Tambobong	BHS	Tambobong Health Center	138.64	3	2	6	Moderate
TIBULOY	BHS	Tibuloy	56.46	2	2	4	Moderate
Tibungco	Birthing Home	Tibungco Lying-In	60.00	1	1	1	Low
Cabantian	Fire Station	Cabantian Fire Station	598.00	2	2	4	Moderate
Malabog	Police Station	Police Station 7 (Paquibato)	5621.00	1	1	1	Low
Marilog	Police Station	Police Station 12 (Marilog)	600	1	1	1	Low
Indangan	Police Sub Station	North Town Sub Station	120	1	1	1	Low
Brgy. 19-B	day care center	19-B	100	2	2	4	Moderate
Langub	day care center	Langub PHDCC	200	2	2	4	Moderate

Table CP– 15. Critical Points Facilities Vulnerability, Landslide Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Ma-a	day care center	GASAI PHDCC	85	2	2	4	Moderate
Ma-a	day care center	Nacilla PHDCC	200	2	2	4	Moderate
Magtuod	day care center	Magtuod PHDCC	150	3	2	6	Moderate
Acacia	day care center	Acacia PHDCC	200	1	2	2	Low
Acacia	day care center	Upper Sta. Cruz	50	2	2	4	Moderate
Buhangin (Pob.)	day care center	Buhangin Hills DCC	242	1	2	2	Low
Cabantian	day care center	Greenland 2 DCC	130	1	2	2	Low
Cabantian	day care center	Green Orchard Village DCC	150	1	2	2	Low
Cabantian	residential facility	Balay Dangupan Crisis Intervention Center	2684	1	1	1	Low
Callawa	day care center	P14 Callawa DCC	85	1	2	2	Low
Callawa	day care center	Manaklay DCC	90	2	2	4	Moderate
Callawa	day care center	P15 Callawa-IP HB	85	1	3	3	Low
Tigatto	day care center	Pilar Rodriguez PHDCC	80	1	2	2	Low
Mahayag	day care center	Liloan DCC	100	1	2	2	Low
Mahayag	day care center	Mahayag DCC	150	2	2	4	Moderate
Colosas	day care center	Galacia DCC	100	1	2	2	Low
Colosas	day care center	Panaga DCC	200	2	2	4	Moderate
Colosas	day care center	Surayan Day Care Center	84	2	2	4	Moderate
Colosas	day care center	Surayan Day Care Center	84	2	2	4	Moderate
Colosas	day care center	Colosas Proper DCC	100	1	2	2	Low
Fatima (Benowang)	day care center	Fatima DCC	120	2	2	4	Moderate
Fatima (Benowang)	day care center	San Pablo DCC	84	1	2	2	Low
Lumiad	day care center	Lumiad DCC	110	1	2	2	Low
Mabuhay	day care center	Mabuhay DCC	100	1	2	2	Low
Mabuhay	day care center	Lawis DCC	120	2	2	4	Moderate
Malabog	day care center	Malambo-on DCC	110	2	2	4	Moderate
Malabog	day care center	Taloytoy HB	100	2	3	6	Moderate
Malabog	day care center	Quarry DCC	95	2	2	4	Moderate
Malabog	day care center	Crossing Malabog DCC	84	2	2	4	Moderate
Malabog	day care center	Binaton DCC	84	2	2	4	Moderate
Malabog	day care center	Bal-ong Day Care Center	84	2	2	4	Moderate

Table CP– 15. Critical Points Facilities Vulnerability, Landslide Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Malabog	day care center	Panulawan DCC	112	2	2	4	Moderate
Malabog	day care center	Malabog DCC	84	3	2	6	Moderate
Malabog	day care center	Malabog Project Hope DCC	110	1	2	2	Low
Malabog	day care center	Cabonbon DCC	90	1	2	2	Low
Malabog	day care center	Balugo Day Care Center	100	2	2	4	Moderate
Mapula	day care center	Lower Mapula DCC	111	1	2	2	Low
Mapula	day care center	Upper Mapula DCC	100	1	2	2	Low
Pandaitan	day care center	Pegdalahan DCC	150	1	2	2	Low
Pañalum	day care center	Pañalum DCC	200	1	2	2	Low
Paquibato	day care center	Alfredo Degamo DCC	190	2	2	4	Moderate
Paradise Embak	day care center	Paradise Embac DCC	130	1	2	2	Low
Paradise Embak	day care center	Dela Cerna DCC	130	2	2	4	Moderate
Salapawan	day care center	Balite DCC	110	2	2	4	Moderate
Sumimao	day care center	Sumimao Day Care Center	160	1	2	2	Low
Sumimao	day care center	Marcos T. Vistal DCC	100	2	2	4	Moderate
Malabog	day care center	KTC DCC	40	2	2	4	Moderate
Malabog	day care center	Pamantawan Day Care Center	50	2	2	4	Moderate
Dominga	day care center	Sitio Quiabaton HB	192	2	3	6	Moderate
Inayangan	day care center	Inayangan Proper PHDCC	400	2	2	4	Moderate
Inayangan	day care center	Sinagmacan PHDCC	150	1	2	2	Low
Inayangan	day care center	Sitio Galao PHDCC	150	2	2	4	Moderate
Inayangan	day care center	Pablo Sebulan PHDCC	400	1	2	2	Low
Inayangan	day care center	Popo PHDCC	600	2	2	4	Moderate
Lacson	day care center	Lacson Riverside PHDCC	150	1	2	2	Low
Lamanan	day care center	Colabol / Darila PHDCC	400	1	2	2	Low
Lamanan	day care center	Libongan PHDCC	600	1	2	2	Low
Lamanan	day care center	Polokon PHDCC	200	2	2	4	Moderate
Lamanan	day care center	Upper Libongan HB	32	3	3	9	High
Megkawayan	day care center	Megkawayan PHDCC	250	2	2	4	Moderate
Megkawayan	day care center	Purok Mahayag Home Based	80	3	3	9	High
Pangyan	day care center	Pangyan DCC	60	2	2	4	Moderate

Table CP– 15. Critical Points Facilities Vulnerability, Landslide Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Saloy	day care center	Purok Salome PHDCC	300	1	2	2	Low
Saloy	day care center	Sitio Ulas HB	48	1	3	3	Low
Saloy	day care center	P- Masaya HB	40	3	3	9	High
Saloy	day care center	P-Bagong Silang HB	40	3	3	9	High
Tamayong	day care center	Upper Tamayong PHDCC	100	2	2	4	Moderate
Dalag	day care center	Dalag DCC	150	2	2	4	Moderate
Dalag	day care center	Purok 3 Dalag HB (Dalag Lumot HB)	150	3	2	6	Moderate
Gumitan	day care center	Kapatagan DCC (Kapatagan HB?)	300	1	2	2	Low
Magsaysay	day care center	Magsaysay DCC	350	2	2	4	Moderate
Magsaysay	day care center	Sitio Imboy HB	255	3	3	9	High
Magsaysay	day care center	Sitio Lanao HB	100	1	3	3	Low
Malamba	day care center	Titugop DCC	400	1	2	2	Low
Malamba	day care center	Malamba DCC	100	1	2	2	Low
Malamba	day care center	Lanitung DCC	500	1	2	2	Low
Malamba	day care center	Sambunotan (AWID) DCC	600	2	2	4	Moderate
Malamba	day care center	Lower Malungon HB	40	1	3	3	Low
Marilog	day care center	Upper Kibalang DCC	500	1	2	2	Low
Marilog	day care center	Balite DCC	200	2	2	4	Moderate
Marilog	day care center	OSCC DCC, Kibalang	150	1	2	2	Low
Marilog	day care center	Lomondao DCC	400	1	2	2	Low
Marilog	day care center	Sto. Niño DCC	100	1	2	2	Low
Marilog	day care center	Malikongkong HB	150	3	3	9	High
Marilog	day care center	Pataga Adonai HB	40	3	3	9	High
Marilog	day care center	East Marahan HB	100	3	3	9	High
Marilog	day care center	Namnam HB	150	3	3	9	High
Marilog	day care center	Mundo Hill HB	400	3	3	9	High
Marilog	day care center	Mabuhay HB	500	3	3	9	High
Marilog	day care center	Campo Santos HB	60	3	3	9	High
Marilog	day care center	Marilog Proper HB	120	3	3	9	High
Marilog	day care center	Panipasan HB	300	3	3	9	High
Marilog	day care center	Matigsalog HB	500	1	3	3	Low

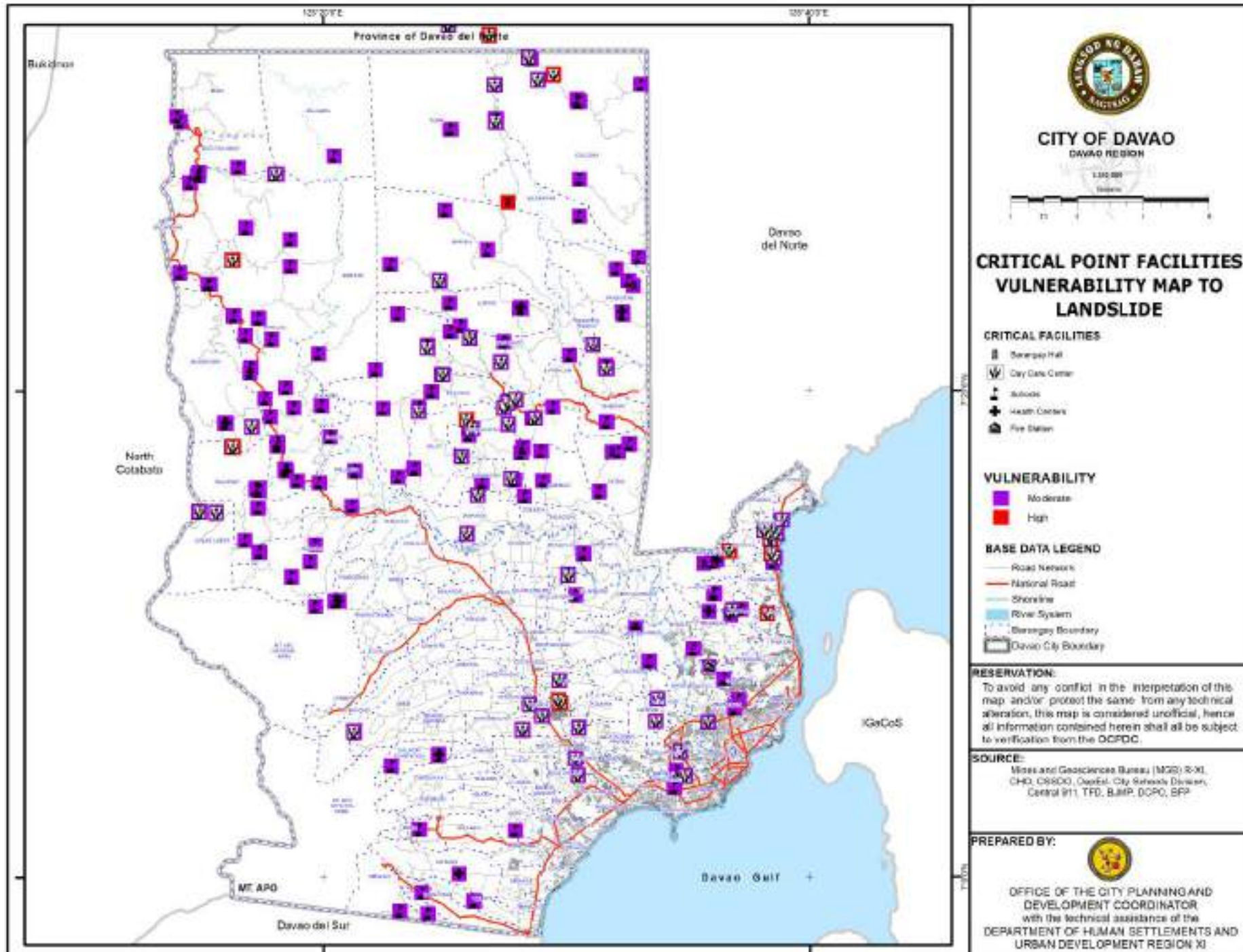
Table CP– 15. Critical Points Facilities Vulnerability, Landslide Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Marilog	day care center	Quimasog DCC	288	1	2	2	Low
Marilog	day care center	Upian DCC	300	2	2	4	Moderate
Marilog	day care center	Magwawa DCC	340	2	2	4	Moderate
Marilog	day care center	Sumilop DCC	168	1	2	2	Low
Marilog	day care center	CSSDO Marilog District Office	300	1	1	1	Low
Salaysay	day care center	Salaysay DCC	300	2	2	4	Moderate
Salaysay	day care center	Sitio Ballah HB	300	2	3	6	Moderate
Salaysay	day care center	Masawang DCC	300	1	2	2	Low
Salaysay	day care center	Cantimon DCCC	80	2	2	4	Moderate
Salaysay	day care center	Mahalyang HB	96	1	3	3	Low
Suawan (Tuli)	day care center	Unapan DCC	300	1	2	2	Low
Suawan (Tuli)	day care center	Suawan DCC	300	2	2	4	Moderate
Suawan (Tuli)	day care center	Quirorom DCC	150	2	2	4	Moderate
Suawan (Tuli)	day care center	Lower Happy Valley DCC	100	2	2	4	Moderate
Suawan (Tuli)	day care center	Balite HB	144	2	3	6	Moderate
Suawan (Tuli)	day care center	Masicampo HB	200	3	3	9	High
Tamugan	day care center	Lower Tamugan DCC	800	2	2	4	Moderate
Tamugan	day care center	Kanacan DCC	200	2	2	4	Moderate
Tamugan	day care center	Bagobo Village HB	100	3	3	9	High
Tamugan	day care center	Pangyan DCC (Pangyan HB?)	360	1	2	2	Low
Tamugan	day care center	Siao DCC	70	2	2	4	Moderate
Tamugan	day care center	Lower Patag DCC	88	2	2	4	Moderate
Tamugan	day care center	Acacia HB	40	2	3	6	Moderate
Tamugan	day care center	Sabang HB	40	3	3	9	High
Tamugan	day care center	Tagbao HB	300	3	3	9	High
Tamugan	day care center	Sualon HB	100	3	3	9	High
Tamugan	day care center	Centro Tamugan DCC	100	2	2	4	Moderate
Tamugan	day care center	Sto. Niño DCC	150	2	2	4	Moderate
Atan-awe	day care center	Atan-awe DCC	100	1	2	2	Low
Binugao	day care center	Binugao PHDCC	250	1	2	2	Low
Camansi	day care center	Camansi DCC	100	1	2	2	Low

Table CP– 15. Critical Points Facilities Vulnerability, Landslide Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Catigan	day care center	Acacia DCC	150	1	2	2	Low
Daliaon Plantation	day care center	Daliaon Plantation DCC I	180	1	2	2	Low
Eden	day care center	Eden PHDCC I	150	1	2	2	Low
Ilang	day care center	Liloan DCC	100	1	2	2	Low
Mahayag	day care center	Mahayag DCC	150	1	2	2	Low
Mahayag	day care center	Mahayag Riverside DCC	150	1	2	2	Low
Bunawan	day care center	Mudiang DCC	100	1	2	2	Low
Bunawan	day care center	K-4 DCC	100	1	2	2	Low
Lumiad	day care center	Lumiad DCC	110	1	2	2	Low
Tapak	day care center	Tapak DCC	100	1	2	2	Low
Tapak	day care center	Tipakis HB	84	1	3	3	Low
Tapak	day care center	Butay DCC	95	1	2	2	Low
Tapak	day care center	Labo DCC	85	1	2	2	Low
Tapak	day care center	Paraiso DCC	84	2	2	4	Moderate
Tapak	day care center	Mangani Day Care HB	90	2	3	6	Moderate
Tapak	day care center	Napus-okan DCC	90	2	2	4	Moderate
Tapak	day care center	Mirol-o HB	70	3	3	9	High

Map 3.6 Critical Points Facilities Vulnerability Map to Landslide, Davao City



LIQUEFACTION

Only Sta. Ana Central Elementary School in Barangay 28-C, Poblacion is categorized under “high” in terms of vulnerability wherein it has low adaptive capacity to accommodate the impact of change in climate or in the occurrence of liquefaction within the area.

Table CP– 16. Critical Points Facilities Vulnerability, Liquefaction Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
1-A	Barangay Hall	1-A Brgy. Hall	87.28	3	1	3	Low
1-A	BHS	Brgy 1-A Health Center	54.40	2	2	4	Moderate
1-A	day care center	Bolton DCC	36.00	2	1	2	Low
1-A	Elementary School	Magallanes ES	60.00	2.5	2	5	Moderate
2-A	Barangay Hall	2-A Brgy. Hall	100.00	1	2	2	Low
2-A	BHS	Brgy. 2-A Health Center	118.87	2	2	4	Moderate
2-A	City Hall	City Hall (Main)	1951.64	1	1	1	Low
2-A	City Hall	Sangguniang Panlungsod	3249.64	1	1	1	Low
2-A	City Hall	City Hall Annex	391.44	1	1	1	Low
2-A	day care center	Magallanes DCC	36.00	2	1	2	Low
2-A	Elementary School	Bolton ES	18943.00	2.5	2	5	Moderate
3-A	Barangay Hall	3-A Brgy. Hall	64.25	1	1	1	Low
4-A	Barangay Hall	4-A Brgy. Hall	96.76	1	1	1	Low
4-A	BHS	Teen Center	120.00	1	1	1	Low
4-A	day care center	Brgy 4-A DCC	36.00	1	3	3	Low
4-A	Elementary School	Kapt. T. Monteverde Sr. CES	10500.00	2.5	2	5	Moderate
4-A	RHU	Tomas Claudio Health Center	481.02	1	1	1	Low
5-A	Barangay Hall	5-A Brgy. Hall	172.16	1	1	1	Low
5-A	BHS	Bankerohan Health Center	68.04	1	2	2	Low
5-A	day care center	Brgy 5-A DCC I	36.00	1	3	3	Low
5-A	day care center	Brgy 5-A DCC II	36.00	1	3	3	Low
5-A	day care center	Brgy 5-A DCC III	36.00	1	3	3	Low
5-A	day care center	Brgy 5-A DCC IV	40.00	1	3	3	Low
5-A	day care center	Brgy 5-A DCC V	60.00	1	1	1	Low
5-A	Elementary School	Dona Pilar Marfori ES	18870.00	3	1	3	Low
7-A	Barangay Hall	7-A Brgy. Hall	149.04	1	2	2	Low
7-A	day care center	Malvar DCC	100.00	1	1	1	Low

Table CP– 16. Critical Points Facilities Vulnerability, Liquefaction Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
9-A	Barangay Hall	9-A Brgy. Hall	115.48	1	1	1	Low
9-A	BHS	Brgy.9-A Health Center	51.20	1	1	1	Low
9-A	day care center	Camus DCC (Barangay 9-A)	80.00	1	1	1	Low
9-A	day care center	San Rafael Day Care Center	120.00	2	1	2	Low
9-A	day care center	DUHA DCC	50.00	3	1	3	Low
9-A	Elementary School	T. Palma Gil Elem. Sch.	2600.00	2.5	2	5	Moderate
11-B	Barangay Hall	11-B Brgy. Hall	58.64	3	2	6	Moderate
12-B	Barangay Hall	12-B Brgy. Hall	101.63	2	1	2	Low
12-B	BHS	Brgy. 12-B Health Center	41.83	2	2	4	Moderate
12-B	day care center	V. Mapa DCC	120.00	1	2	2	Low
13-B	Barangay Hall	13-B Brgy. Hall	*	3	1	3	Low
14-B	Barangay Hall	14-B Brgy. Hall	33.55	1	1	1	Low
14-B	BHS	Brgy.14-B Health Center	11.04	3	2	6	Moderate
15-B	Barangay Hall	15-B Brgy. Hall	100.00	3	1	3	Low
15-B	BHS	Brgy. 15-B Health Center	6.02	3	2	6	Moderate
15-B	day care center	Brgy 15 B PHDCC	150.00	3	2	6	Moderate
16-B	Barangay Hall	16-B Brgy. Hall	*	3	1	3	Low
17-B	Barangay Hall	17-B Brgy. Hall	51.38	3	1	3	Low
18-B	Barangay Hall	18-B Brgy. Hall	122.10	1	1	1	Low
18-B	BHS	Brgy.18-B Health Center	39.44	3	2	6	Moderate
18-B	day care center	Brgy. 18 DCC Little Angels DCC	60.00	3	1	3	Low
19-B	RHU	El Rio Vista Health Center	46.02	1	2	2	Low
19-B	day care center	El Rio Vista DCC	150.00	2	1	2	Low
20-B	Barangay Hall	20-B Brgy. Hall	141.16	1	1	1	Low
20-B	BHS	Brgy.20-B Health Center	46.02	1	2	2	Low
20-B	Elementary School	E. Quirino ES	6202.00	2.5	2	5	Moderate
20-B	Elementary School	San Roque CES	3500.00	2.5	2	5	Moderate
20-B	day care center	Regina Comp. DCC	100.00	1	1	1	Low
21-C	Barangay Hall	21-C Brgy. Hall	45.42	3	2	6	Moderate
21-C	BHS	Brgy.21-C Piapi Health Center	30.00	1	2	2	Low
21-C	day care center	Barangay 21-C PHDCC	60.00	1	2	2	Low
22-C	Barangay Hall	22-C Brgy. Hall	270.72	1	2	2	Low

Table CP– 16. Critical Points Facilities Vulnerability, Liquefaction Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
22-C	BHS	Brgy 22-C Health Center	278.75	2	2	4	Moderate
22-C	day care center	Brgy 22-C DCC	85.00	1	1	1	Low
23-C	Barangay Hall	23-C Brgy. Hall	134.65	1	3	3	Low
23-C	BHS	New BHS / Isla Verde Purok 3B	51.85	1	2	2	Low
23-C	day care center	Mini-Forest DCC	100.00	2	1	2	Low
23-C	Day care center (homebased)	Purok 2 Home-Based	300.00	3	1	3	Low
23-C	Day care center (homebased)	Purok 4 A Home-Based	50.00	3	1	3	Low
23-C	Day care center (homebased)	Kabingaag Home Based	50.00	3	2	6	Moderate
23-C	Day care center (homebased)	Purok 4 b Home-Based I	80.00	3	1	3	Low
23-C	Day care center (homebased)	Badjao Home Based	80.00	3	1	3	Low
23-C	Elementary School	Zonta Elem. School	10500.00	3	2	6	Moderate
23-C	Police Station	Police Station 1 (Sta. Ana)	300.00	1	1	1	Low
23-C	Police Sub Station	23-C Police Sub Station	25.00	3	1	3	Low
23-C	RHU	Brgy 23-C Mini Forest Health Center	361.65	1	2	2	Low
24-C	Barangay Hall	24-C Brgy. Hall	84.69	1	1	1	Low
24-C	BHS	Brgy 24-C Health Center	84.96	1	1	1	Low
25-C	Barangay Hall	25-C Brgy. Hall	25.85	1	2	2	Low
25-C	BHS	Brgy.25-C Health Center	12.93	3	1	3	Low
26-C	Barangay Hall	26-C Brgy. Hall	116.91	1	3	3	Low
26-C	BHS	Brgy.26-C Health Center	141.38	1	2	2	Low
26-C	day care center	Silangan PHDCC	40.00	1	2	2	Low
27-C	Barangay Hall	27-C Brgy. Hall	42.08	1	2	2	Low
27-C	BHS	Brgy.27-C Health Center	167.03	1	3	3	Low
27-C	day care center	China Town DCC	40.00	1	1	1	Low
27-C	day care center	Brgy. 27-C PHDCC	100.00	1	2	2	Low
27-C	UHC	Sta. Ana Health Center	550.00	1	2	2	Low
28-C	Barangay Hall	28-C Brgy. Hall	107.56	1	1	1	Low
28-C	BHS	Brgy.28-C Health Center	29.04	1	2	2	Low
28-C	day care center	Brgay 28 -C PHDCC	33.00	1	2	2	Low
28-C	day care center	Rizal Day Care Center	100.00	1	1	1	Low
28-C	Elementary School	Jose Rizal ES	2681.00	2.5	2	5	Moderate
28-C	Elementary School	M. Quezon ES	9468.00	2.5	1	2.5	Low

Table CP– 16. Critical Points Facilities Vulnerability, Liquefaction Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
28-C	Elementary School	Sta. Ana CES	9000.00	2.5	3	7.5	High
28-C	Elementary School	Manuel Roxas ES	15013.00	2.5	2	5	Moderate
28-C	Secondary School	Sta. Ana NHS	14023.00	2	1	2	Low
28-C	Secondary School	Sta. Ana SHS-Annex		2	1	2	Low
29-C	Barangay Hall	29-C Brgy. Hall	*	1	1	1	Low
29-C	BHS	Brgy. 29-C Health Center	22.04	1	2	2	Low
30-C	Barangay Hall	30-C Brgy. Hall	118.66	1	1	1	Low
30-C	BHS	Brgy.30-C Health Center	31.32	1	2	2	Low
30-C	day care center	St. Anne DCC	100.00	1	1	1	Low
31-D	Barangay Hall	31-D Brgy. Hall	81.60	1	1	1	Low
31-D	BHS	Brgy. 31-D Health Center	38.71	1	2	2	Low
31-D	day care center	Roxas 1 DCC	100.00	1	1	1	Low
31-D	day care center	Roxas 2 DCC	120.00	1	1	1	Low
31-D	Police Sub Station	31-D Police Sub Station	100.00	1	2	2	Low
32-D	Barangay Hall	32-D Brgy. Hall	40.17	3	1	3	Low
32-D	BHS	Reproductive Health and Wellness Center	485.48	1	2	2	Low
32-D	day care center	Jacinto DCC	120.00	1	1	1	Low
32-D	RHU	Brgy. 32-D Health Center	249.12	1	2	2	Low
33-D	Barangay Hall	33-D Brgy. Hall	77.39	1	1	1	Low
33-D	day care center	Mabini DCC	20.00	1	1	1	Low
34-D	Barangay Hall	34-D Brgy. Hall	*	3	1	3	Low
35-D	Barangay Hall	35-D Brgy. Hall	89.74	1	1	1	Low
35-D	BHS	Brgy. 35-D Health Center	11.00	3	1	3	Low
35-D	day care center	Brgy 35 D PHDCC	60.00	1	1	1	Low
36-D	Barangay Hall	36-D Brgy. Hall	109.07	1	1	1	Low
36-D	BHS	Brgy. 36-D Health Center	38.88	1	2	2	Low
36-D	day care center	Brgy 36 Day Care Center	60.00	1	3	3	Low
37-D	Barangay Hall	37-D Brgy. Hall	128.70	1	2	2	Low
37-D	BHS	Brgy. 37-D Health Center	94.12	1	2	2	Low
37-D	day care center	Brgy. 37-D DCC?	60.00	1	3	3	Low
38-D	Barangay Hall	38-D Brgy. Hall	100.00	1	1	1	Low
38-D	BHS	Brgy. 38-D Health Center	38.94	1	1	1	Low

Table CP– 16. Critical Points Facilities Vulnerability, Liquefaction Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
38-D	day care center	Brgy 38 D PHDCC	200.00	1	2	2	Low
38-D	Police Headquarters	Camp Captain Domingo E. Leonor	59629.00	3	1	3	Low
38-D	Police Station	Police Station 2 (San Pedro)	640.00	1	1	1	Low
38-D	residential facility	Paginhawaan Drop-In Center	200.00	1	2	2	Low
38-D	residential facility	Quick Response Team for Children's Concern / Kean Gabriel	200.00	1	1	1	Low
39-D	Barangay Hall	39-D Brgy. Hall	93.98	2	3	6	Moderate
39-D	BHS	Brgy. 39-D Health Center	50.80	3	1	3	Low
39-D	day care center	Brgy 39 D PHDCC	60.00	1	1	1	Low
39-D	day care center	Child-Minding Center	68.00	1	1	1	Low
40-D	Barangay Hall	40-D Brgy. Hall	43.61	1	1	1	Low
40-D	day care center	Brgy 40 D PHDCC	35.00	1	2	2	Low
Agdao	RHU	Agdao Health Center	278.11	1	1	1	Low
AGDAO PROPER	Barangay Hall	Agdao Brgy. Hall	135.96	1	1	1	Low
Agdao Proper	day care center	San Miguel DCC	65.00	3	1	3	Low
Agdao Proper	day care center	Sta. Cruz DCC	40.00	3	1	3	Low
Agdao Proper	day care center	San Isidro DCC	45.00	1	1	1	Low
Agdao Proper	Elementary School	Agdao ES	3397.00	2.5	2	5	Moderate
W. Aquino	BHS	Vicente Duterte Health Center	345.27	1	2	2	Low
Wilfredo Aquino	BHS	Wilfredo Aquino Health Center	259.09	3	2	6	Moderate
Wilfredo Aquino	day care center	W. Aquino DCC I	100.00	1	1	1	Low
Agdao Proper	Police Sub Station	Agdao Proper Police Sub Station	50.00	1	2	2	Low
Paciano Bangoy	BHS	Paciano Bangoy Health Center	153.09	3	1	3	Low
Paciano Bangoy	day care center	Cory Village DCC	80.00	1	1	1	Low
Paciano Bangoy	day care center	RGA DCC	30.00	2	1	2	Low
Paciano Bangoy	day care center	Bagong Buhay DCC	80.00	3	1	3	Low
Paciano Bangoy	Fire Station	Bangoy Fire Station	14985.00	3	1	3	Low
PANACAN	Barangay Hall	Panacan Brgy. Hall	167.45	3	1	3	Low
Wilfredo Aquino	day care center	Waan PHDCC	100.00	2	1	2	Low
Wilfredo Aquino	Elementary School	J. Porras ES	1007.00	2.5	1	2.5	Low
R. Castillo	BHS	R.Castillo Health Center	144.59	2	2	4	Moderate
Rafael Castillo	day care center	R. Castillo DCC	72.00	1	1	1	Low
SAN ANTONIO	Barangay Hall	San Antonio Brgy. Hall	152.27	1	1	1	Low

Table CP– 16. Critical Points Facilities Vulnerability, Liquefaction Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Centro	Elementary School	San Juan ES	5000.00	2.5	2	5	Moderate
Centro	BHS	North San Juan Health Center	384.46	2	2	4	Moderate
Centro	BHS	New BHS	119.62	1	2	2	Low
Centro	BHS	South San Juan Health Center	125.95	3	2	6	Moderate
Centro	day care center	Sto. Niño Pelayo DCC	117.00	1	2	2	Low
Centro	day care center	South San Juan DCC	100.00	1	2	2	Low
Centro	day care center	North San Juan DCC	100.00	1	2	2	Low
Centro	day care center	San Miguel DCC	35.00	1	1	1	Low
Centro	day care center	Sta. Lucia DCC	150.00	3	1	3	Low
Centro	day care center	New Fatima DCC	100.00	1	2	2	Low
VICENTE DUTERTE	Barangay Hall	V. Duterte Brgy. Hall	94.41	1	2	2	Low
Vicente Duterte	BHS	Vetran Hills Health Center	51.20	1	2	2	Low
Vicente Duterte	day care center	Rotary Club DCC	40.00	1	1	1	Low
Vicente Duterte	Elementary School	Don Julian Rodriguez ES	2100.00	2.5	2	5	Moderate
Leon Garcia	day care	St. Luke DCC	80.00	3	1	3	Low
Leon Garcia	day care center	Baybay DCC	80.00	1	1	1	Low
Leon Garcia	day care center	GOTAMCO DCC	70.00	1	2	2	Low
Leon Garcia	Elementary School	Manuel M. Garcia ES	1500.00	3	2	6	Moderate
Leon Garcia	Police Sub Station	Leon Garcia Police Sub Station	25.00	3	1	3	Low
Leon Garcia	Secondary School	Leon Garcia Sr. NHS	1000.00	2.5	2	5	Moderate
Leon Garcia	TFD Headquarters	Task Force Davao (Task Group Agila)	9990.00	2	1	2	Low
LEON GARCIA SR.	Barangay Hall	Leon Garcia Brgy. Hall	202.50	1	2	2	Low
LIZADA	Barangay Hall	Lizada Brgy Hall	168.33	1	2	2	Low
Lapu-Lapu	BHS	Lapu-Lapu Health Center	142.88	2	1	2	Low
Lapu-Lapu	day care	Seaside DCC	16.00	3	1	3	Low
Lapu-Lapu	day care center	Lapu-Lapu DCC	150.00	1	1	1	Low
Lapu-Lapu	day care center	IKP DCC	38.00	2	1	2	Low
Lapu-Lapu	day care center	Isla Noah DCC	84.00	3	1	3	Low
Lapu-Lapu	Elementary School	Lapu-lapu ES		2.5	1	2.5	Low
LASANG	Barangay Hall	Lasang Brgy. Hall	212.89	3	1	3	Low
Tomas Monteverde	Barangay Hall	T. Monteverde Brgy. Hall	121.56	1	1	1	Low
Tomas Monteverde	BHS	Times Beach Health Center	50.23	1	2	2	Low
Tomas Monteverde	day care center	KTM DCC	30.00	1	2	2	Low

Table CP– 16. Critical Points Facilities Vulnerability, Liquefaction Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Tomas Monteverde	Fire Station	Central Fire Station	580.00	3	2	6	Moderate
Tomas Monteverde	Police Sub Station	Tomas Monteverde Police Sub Station	25.00	3	2	6	Moderate
San Antonio	BHS	San Antonio Health Center	113.82	3	1	3	Low
San Antonio	day care center	San Antonio (NHA) DCC	84.00	1	2	2	Low
San Antonio	day care center	Ibula DCC	250.00	1	2	2	Low
San Antonio	day care center	Sto. Niño DCC	42.00	1	2	2	Low
SAN ISIDRO	Barangay Hall	San Isidro Brgy. Hall	146.60	1	2	2	Low
Ubalde	Barangay Hall	Ubalde Brgy. Hall	359.48	1	1	1	Low
Ubalde	BHS	Ubalde Health Center	86.17	3	1	3	Low
Ubalde	Elementary School	Ubalde Elem. School	4400.00	2.5	1	2.5	Low
Ubalde	Secondary School	Dona Carmen Denia NHS	19550.00	2.5	1	2.5	Low
Ubalde Agdao	Police Sub Station	Ubalde Police Sub Station	25.00	3	2	6	Moderate
V. HIZON	Barangay Hall	V. Hizon Brgy. Hall	293.67	1	1	1	Low
Sasa	day care center	Km 11 Sasa PHDCC	174.00	1	1	1	Low
Sasa	day care center	San Isidro DCC	70.00	1	2	2	Low
Sasa	day care center	Fatima DCC	90.00	3	1	3	Low
Sasa	day care center	ICSAMA DCC	60.00	1	2	2	Low
Sasa	day care center	Bayview DCC	256.00	1	2	2	Low
Sasa	Elementary School	F. Bangoy CES SPED Center	540.00	2	2	4	Moderate
Sasa	Elementary School	Osmena ES	5000.00	2.5	2	5	Moderate
Sasa	Fire Station	Lanang Fire Station	1587.00	2	2	4	Moderate
Sasa	Police Station	Police Station 4 (Sasa)	600.00	2	1	2	Low
Sasa	RHU	Sasa Health Center	250.00	1	1	1	Low
Sasa	Secondary School	F. Bangoy NHS	2849.00	2	1	2	Low
Sasa	Secondary School	F. Bangoy NHS - Annex		2	1	2	Low
Sasa	Teen Center	Sasa Health Center	499.40	1	2	2	Low
Sirawan	day care center	Sirawan Beach DCC	300.00	1	1	1	Low
Tigatto	day care center	Uyanguren PHDCC II	150.00	1	2	2	Low
Tigatto	day care center	Jade Valley PHDCC	150.00	1	2	2	Low
Tigatto	day care center	Juliville PHDCC	150.00	1	2	2	Low
Tigatto	day care center	Deca Homes Esperanza	150.00	1	2	2	Low
Tigatto	Police Sub Station	Tigatto Police Sub Station	80.00	1	2	2	Low
Waan	Barangay Hall	W. Aquino Brgy. Hall	165.23	3	2	6	Moderate

Table CP– 16. Critical Points Facilities Vulnerability, Liquefaction Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Aliongto	Police Outpost	Damosa Police Outpost	5.00	3	1	3	Low
V, Hizon	BHS	Hizon Health Center	107.00	2	2	4	Moderate
V, Hizon	day care center	ALSONS DCC	70.00	1	2	2	Low
V, Hizon	Elementary School	V. Hizon Elem. Sch.	3851.00	2	1	2	Low
V. HIZON	day care center	Ubalde DCC	128.00	1	1	1	Low
BUCANA	Barangay Hall	Bucana Brgy. Hall	98.66	1	1	1	Low
Bunawan	day care center	Rhema DCC	75.00	3	2	6	Moderate
Bunawan	day care center	DCPI 1 & 2 DCC	150.00	1	2	2	Low
Bunawan	day care center	Damiana DCC	100.00	1	2	2	Low
Bunawan	day care center	Tesorero DCC	60.00	1	2	2	Low
Bunawan	day care center	Bunawan Aplaya DCC	60.00	1	2	2	Low
Bunawan	Elementary School	Bunawan Aplaya ES	10001.00	3	2	6	Moderate
Bunawan	Elementary School	Daniel M. Perez ES	3919.00	2.5	2	5	Moderate
Bunawan	RHU	Bunawan Rural Health Unit	373.84	1	2	2	Low
Bunawan	Fire Station	Bunawan Fire Station	500.00	3	1	3	Low
Bunawan	Police Station	Police Station 6 (Bunawan)	300.00	1	1	1	Low
CENTRO	Barangay Hall	Centro Brgy. Hall	400.24	1	1	1	Low
Ilang	Police Sub Station	Ilang Police Sub Station	80.00	1	2	2	Low
LAPU - LAPU	Barangay Hall	Lapu-Lapu Brgy. Hall	89.50	1	2	2	Low
A. Navarro (Lasang)	day care center	Tambongon DCC	100.00	1	2	2	Low
A. Navarro (Lasang)	day care center	Aledia DCC	110.00	1	2	2	Low
A. Navarro (Lasang)	day care center	Sto. Niño DCC	90.00	3	1	3	Low
Lasang	BHS	Lasang Health Center	193.93	1	1	1	Low
Lasang	Elementary School	Alfredo A. Aledia Elementary School	5021.00	3	1	3	Low
Lasang	Elementary School	Tambongon ES	5000.00	2.5	1	2.5	Low
Lasang	Elementary School	AL Navarro CES	9000.00	2.5	1	2.5	Low
Lasang	Elementary School	Dacudao Sr. ES	21984.00	2.5	2	5	Moderate
Lasang	Secondary School	AL Navarro NHS	21984.00	2.5	2	5	Moderate
Lasang	TFD Detachment	Task Group Lawin	2256.00	2	1	2	Low
Leon Garcia	BHS	Leon Garcia Health Center	68.74	1	2	2	Low
Panacan	BHS	Panacan Proper Health Center	89.77	2	1	2	Low
Panacan	BHS	Panacan 13 Health Center	100.00	2	1	2	Low
Panacan	day care center	St. John DCC	70.00	2	1	2	Low

Table CP– 16. Critical Points Facilities Vulnerability, Liquefaction Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Panacan	day care center	F.L. Apostol DCC	150.00	1	2	2	Low
Panacan	day care center	Panacan Trece DCC	120.00	1	2	2	Low
Panacan	Elementary School	Armed Forces of the Philippines Logistics Command Elementary School	1345.00	2.5	1	2.5	Low
Panacan	Fire Station	Panacan Fire Station	300.00	3	1	3	Low
R. Castillo	Barangay Hall	R. Castillo Brgy. Hall	144.23	1	2	2	Low
San Isidro	BHS	Kabacan Health Center II	51.20	1	1	1	Low
San Isidro	BHS	Lasang Health Center	193.93	2	1	2	Low
San Isidro	Elementary School	Pablo M. Piatos ES	3662980.00	2.5	2	5	Moderate
San Isidro (Licanan)	day care center	New Millenium DCC	150.00	1	2	2	Low
SASA	Barangay Hall	Sasa Brgy. Hall	101.81	3	1	3	Low
BAGO APLAYA	Barangay Hall	Bago Aplaya Brgy. Hall	426.69	1	2	2	Low
Bago Aplaya	BHS	Bago Aplaya Health Center	51.20	1	3	3	Low
Bago Aplaya	BHS	Gulf View Health Center	51.20	1	3	3	Low
Bago Aplaya	day care center	D'Garden PHDCC	46.00	2	1	2	Low
Bago Aplaya	day care center	Gulf View Subd. PHDCC	42.00	1	2	2	Low
Bago Aplaya	day care center	BLISS PHDCC	70.00	1	1	1	Low
Bago Aplaya	day care center	Bago Sea side PHDCC	42.00	2	1	2	Low
Bago Aplaya	day care center	BALAI, PHDCC	75.00	1	2	2	Low
Bago Aplaya	day care center	LORAMPCO PHDCC	40.00	2	1	2	Low
Bago Aplaya	Elementary School	RC Quimpo ES	16500.00	3	1	3	Low
Bago Aplaya	Elementary School	Dr. Jovito Francisco ES(Camilo Osias ES)	6000.00	2.5	1	2.5	Low
Bago Aplaya	Elementary School	Generoso ES	2037.00	2.5	1	2.5	Low
Bago Aplaya	Secondary School	Erico Nograles NHS-B	2456.00	2.5	1	2.5	Low
Bago Gallera	day care center	Bago Gallera De Oro Home Based	100.00	1	2	2	Low
Baliok Proper	BHS	Baliok Health Center	53.86	1	2	2	Low
DALIAO	Barangay Hall	Daliao Brgy Hall	188.40	1	2	2	Low
BUCANA	Barangay Hall	Bucana Brgy. Hall	169.80	3	2	6	Moderate
Bucana	BHS	Kabacan Health Center I	51.20	1	2	2	Low
Bucana	BHS	Bucana Health Center	47.89	2	2	4	Moderate
Bucana	BHS	St. John Health Center	92.49	1	2	2	Low
Bucana	BHS	Talomo North Health Center RHU	338.47	1	2	2	Low
Bucana	BHS	SIR Phase 2 Health Center	41.08	1	2	2	Low

Table CP– 16. Critical Points Facilities Vulnerability, Liquefaction Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
bucana	CDRRMO Headquarters	City Disaster Risk Reduction and Management Office	60.00	3	1	3	Low
Bucana	day care center	Prk 7 PHDCC	148.00	2	1	2	Low
Bucana	day care center	Prk 6 PHDCC	120.00	2	1	2	Low
Bucana	day care center	Bilusa PHDCC	100.00	2	1	2	Low
Bucana	day care center	Kasilak PHDCC	150.00	2	1	2	Low
Bucana	day care center	Rosas DCC	100.00	2	2	4	Moderate
Bucana	day care center	St. John PHDCC II	85.00	2	1	2	Low
Bucana	day care center	Prk 2 Bucana DCC	150.00	2	1	2	Low
Bucana	day care center	Pebsa PHDCC	100.00	2	1	2	Low
Bucana	day care center	Kabacan Times Beach DCC	36.00	2	1	2	Low
Bucana	day care center	P 32 Holy Trinity DCC	30.00	2	1	2	Low
Bucana	day care center	S.I.R Phase 2 PHDCC 3	64.00	2	1	2	Low
Bucana	day care center	Sabroso Village PHDCC	56.00	2	1	2	Low
Bucana	day care center	Savina DCC	45.00	2	1	2	Low
Bucana	day care center	SIR Phase 2 DCC 1	36.00	2	1	2	Low
Bucana	day care center	SIR Phase 2 DCC 2	36.00	2	1	2	Low
bucana	day care center	W. Aquino DCC 2	65.00	1	2	2	Low
Bucana	Elementary School	Cesario Villa Abrille ES	5198.00	3	2	6	Moderate
Bucana	Elementary School	New Matina ES	4788.00	3	1	3	Low
Bucana	Elementary School	SIR ES	450.00	2.5	1	2.5	Low
Bucana	Elementary School	Kabacan ES	23215.00	2.5	2	5	Moderate
bucana	Fire Station	SIR Fire Station	155.00	3	2	6	Moderate
bucana	Police Outpost	Sandawa Mc Arthur Police Outpost	8.00	2	2	4	Moderate
bucana	Police Sub Station	Sandawa Police Sub Station	15.00	2	1	2	Low
bucana	PSSCC Headquarters	Public Safety and Security Services	8138.00	3	2	6	Moderate
Bucana	residential facility	Sidlakan Women Crisis Center	200.00	1	1	1	Low
Bucana	Secondary School	Vicenta C. Nograles NHS	1200.00	2.5	2	5	Moderate
Bucana	TC	Teen Center	51.20	1	2	2	Low
BUNAWAN	Barangay Hall	Bunawan Brgy. Hall	199.52	1	2	2	Low
Ma-a	day care center	Don Julian PHDCC	56.00	1	1	1	Low
Ma-a	day care center	P34 South Villa PHDCC	48.00	1	2	2	Low
Ma-a	day care center	DIHO IV PHDCC	56.00	1	2	2	Low

Table CP– 16. Critical Points Facilities Vulnerability, Liquefaction Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Ma-a	day care center	Prk 38 NHA PHDCC	250.00	1	1	1	Low
Ma-a	day care center	Purok 16 St. Michael DCC	380.00	1	1	1	Low
Ma-a	day care center	Maharlika PHDCC	147.00	1	1	1	Low
Ma-a	day care center	New Washington PHDCC	250.00	1	0	0	Low
Ma-a	Jail Facility	Main City Jail	155.00	2	1	2	Low
Ma-a	Jail Facility	Female City Jail	750.00	2	2	4	Moderate
Ma-a	Jail Facility	Annex City Jail	400.00	2	2	4	Moderate
MATINA APLAYA	Barangay Hall	Matina Aplaya Brgy. Hall	258.72	1	2	2	Low
Matina Aplaya	BHS	Matina Aplaya Health Center	109.00	1	1	1	Low
Matina Aplaya	day care center	Dumalag PHDCC	200.00	1	1	1	Low
Matina Aplaya	day care center	Cristina Village PHDCC	90.00	1	1	1	Low
Matina Aplaya	day care center	Malinawon DCC	40.00	1	1	1	Low
Matina Aplaya	day care center	Shanghai PHDCC	75.00	1	1	1	Low
Matina Aplaya	day care center	Dumalag PHDCC 3	40.00	1	1	1	Low
Matina Aplaya	day care center	Seaside II PHDCC	54.00	1	2	2	Low
Matina Aplaya	day care center	Teacher's Village PHDCC	40.00	1	1	1	Low
Matina Aplaya	Elementary School	Diego Silang ES	2500.00	3	2	6	Moderate
Matina Aplaya	Elementary School	Matina Aplaya ES	620.00	2.5	1	2.5	Low
MATINA APLAYA	Police Outpost	Bogser Police Outpost	16.00	2	1	2	Low
MATINA APLAYA	Police Sub Station	Matina Aplaya Police Sub Station	8.00	2	2	4	Moderate
MATINA CROSSING	Barangay Hall	Matina Crossing Brgy. Hall	404.94	1	1	1	Low
Matina Crossing	BHS	Gravahan Health Center	21.00	3	2	6	Moderate
Matina Crossing	BHS	Matina Crossing Health Center	410.69	1	1	1	Low
Matina Crossing	Elementary School	Don Manuel Gutierrez ES	8474.00	2.5	1	2.5	Low
Matina Crossing	Elementary School	Matina CES	13920.00	2.5	1	2.5	Low
Matina Crossing	Elementary School	Bayanihan ES	10737.00	2.5	1	2.5	Low
Matina Crossing	Police Outpost	UM Matina Police Outpost	6.00	2	2	4	Moderate
Matina Crossing	Police Station	Police Station 3 (Talomo)	200.00	1	2	2	Low
Matina Crossing	Secondary School	Daniel R. Aguinaldo NHS	665881.00	2.5	1	2.5	Low
MATINA PANGI	Barangay Hall	Matina Pangi Brgy. Hall	107.73	3	2	6	Moderate
Matina Pangi	BHS	Pangi Health Center	63.00	1	2	2	Low
Matina Pangi	day care center	Km.8 Matina Pangi PHDCC	50.00	1	1	1	Low
PACIANO BANGOY	Barangay Hall	P. Bangoy Brgy. Hall	142.15	3	1	3	Low

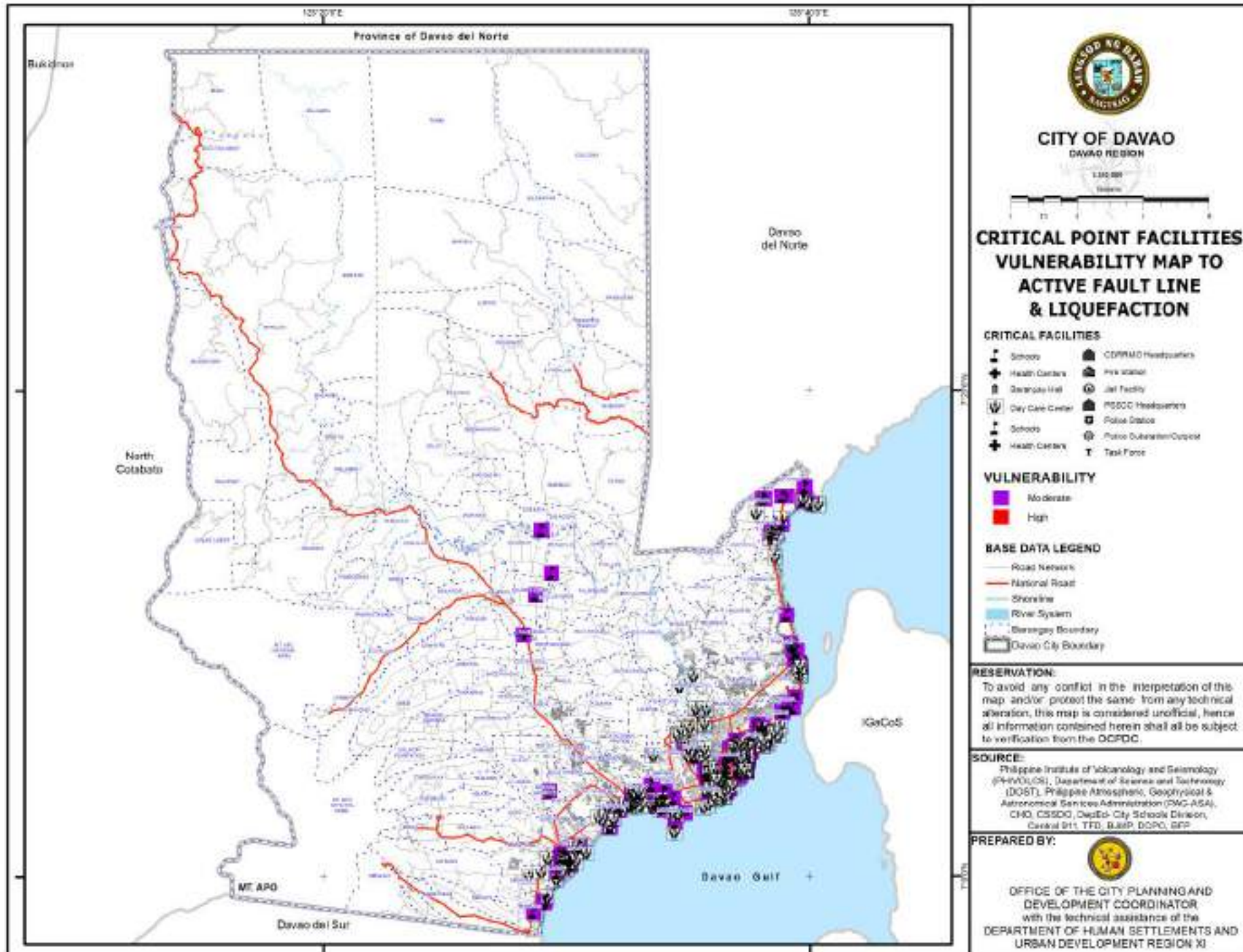
Table CP– 16. Critical Points Facilities Vulnerability, Liquefaction Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
TALOMO	BHS	NHA Relocation Health Center	57.59	2	2	4	Moderate
TALOMO	BHS	Royal Valley Health Center	63.00	1	2	2	Low
TALOMO	BHS	Talomo Cemento Health Center	56.21	1	2	2	Low
TALOMO	day care center	Kadayawan PHDCC	200.00	1	0	0	Low
TALOMO	day care center	San Juan PHDCC	120.00	1	1	1	Low
TALOMO	day care center	Christian Village, PHDCC	50.00	1	1	1	Low
TALOMO	day care center	Taal Central Park PHDCC	40.00	1	1	1	Low
TALOMO	day care center	NHA Relocation PHDCC	120.00	1	1	1	Low
TALOMO	day care center	Talomo PHDCC	80.00	1	2	2	Low
TALOMO	day care center	Talomo Barangay Hall 1	40.00	1	2	2	Low
TALOMO	day care center	Mushville PHDC	40.00	1	1	1	Low
TALOMO	day care center	Gabay Kabataan DCC	40.00	1	1	1	Low
TALOMO	day care center	Kalambuan Home-based	30.00	1	1	1	Low
TALOMO	Elementary School	Dona Soledad Dolor ES	2800.00	2.5	1	2.5	Low
TALOMO	Elementary School	A. Bonifacio Elem. School	15228.00	2.5	1	2.5	Low
TALOMO	Elementary School	Talomo CES	10500.00	2.5	1	2.5	Low
TALOMO	Elementary School	Leon A. Garcia Sr. ES	10500.00	2.5	1	2.5	Low
TALOMO	Elementary School	A. Mabini ES	2051.00	2	1	2	Low
TALOMO	Secondary School	Gov. V. Duterte NHS	4490.00	2.5	1	2.5	Low
TALOMO	Secondary School	Talomo NHS	1200.00	2.5	1	2.5	Low
TALOMO	Secondary School	Mabini NHS	5892.00	2	1	2	Low
Talomo	Police Outpost	Talomo Police Outpost	12.00	2	2	4	Moderate
Talomo	Police Sub Station	Ulas Police Sub Station	50.00	2	1	2	Low
Tigatto	day care center	Uyanguren PHDCC I	50.00	1	2	2	Low
BINUGAO	Barangay Hall	Binugao Brgy Hall	303.10	1	1	1	Low
Binugao	day care center	Central Binugao HB	150.00	3	1	3	Low
Binugao	Elementary School	Binugao CES	10000.00	2.5	1	2.5	Low
Binugao	Secondary School	Binugao NHS	10000.00	2.5	1	2.5	Low
Daliao	day care center	Daliao Proper DCC	150.00	1	1	1	Low
Daliao	day care center	Daliao Beach DCC	150.00	1	2	2	Low
Daliao	day care center	St. Jude DCC	150.00	1	1	1	Low
Daliao	day care center	Prudential DCC	180.00	1	1	1	Low
Daliao	day care center	Lipadas DCC	150.00	1	1	1	Low
Daliao	day care center	San Jose DCC	150.00	1	1	1	Low

Table CP– 16. Critical Points Facilities Vulnerability, Liquefaction Impact Areas

Barangay	Facility Type	Name	Area (sq. m)	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Daliao	day care center	FESA DCC	150.00	1	1	1	Low
Daliao	day care center	Doña Rosa I DCC	180.00	1	2	2	Low
Daliao	day care center	Rovical DCC	150.00	1	1	1	Low
Daliao	Elementary School	V.S. Bangoy ES	26267.00	2.5	2	5	Moderate
Daliao	Elementary School	Sta. Clara ES	4437.00	2.5	2	5	Moderate
Daliao	Elementary School	Ramon F. Magsaysay ES	5036.00	2.5	2	5	Moderate
Ilang	Elementary School	Sixto Babao ES	19445.00	2.5	2	5	Moderate
Lizada	day care center	Lizada Proper DCC	200.00	1	2	2	Low
Lizada	day care center	NLPL DCC	160.00	1	2	2	Low
Lizada	day care center	Maharlika DCC	138.00	1	2	2	Low
Lizada	day care center	New Lizada DCC	150.00	1	2	2	Low
Lizada	day care center	Curvada DCC	100.00	1	2	2	Low
Lizada	day care center	KASAMA DCC	150.00	1	2	2	Low
Lizada	Elementary School	JV Ferriols ES	20273.00	3	1	3	Low
Lizada	Secondary School	JV Ferriols NHS	4689.00	2.5	2	5	Moderate
Sirawan	Elementary School	Sirawan Beach ES	8000.00	3	1	3	Low
Sirawan	NRDP	day care center	198.00	1	2	2	Low
Sirawan	Secondary School	Sirawan NHS(Toril NHS)	40867.00	2.5	1	2.5	Low
TALOMO	Barangay Hall	Talomo Brgy. Hall	334.32	1	1	1	Low
Toril	Police Outpost	Shell Toril Police Outpost	5.00	3	2	6	Moderate
Toril Poblacion	BHS	Tomas Monteverde Health Center	87.71	1	1	1	Low
Toril Poblacion	Elementary School	Don Juan Dela Cruz CES	40000.00	2.5	1	2.5	Low
Maa	Elementary School	JL Escoda ES	1000.00	3	2	6	Moderate

Map 3.7 Critical Point Facilities Vulnerability Map to Active Fault Line & Liquefaction, Davao City



CONSEQUENCE ANALYSIS

The exposure of critical point facilities to various hazards is further analysed by assigning severity of consequence scores to classify structures into categories in terms the degree of damage and disruption of delivery of services and/or operations after the occurrence of hazards, particularly, Flood and Landslide. These categories are Very High wherein damages may lead to the disruption of services which may last one week or more; High when damages may lead to the disruption of services which may last three days to less than a week; Moderate when damages may lead to the disruption of service lasting for one day to less than three days, and Low wherein daages may lead to the disruption of service lasting less than one day.

FLOOD RISK ASSESSMENT

There are 110 structures in the table below that are susceptible to flood wherein 15 are under the category of very high which are day care centers (2), elementary school (1), and police outposts/sub-stations (12) these structures do not employ hazard resistant designs making the same vulnerable when exposed to flood, hence the increased severity of consequence scores.

Table CP– 17. Flood Risk to Critical Point Facilities

Barangay	Facility Type	HAZARD			EXPOSURE			VULNERABILITY			SEVERITY OF CONSEQUENCE	RISK	
		Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Storey	Area	Number of Classroom/ Rooms/ Bed Capacity	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design		Risk Score	Risk Category
1-A	day care center	HSA	3	< 1 meter	1	80	1 classroom	concrete	fair	No	2	6	Moderate
	Barangay Hall	HSA	3	< 1 meter	2	57.94	N/A	mixed	fair	no	3	9	Moderate
	BHS	HSA	3	< 1 meter	2	54	N/A	Mixed	Fair	No	3	9	Moderate
2-A	day care center	HSA	4	> 1 meter	1	16	1 classroom	concrete	fair	No	2	8	Moderate
	BHS	HSA	4	> 1 meter	2	40	N/A	Concrete	Fair	No	3	12	Moderate
	Elementary School	HSA	4	> 1 meter	2	10500	29 classrooms	Mixed	Needs repair	Yes	3	12	High
8-A	day care center	HSA	4	> 1 meter	2	45	1 classroom	concrete	good	No	2	8	Moderate
15-B	day care center	MLSA	3	< 1 meter	2	50	1 classroom	mixed	good	Yes	2	6	Moderate
19-B	day care center	HSA	6	> 1 meter	2	100	1 classroom	mixed	critical	Yes	4	24	High
	day care center	HSA	6	> 1 meter	2	100	1 classroom	mixed	fair	No	2	12	Moderate
37-D	Secondary School	HSA	2	< 1 meter	4	1816	41 classrooms	Mixed	Needs repair	Yes	3	6	Moderate

Table CP– 17. Flood Risk to Critical Point Facilities

Barangay	Facility Type	HAZARD			EXPOSURE			VULNERABILITY			SEVERITY OF CONSEQUENCE	RISK	
		Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Storey	Area	Number of Classroom/ Rooms/ Bed Capacity	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design		Risk Score	Risk Category
Agdao Proper	day care center	MLSA	3	< 1 meter	2	65	1 classroom	concrete	good	No	2	6	Moderate
W. Aquino	day care center	MLSA	3	< 1 meter	2	80	1 classroom	concrete	good	No	2	6	Moderate
	BHS	MLSA	3	< 1 meter	2	40	N/A	Concrete	Poor	No	3	9	Moderate
P. Bangoy	day care center	MLSA	3	< 1 meter	2	80	1 classroom	mixed	good	No	2	6	Moderate
P. Bangoy	day care center	MLSA	3	< 1 meter	2	80	1 classroom	mixed	good	No	2	6	Moderate
P. Bangoy	Police Sub Station	HSA	3	< 1 meter	1	25	3 persons	wood	poor	no	4	12	very high
Centro Agdao	BHS	MLSA	2	< 1 meter	1	125	N/A	Concrete	Poor	No	3	6	Moderate
Leon Garcia	Police Sub Station	MLSA	2	< 1 meter	2	25	3 persons	wood	poor	no	4	8	very high
Leon Garcia	Police Outpost	MLSA	2	< 1 meter	1	8	6 persons	concrete	fair	no	4	8	very high
Leon Garcia	Secondary School	HSA	2	< 1 meter	2	1000	42 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Leon Garcia	Elementary School	HSA	2	< 1 meter	2	1807		Mixed	Needs repair	Yes	3	6	Moderate
Lapu-lapu	day care center	MLSA	2	< 1 meter	2	200	1 classroom	mixed	dilapidated	No	4	8	Moderate
Tomas Monteverde	Police Sub Station	HSA	2	< 1 meter	1	25	3 persons	wood	poor	no	4	8	very high
Ubalde Agdao	Police Outpost	MLSA	3	< 1 meter	1	6	4 persons	mixed	fair	no	4	12	very high
Gumalang	day care center	MLSA	4	> 1 meter	2	150	1 classroom	concrete	good	No	2	8	Moderate
Buhangin	day care center	MLSA	5	> 1 meter	2	150	1 classroom	concrete	good	No	2	10	Moderate
Mandug	day care center	MLSA	6	> 1 meter	2	400	1 classroom	concrete	good	No	2	12	Moderate
Sasa	day care center	MLSA	3	< 1 meter	2	120	1 classroom	concrete	good	No	2	6	Moderate
Sasa	day care center	MLSA	3	< 1 meter	2	80	1 classroom	concrete	good	No	2	6	Moderate
Sasa	day care center	MLSA	3	< 1 meter	2	200	1 classroom	concrete	good	No	2	6	Moderate
Tigatto	day care center	MLSA	6	> 1 meter	2	150	1 classroom	concrete	good	No	2	12	Moderate
Tigatto	day care center	MLSA	6	> 1 meter	2	150	1 classroom	concrete	good	No	2	12	Moderate
Tigatto	day care center	HSA	6	> 1 meter	2	150	1 classroom	concrete	good	No	2	12	Moderate
Waan	day care center	HSA	4	> 1 meter	2	40	1 classroom	mixed	good	No	2	8	Moderate
Lasang	day care center	HSA	6	> 1 meter	2	100	1 classroom	concrete	good	No	2	12	Moderate

Table CP– 17. Flood Risk to Critical Point Facilities

Barangay	Facility Type	HAZARD			EXPOSURE			VULNERABILITY			SEVERITY OF CONSEQUENCE	RISK	
		Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Storey	Area	Number of Classroom/ Rooms/ Bed Capacity	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design		Risk Score	Risk Category
Lasang	day care center	HSA	6	> 1 meter	2	110	1 classroom	concrete	good	No	2	12	Moderate
Lasang	Elementary School	MLSA	6	> 1 meter	3	21984	30 classrooms	Mixed	Needs repair	Yes	2	12	High
PANACAN	Barangay Hall	HSA	5	> 1 meter	2	143.704	N/A	concrete	fair	no	3	15	High
Bunawan	day care center	HSA	6	> 1 meter	2	150	1 classroom	concrete	good	No	2	12	Moderate
Calinan	day care center	HSA	5	> 1 meter	2	180	1 classroom	concrete	fair	No	2	10	Moderate
Calinan	day care center	MLSA	5	> 1 meter	2	150	1 classroom	concrete	good	No	2	10	Moderate
Calinan	day care center	MLSA	5	> 1 meter	2	300	1 classroom	concrete	good	No	2	10	Moderate
Calinan	day care center	HSA	5	> 1 meter	2	200	1 classroom	concrete	good	No	2	10	Moderate
Calinan	day care center	HSA	5	> 1 meter	2	160	1 classroom	mixed	fair	No	2	10	Moderate
Calinan	day care center	MLSA	5	> 1 meter	2	100	1 classroom	mixed	fair	No	2	10	Moderate
Calinan	day care center	MLSA	5	> 1 meter	2	60	1 classroom	mixed	fair	No	2	10	Moderate
Calinan	day care center	HSA	5	> 1 meter	2	120	1 classroom	mixed	fair	No	2	10	Moderate
Calinan	BHS	MLSA	5	> 1 meter	1	120	N/A	Mixed	Poor	No	3	15	High
Calinan	Secondary School	HSA	5	> 1 meter	4	6000	124 classrooms	Mixed	Needs repair	Yes	2	10	Moderate
Dominga	Elementary School	HSA	3	< 1 meter	3	20000	7 classrooms	Mixed	Needs repair	Yes	2	6	Moderate
Inayangan	Elementary School	HSA	3	< 1 meter	1	19900	7 classrooms	Mixed	Needs repair	Yes	2	6	Moderate
Lacson	Police Sub Station	MLSA	2	< 1 meter	1	25	3 persons	wood	poor	no	4	8	very high
Riverside	BHS	HSA	4	> 1 meter	1	173	N/A	Concrete	Fair	No	2	8	Moderate
Riverside	Elementary School	HSA	4	> 1 meter	1	16041	16 classrooms	Mixed	Needs repair	Yes	3	12	High
Saloy	Elementary School	HSA	4	> 1 meter	1	19241	10 classrooms	Mixed	Needs repair	Yes	2	8	Moderate
Tamugan	Elementary School	HSA	6	> 1 meter	1	20000	26 classrooms	Mixed	Needs repair	Yes	2	12	High

Table CP– 17. Flood Risk to Critical Point Facilities

Barangay	Facility Type	HAZARD			EXPOSURE			VULNERABILITY			SEVERITY OF CONSEQUENCE	RISK	
		Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Storey	Area	Number of Classroom/ Rooms/ Bed Capacity	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design		Risk Score	Risk Category
Sumimao	Elementary School	HSA	3	< 1 meter	1	18990	6 classrooms	Mixed	Needs repair	Yes	2	6	Moderate
Bago Aplaya	day care center	MLSA	5	> 1 meter	2	70	1 classroom	concrete	good	No	2	10	Moderate
Bago Aplaya	day care center	MLSA	5	> 1 meter	2	42	1 classroom	concrete	good	No	2	10	Moderate
Bago Gallera	day care center	MLSA	4	> 1 meter	2	52	1 classroom	concrete	good	No	2	8	Moderate
Bago Gallera	day care center	MLSA	4	> 1 meter	2	48	1 classroom	concrete	good	No	2	8	Moderate
Bucana	day care center	MLSA	4	> 1 meter	2	148	1 classroom	concrete	fair	No	2	8	Moderate
Bucana	day care center	MLSA	4	> 1 meter	2	120	1 classroom	concrete	fair	No	2	8	Moderate
Bucana	day care center	HSA	4	> 1 meter	2	100	1 classroom	concrete	fair	No	2	8	Moderate
Bucana	day care center	HSA	4	> 1 meter	2	150	1 classroom	concrete	fair	No	2	8	Moderate
Bucana	day care center	MLSA	4	> 1 meter	2	100	1 classroom	concrete	fair	No	2	8	Moderate
Bucana	day care center	MLSA	4	> 1 meter	2	85	1 classroom	mixed	fair	No	2	8	Moderate
Bucana	day care center	HSA	4	> 1 meter	2	150	1 classroom	concrete	fair	No	2	8	Moderate
Bucana	day care center	MLSA	4	> 1 meter	2	100	1 classroom	mixed	fair	No	2	8	Moderate
Bucana	day care center	HSA	4	> 1 meter	2	150	1 classroom	concrete	fair	No	2	8	Moderate
Bucana	SIR FS	MLSA	4	> 1 meter	2	155	12 personnel	mixed	poor	no	2	8	moderate
Bucana	Police Sub Station	HSA	4	> 1 meter	1	8	4 persons	concrete	fair	no	4	16	very high
Catalunan Grande	day care center	MLSA	3	< 1 meter	2	56	1 classroom	concrete	good	No	2	6	Moderate
Catalunan Pequeño	BHS	MLSA	3	< 1 meter	1	133	N/A	Concrete	Fair	No	2	6	Moderate
Ma-a	day care center	HSA	6	> 1 meter	2	56	1 classroom	concrete	good	No	2	12	Moderate
Ma-a	day care center	HSA	6	> 1 meter	2	250	1 classroom	concrete	good	No	2	12	Moderate
Ma-a	Police Sub Station	MLSA	6	> 1 meter	2	50	20 persons	mixed	fair	no	4	24	very high
Matina Aplaya	day care center	MLSA	6	> 1 meter	2	200	1 classroom	mixed	good	No	2	12	Moderate
Matina Aplaya	day care center	HSA	6	> 1 meter	2	40	1 classroom	concrete	good	No	2	12	Moderate

Table CP– 17. Flood Risk to Critical Point Facilities

Barangay	Facility Type	HAZARD			EXPOSURE			VULNERABILITY			SEVERITY OF CONSEQUENCE	RISK	
		Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Storey	Area	Number of Classroom/ Rooms/ Bed Capacity	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design		Risk Score	Risk Category
Matina Aplaya	day care center	MLSA	6	> 1 meter	2	75	1 classroom	concrete	poor	No	2	12	Moderate
Matina Aplaya	day care center	HSA	6	> 1 meter	2	40	1 classroom	concrete	good	No	2	12	Moderate
Matina Aplaya	day care center	HSA	6	> 1 meter	2	40	1 classroom	concrete	fair	No	2	12	Moderate
Matina Aplaya	Police Outpost	MLSA	6	> 1 meter	1	12	6 persons	concrete	fair	no	4	24	very high
Matina Aplaya	Elementary School	HSA	6	> 1 meter	1	620	7 classrooms	Mixed	Needs repair	Yes	4	24	High
Matina Crossing	Police Sub Station	MLSA	6	> 1 meter	1	20	8 persons	mixed	fair	no	4	24	very high
Matina Crossing	BHS	HSA	6	> 1 meter	1	21	N/A	Concrete	Fair	No	3	18	High
Matina Crossing	Secondary School	HSA	6	> 1 meter	4	66588 1	129 classroom	Mixed	Needs repair	Yes	2	12	High
Matina Crossing	Elementary School	HSA	6	> 1 meter	4	10737	98 classrooms	Mixed	Needs repair	Yes	3	18	High
Matina Pangil	day care center	HSA	6	> 1 meter	2	50	1 classroom	concrete	good	No	2	12	Moderate
Matina Pangil	Barangay Hall	MLSA	6	> 1 meter	3	208.00 75	N/A	concrete	fair	no	3	18	High
Talomo	day care center	HSA	6	> 1 meter	2	200	1 classroom	concrete	good	No	2	12	Moderate
Talomo	day care center	HSA	6	> 1 meter	2	120	1 classroom	concrete	good	No	2	12	Moderate
Talomo	day care center	MLSA	6	> 1 meter	2	50	1 classroom	concrete	good	No	2	12	Moderate
Talomo	day care center	MLSA	6	> 1 meter	2	40	1 classroom	concrete	good	No	2	12	Moderate
Talomo	day care center	HSA	6	> 1 meter	2	120	1 classroom	mixed	good	No	2	12	Moderate
Talomo	day care center	HSA	6	> 1 meter	2	80	1 classroom	concrete	good	No	2	12	Moderate
Talomo	day care center	MLSA	6	> 1 meter	2	40	1 classroom	concrete	good	No	2	12	Moderate
Talomo	day care center	MLSA	6	> 1 meter	2	30	1 classroom	mixed	good	No	2	12	Moderate
Talomo	Police Outpost	MLSA	6	> 1 meter	1	16	6 persons	concrete	fair	no	4	24	very high
Talomo	Police Outpost	HSA	6	> 1 meter	1	5	5 persons	wood	good	no	4	24	very high
Talomo	Elementary School	HSA	6	> 1 meter	1	15228	24 classrooms	Mixed	Needs repair	Yes	3	18	High

Table CP– 17. Flood Risk to Critical Point Facilities

Barangay	Facility Type	HAZARD			EXPOSURE			VULNERABILITY			SEVERITY OF CONSEQUENCE	RISK	
		Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Storey	Area	Number of Classroom/ Rooms/ Bed Capacity	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design		Risk Score	Risk Category
Talomo	Secondary School	MLSA	6	> 1 meter	4	1200	50 classrooms	Mixed	Needs repair	Yes	2	12	High
Marapangi	BHS	MLSA	6	> 1 meter	1	111	N/A	Concrete	Fair	No	3	18	High
Angalan	BHS	MLSA	2	< 1 meter	1	117	N/A	Concrete	Fair	No	3	6	Moderate
Balingaeng	BHS	MLSA	2	< 1 meter	1	63	N/A	Concrete	Fair	No	3	6	Moderate
Biao Guianga	BHS	MLSA	2	< 1 meter	1	72	N/A	Concrete	Fair	No	3	6	Moderate
Matina Biao	BHS	MLSA	2	< 1 meter	1	150	N/A	Concrete	Fair	No	3	6	Moderate
Mintal	Elementary School	HSA	5	> 1 meter	4	3167	81 classrooms	Mixed	Needs repair	Yes	2	10	Moderate
Tugbok Proper	Secondary School	HSA	6	> 1 meter	2	17000	37 classrooms	Mixed	Needs repair	Yes	2	12	High

LANDSLIDE RISK ASSESSMENT

The table below shows 223 structures are susceptible to landslide. Of the total number, eight (8) are under the category of very high in terms of severity of consequence, namely, day care centers (2), barangay health stations (3), elementary schools (2) and one secondary school. These structures need repair and retrofitting to withstand the occurrence of landslide in the area.

Table CP– 18 Landslide Risk to Critical Point Facilities

Barangay	Facility Type	HAZARD	EXPOSURE			VULNERABILITY				SEVERITY OF CONSEQUENCE	RISK	
		Landslide Susceptibility	Likelihood of Occurrence Score	Storey	Area	Number of Classroom/ Rooms/ Bed Capacity	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design		Risk Score	Risk Category
19-B	day care center	HSA	5	1	100	1 classroom	concrete	fair	No	2	10	Moderate
Tambobong	Elementary School	HSA	5	1	500	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Tambobong	Elementary School	HSA	5	1	20000	7 classroom	Mixed	Needs repair	Yes	0	0	High
Tambobong	Elementary School	MLSA	5	1	2000	20 classrooms	Mixed	Needs repair	Yes	0	0	High
Tambobong	Secondary School	MLSA	5	1	10000	6 classrooms	Mixed	Needs repair	Yes	0	0	High
Tambobong	BHS	MLSA	5	1	40	N/A	Mixed	Poor	No	4	20	High
Acacia	BHS	MLSA	2	1	35	N/A	Concrete	Fair	No	3	6	Moderate
Acacia	Secondary School	MLSA	2	1	1,248	17 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Buhangin	Elementary School	MLSA	5	2	8881	19 classroom	Mixed	Needs repair	Yes	0	0	High
Cabantian	Elementary School	MLSA	2	1	4,195	7 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Cabantian	Elementary School	MLSA	2	3	2,000	40 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Mandug	Elementary School	MLSA	2	1	2865	7 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Gatungan	BHS	HAS	2	1	65	N/A	Concrete	Fair	No	3	6	Moderate
Gatungan	Elementary School	MLSA	2	1	6623	7 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Mahayag	day care center	MLSA	3	1	100	1 classroom	concrete	fair	No	6	18	High
Mudiang	Elementary School	MLSA	2	1	10000	10 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Mudiang	BHS	MLSA	4	1	103	N/A	Concrete	Fair	No	2	8	Moderate

Table CP– 18 Landslide Risk to Critical Point Facilities

Barangay	Facility Type	HAZARD	EXPOSURE			VULNERABILITY				SEVERITY OF CONSEQUENCE	RISK	
		Landslide Susceptibility	Likelihood of Occurrence Score	Storey	Area	Number of Classroom/ Rooms/ Bed Capacity	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design		Risk Score	Risk Category
Tibungco	Elementary School	HSA	2	2	20831	29 classroom	Mixed	Needs repair	Yes	3	6	Moderate
Dominga	Elementary School	MLSA	2	1	20000	7 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Dominga	Elementary School	HSA	2	1	20000	4 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Inayangan	day care center	HSA	5	1	400	1 classroom	light	poor	No	2	10	Moderate
Inayangan	day care center	HSA	5	1	400	1 classroom	concrete	good	No	2	10	Moderate
Inayangan	day care center	HSA	5	1	600	1 classroom	mixed	good	No	2	10	Moderate
Inayangan	Elementary School	HSA	5	2	11880	17 classroom	Mixed	Needs repair	Yes	0	0	High
Inayangan	Secondary School	HSA	5	3	11200	6 classrooms	Mixed	Needs repair	Yes	0	0	High
Inayangan	Elementary School	HSA	5	1	10000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Inayangan	Elementary School	HSA	5	1	19900	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Lamanan	day care center	HSA	3	1	600	1 classroom	concrete	good	No	2	6	Moderate
Lamanan	day care center	HSA	3	1	200	1 classroom	concrete	good	No	2	6	Moderate
Lamanan	Elementary School	HSA	2	1	25000	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Lampianao	Elementary School	MLSA	2	1	20000	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Megkawayan	day care center	MLSA	5	1	250	1 classroom	concrete	good	No	2	10	Moderate
Megkawayan	day care center	MLSA	5	1	80	1 classroom	mixed	good	No	3	15	High
Megkawayan	Elementary School	MLSA	5	1	2580	15 Classrooms	Mixed	Needs repair	Yes	0	0	High
Megkawayan	Secondary School	MLSA	5	2	10000	21 Classrooms	Mixed	Needs repair	Yes	0	0	High
Pangyan	day care center	MLSA	3	1	60	1 classroom	light	poor	No	2	6	Moderate
Pangyan	Elementary School	HSA	2	1	25000	6 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Saloy	day care center	MLSA	3	1	300	1 classroom	light	poor	No	2	6	Moderate
Tamayong	day care center	MLSA	3	1	100	1 classroom	light	poor	No	2	6	Moderate
Tamayong	Elementary School	MLSA	2	1	20000	13 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Baganihan	Elementary	MLSA	5	1	3000	7 classrooms	Mixed	Needs repair	Yes	3	15	High
Bantol	Elementary School	MLSA	2	7	19000	7 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Bantol	Elementary School	MLSA	2	1	20000	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate

Table CP– 18 Landslide Risk to Critical Point Facilities

Barangay	Facility Type	HAZARD	EXPOSURE			VULNERABILITY				SEVERITY OF CONSEQUENCE	RISK	
		Landslide Susceptibility	Likelihood of Occurrence Score	Storey	Area	Number of Classroom/ Rooms/ Bed Capacity	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design		Risk Score	Risk Category
Buda	Secondary	MLSA	5	3	18000	20	Mixed	Needs repair	Yes	3	15	High
Buda	Elementary	HSA	5	1	1000	11	Mixed	Needs repair	Yes	3	15	High
Dalag	day care center	MLSA	3	1	150	1 classroom	concrete	good	No	2	6	Moderate
Dalag	Elementary School	HSA	2	9	2000	9	Mixed	Needs repair	Yes	3	6	Moderate
Dalag	Elementary School	MLSA	2	7	10000	7	Mixed	Needs repair	Yes	0	0	Moderate
Dalag	day care center	HSA	3	1	150	1 classroom	mixed	fair	No	2	6	Moderate
Datu Salumay	Elementary	MLSA	2	3	55000	8	Mixed	Needs repair	Yes	3	6	Moderate
Datu Salumay	Secondary	MLSA	2	1	55000	11	Mixed	Needs repair	Yes	0	0	Moderate
Datu Salumay	Elementary	MLSA	2	1	745	7	Mixed	Needs repair	Yes	0	0	Moderate
Datu Salumay	Elementary School	MLSA	2	1	60000	7	Mixed	Needs repair	Yes	0	0	Moderate
Gumitan	Elementary School	MLSA	5	1	20000	7	Mixed	Needs repair	Yes	3	15	High
Magsaysay	day care center	MLSA	4	1	255sq m.	1 classroom	light	fair	No	3	12	Moderate
Magsaysay	day care center	HSA	4	1	100sq m.	1 classroom	concrete	good	No	2	8	Moderate
Magsaysay	BHS	MLSA	5	1	72	N/A	Concrete	Poor	No	5	25	High
Magsaysay	Elementary School	MLSA	4	1	43056	8	Mixed	Needs repair	Yes	0	0	High
Malamba	Secondary School	MLSA	2	1	10000	15	Mixed	Needs repair	Yes	3	6	Moderate
Malamba	Elementary School	MLSA	2	1	30316	9	Mixed	Needs repair	Yes	0	0	Moderate
Malamba	Elementary School	MLSA	2	1	12000	7	Mixed	Needs repair	Yes	0	0	Moderate
Malamba	Elementary School	HSA	2	1	20000	7	Mixed	Needs repair	Yes	0	0	Moderate
Malamba	Elementary School	HSA	2	1	77730	7	Mixed	Needs repair	Yes	0	0	Moderate
Marilog	day care center	MLSA	6	1	500sq.m.	1 classroom	concrete	good	No	1	6	Moderate
Marilog	day care center	MLSA	6	1	200sq.m.	1 classroom	mixed	fair	No	1	6	Moderate
Marilog	day care center	MLSA	6	1	150sq.m.	1 classroom	mixed	fair	No	1	6	Moderate
Marilog	day care center	MLSA	6	1	400sq m.	1 classroom	light	fair	No	1	6	Moderate
Marilog	day care center	MLSA	6	1	100sq.m.	1 classroom	concrete	good	No	1	6	Moderate
Marilog	day care center	MLSA	6	1	150sq.m.	1 classroom	concrete	good	No	2	12	Moderate
Marilog	day care center	HSA	6	1	40sq m.	1 classroom	concrete	good	No	2	12	Moderate
Marilog	day care center	HSA	6	1	100sq m.	1 classroom	concrete	good	No	3	18	High
Marilog	day care center	HSA	6	1	150sq m.	1 classroom	mixed	good	No	3	18	High
Marilog	day care center	HSA	6	1	400sq m.	1 classroom	light	needsrepair	No	3	18	High

Table CP– 18 Landslide Risk to Critical Point Facilities

Barangay	Facility Type	HAZARD	EXPOSURE			VULNERABILITY				SEVERITY OF CONSEQUENCE	RISK	
		Landslide Susceptibility	Likelihood of Occurrence Score	Storey	Area	Number of Classroom/ Rooms/ Bed Capacity	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design		Risk Score	Risk Category
Marilog	day care center	HSA	6	1	500sq.m.	1 classroom	concrete	good	No	2	12	Moderate
Marilog	day care center	HSA	6	1	60sq.m.	1 classroom	concrete	good	No	2	12	Moderate
Marilog	day care center	HSA	6	1	120sq m.	1 classroom	mixed	good	No	2	12	Moderate
Marilog	day care center	HSA	6	1	300sq.m.	1 classroom	concrete	good	No	2	12	Moderate
Marilog	day care center	HSA	6	1	500sq.m.	1 classroom	concrete	good	No	2	12	Moderate
Marilog	day care center	HSA	6	1	288sq m.	1 classroom	concrete	good	No	1	6	Moderate
Marilog	day care center	HSA	6	1	300sq m.	1 classroom	light	poor	No	2	12	Moderate
Marilog	day care center	HSA	6	1	340sq m.	1 classroom	mixed	fair	No	2	12	Moderate
Marilog	day care center	HSA	6	1	168sq m.	1 classroom	light	good	No	1	6	Moderate
Marilog	Elementary School	HSA	5	1	70000	7 classrooms	Mixed	Needs repair	Yes	3	15	High
Marilog	Elementary School	MLSA	5	1	35703	7 classrooms	Mixed	Needs repair	Yes	4	20	High
Marilog	BHS	MLSA	4	1	143	N/A	Concrete	Fair	No	4	16	High
Marilog	Elementary School	MLSA	5	1	40012	13 classroom	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary	MLSA	5	1	11600	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	MLSA	5	1	1500	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	MLSA	5	1	3500	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	MLSA	5	1	5000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	MLSA	5	1	40000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	MLSA	5	1	40000	11 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	MLSA	5	1	2500	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Secondary School	MLSA	5	2	25890	12 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	MLSA	5	1	60000	10 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	MLSA	5	1	40000	15 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Secondary School	MLSA	5	2	21300	11 classrooms	Mixed	Needs repair	Yes	0	0	High

Table CP– 18 Landslide Risk to Critical Point Facilities

Barangay	Facility Type	HAZARD	EXPOSURE			VULNERABILITY				SEVERITY OF CONSEQUENCE	RISK	
		Landslide Susceptibility	Likelihood of Occurrence Score	Storey	Area	Number of Classroom/ Rooms/ Bed Capacity	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design		Risk Score	Risk Category
Marilog	Elementary School	MLSA	5	1	14000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	MLSA	5	1	10000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	HSA	5	1	10000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	MLSA	5	1	10590	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	MLSA	5	1	17000	8 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	MLSA	5	1	2000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	HSA	5	1	3500	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	HSA	5	1	20000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Marilog	Elementary School	MLSA	5	1	30000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Salaysay	Elementary School	MLSA	5	1	10000	7 classrooms	Mixed	Needs repair	Yes	3	15	High
Salaysay	Elementary School	MLSA	5	1	5000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Salaysay	Elementary School	MLSA	5	1	12500	8 classrooms	Mixed	Needs repair	Yes	0	0	High
Salaysay	Elementary School	MLSA	5	1	19994	11 classrooms	Mixed	Needs repair	Yes	0	0	High
Salaysay	Secondary School	MLSA	5	1	10000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Salaysay	Elementary School	MLSA	5	1	24000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Suawan	Elementary School	MLSA	5	1	40000	7 classrooms	Mixed	Needs repair	Yes	3	15	High
Suawan	Elementary School	HSA	5	1	20000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Suawan	day care center	HSA	5	1	96sq m.	1 classroom	mixed	good	No	2	10	Moderate
Suawan	day care center	HSA	5	1	300sq.m.	1 classroom	light	fair	No	2	10	Moderate
Suawan	day care center	HSA	5	1	300sq.m.	1 classroom	light	good	No	2	10	Moderate
Suawan	day care center	HSA	5	1	150sq m.	1 classroom	concrete	good	No	2	10	Moderate
Suawan	day care center	HSA	5	1	100sq m.	1 classroom	light	good	No	2	10	Moderate
Suawan	day care center	HSA	5	1	144sq m.	1 classroom	light	fair	No	3	15	High
Tamugan	day care center	MLSA	6	1	200sq.m.	1 classroom	concrete	good	No	3	18	High
Tamugan	day care center	MLSA	6	1	800sq.m.	1 classroom	concrete	good	No	2	12	Moderate
Tamugan	day care center	MLSA	6	1	200sq.m.	1 classroom	mixed	fair	No	2	12	Moderate
Tamugan	day care center	MLSA	6	1	100sq m.	1 classroom	concrete	good	No	3	18	High
Tamugan	day care center	MLSA	6	1	360sq m.	1 classroom	concrete	good	No	12	72	High
Tamugan	day care center	MLSA	6	1	70sq m.	1 classroom	light	poor	No	2	12	Moderate

Table CP– 18 Landslide Risk to Critical Point Facilities

Barangay	Facility Type	HAZARD	EXPOSURE			VULNERABILITY				SEVERITY OF CONSEQUENCE	RISK	
		Landslide Susceptibility	Likelihood of Occurrence Score	Storey	Area	Number of Classroom/ Rooms/ Bed Capacity	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design		Risk Score	Risk Category
Tamugan	day care center	MLSA	6	1	88sq m.	1 classroom	concrete	good	No	2	12	Moderate
Tamugan	day care center	MLSA	6	1	40sq m.	1 classroom	concrete	good	No	3	18	High
Tamugan	day care center	MLSA	6	1	40sq m.	1 classroom	light	needsrepair	No	3	18	High
Tamugan	day care center	MLSA	6	1	300sq m.	1 classroom	mixed	good	No	3	18	High
Tamugan	day care center	MLSA	6	1	100sq m.	1 classroom	light	fair	No	3	18	High
Tamugan	day care center	MLSA	6	1	100sq m.	1 classroom	light	fair	No	2	12	Moderate
Tamugan	Elementary School	HSA	6	1	2467	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Tamugan	Elementary School	MLSA	6	1	25000	6 classrooms	Mixed	Needs repair	Yes	0	0	High
Tamugan	Elementary School	MLSA	6	1	20000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Colosas	day care center	M	3	1	100	1 classroom	light	good	No	3	9	Moderate
Colosas	Elementary School	HSA	2	1	20000	7 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Colosas	Elementary School	MLSA	2	1	36000	14 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Colosas	Elementary School	HSA	2	1	36000	7 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Colosas	Secondary School	MLSA	2	1	17000	16 Classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Colosas	Elementary School	MLSA	2	1	11946	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Fatima	Barangay Hall	MLSA	4	2	740.2170 644	N/A	concrete	fair	no	2	8	Moderate
Fatima	Elementary School	MLSA	4	1	27048	8 classrooms	Mixed	Needs repair	Yes	3	12	High
Fatima	Secondary School	HSA	4	2	15000	10 classrooms	Mixed	Needs repair	Yes	4	16	High
Fatima	Elementary School	MLSA	4	1	10000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Fatima	Elementary School	MLSA	4	1	13000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Lumiad	Barangay Hall	MLSA	5	2	739.26	N/A	mixed	fair	no	3	15	High
Lumiad	Elementary School	MLSA	5	1	50000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Lumiad	BHS	HSA	2	1	77	N/A	Concrete	Fair	No	3	6	Moderate
Malabog	day care center	HSA	3	1	110	1 classroom	light	good	No	2	6	Moderate
Malabog	day care center	MLSA	3	1	100	1 classroom	mixed	good	No	2	6	Moderate
Malabog	day care center	MLSA	3	1	95	1 classroom	mixed	good	No	2	6	Moderate

Table CP– 18 Landslide Risk to Critical Point Facilities

Barangay	Facility Type	HAZARD	EXPOSURE			VULNERABILITY				SEVERITY OF CONSEQUENCE	RISK	
		Landslide Susceptibility	Likelihood of Occurrence Score	Storey	Area	Number of Classroom/ Rooms/ Bed Capacity	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design		Risk Score	Risk Category
Malabog	day care center	HSA	3	1	84	1 classroom	concrete	good	No	2	6	Moderate
Malabog	day care center	HSA	3	1	84	1 classroom	concrete	good	No	2	6	Moderate
Malabog	day care center	HSA	3	1	112	1 classroom	concrete	good	No	2	6	Moderate
Malabog	day care center	MLSA	3	1	84	1 classroom	concrete	good	No	2	6	Moderate
Malabog	day care center	MLSA	3	1	110	1 classroom	light	good	No	2	6	Moderate
Malabog	Elementary School	MLSA	2	1	17000	7 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Malabog	Elementary School	HSA	2	1	25000	6 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Malabog	Elementary School	HSA	2	1	40000	7 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Malabog	Elementary School	MLSA	2	1	14400	7 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Malabog	Secondary	MLSA	2	1	235	7 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Malabog	Elementary School	MLSA	2	1	1750	7 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Malabog	Elementary School	HSA	2	1	30000	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Malabog	Elementary School	MLSA	2	1	24740	18 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Malabog	Secondary School	MLSA	2	2	10000	20 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Malabog	Secondary School	MLSA	2	1	292	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Malabog	Elementary School	MLSA	2	1	20850	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Malabog	Elementary School	MLSA	2	1	3000	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Malabog	Elementary School	HSA	2	1	15540	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Malabog	Elementary School	MLSA	2	1	28682	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Malabog	Elementary School	MLSA	2	1	30000	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Mapula	Elementary School	HSA	2	1	4000	11 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Mapula	Elementary School	MLSA	2	1	20000	11 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Pandaitan	Secondary School	HSA	2	1	10000	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Pandaitan	Elementary School	HSA	2	1	2000	10 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Pandaitan	Elementary School	MLSA	2	1	40000	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Pandaitan	BHS	HSA	2	2	76	N/A	Concrete	Poor	No	3	6	Moderate

Table CP– 18 Landslide Risk to Critical Point Facilities

Barangay	Facility Type	HAZARD	EXPOSURE			VULNERABILITY				SEVERITY OF CONSEQUENCE	RISK	
		Landslide Susceptibility	Likelihood of Occurrence Score	Storey	Area	Number of Classroom/ Rooms/ Bed Capacity	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design		Risk Score	Risk Category
Pañalum	Elementary School	MLSA	2	1	10000	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Paradise Embac	Elementary School	HSA	2	1	25191	15 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Paradise Embac	Secondary School	HSA	2	2	1028	19 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Paradise Embac	day care center	HSA	3	1	130	1 classroom	concrete	good	No	2	6	Moderate
Paradise Embac	day care center	HSA	3	1	130	1 classroom	concrete	good	No	2	6	Moderate
Salapawan	Elementary School	HSA	2	1	20000	7 classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Salapawan	Elementary School	HSA	2	1	10000	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Sumimao	day care center	HSA	3	1	2160	1 classroom	mixed	good	No	2	6	Moderate
Sumimao	Elementary School	HSA	4	1	4000	7 classrooms	Mixed	Needs repair	Yes	3	12	High
Sumimao	Elementary School	HSA	4	1	18990	6 classrooms	Mixed	Needs repair	Yes	0	0	High
Sumimao	Secondary School	HSA	4	1	10000	14 Classrooms	Mixed	Needs repair	Yes	0	0	High
Tapak	day care center	MLSA	6	1	100	1 classroom	concrete	good	No	2	12	Moderate
Tapak	day care center	MLSA	6	1	84	1 classroom	concrete	good	No	2	12	Moderate
Tapak	day care center	MLSA	6	1	95	1 classroom	concrete	good	No	2	12	Moderate
Tapak	day care center	MLSA	6	1	85	1 classroom	concrete	good	No	3	18	High
Tapak	day care center	MLSA	6	1	84	1 classroom	mixed	good	No	2	12	Moderate
Tapak	day care center	MLSA	6	1	90	1 classroom	light	poor	No	2	12	Moderate
Tapak	Elementary School	MLSA	6	1	60000	7 classrooms	Mixed	Needs repair	Yes	3	18	High
Tapak	Elementary School	MLSA	6	1	60000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Tapak	Secondary School	MLSA	6	1	488	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Tapak	Elementary	MLSA	6	1	50000	7 classrooms	Mixed	Needs repair	Yes	0	0	High
Tapak	Elementary	MLSA	6	1	9000	11 classrooms	Mixed	Needs repair	Yes	0	0	High
Tapak	Secondary School	MLSA	6	1	410	7 classrooms	Mixed	Needs repair	Yes	0	0	High

Table CP– 18 Landslide Risk to Critical Point Facilities

Barangay	Facility Type	HAZARD	EXPOSURE			VULNERABILITY				SEVERITY OF CONSEQUENCE	RISK	
		Landslide Susceptibility	Likelihood of Occurrence Score	Storey	Area	Number of Classroom/ Rooms/ Bed Capacity	Wall Materials used	Existing Condition	Structure Employing Hazard Resistant Design		Risk Score	Risk Category
Langub	day care center	MLSA	4	1	200	1 classroom	concrete	good	No	2	8	Moderate
Langub	BHS	MLSA	2	1	90	N/A	Concrete	Fair	No	3	6	Moderate
Ma-a	day care center	HSA	4	1	85	1 classroom	concrete	good	No	2	8	Moderate
Ma-a	day care center	HSA	4	1	200	1 classroom	concrete	fair	No	2	8	Moderate
Magtuod	day care center	MLSA	5	1	150	1 classroom	light	poor	No	2	10	Moderate
Matina Crossing	Elementary School	MLSA	6	1	1000	8 classrooms	Mixed	Needs repair	Yes	3	18	High
Matina Crossing	Elementary School	MLSA	6	2	20000	14 classrooms	Mixed	Needs repair	Yes	3	18	High
Atan-awe	day care center	MLSA	3	1	150sq m.	1 classroom	mixed	good	No	2	6	Moderate
Atan-awe	Elementary School	HSA	2	1	10000	7 classroom	Mixed	Needs repair	Yes	3	6	Moderate
Baracatan	Elementary School	MLSA	2	1	5000	7 classroom	Mixed	Needs repair	Yes	0	0	Moderate
Bato	Elementary School	HSA	2	1	10000	8 classrooms	Mixed	Needs repair	Yes	4	8	Moderate
Daliaon Plantation	BHS	MLSA	2	1	101	N/A	Concrete	Fair	No	3	6	Moderate
Daliaon Plantation	Elementary School	MLSA	2	1	11156	12 Classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Daliaon Plantation	Elementary School	MLSA	2	1	227882000	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Eden	BHS	MLSA	2	1	62	N/A	Concrete	Fair	No	3	6	Moderate
Eden	Secondary School	MLSA	2	3	10000	23 Classrooms	Mixed	Needs repair	Yes	3	6	Moderate
Eden	Elementary School	MLSA	2	1	20000	13 Classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Sibulan	Elementary School	MLSA	2	1	20214	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Sibulan	Secondary School	MLSA	2	1	3218	7 classrooms	Mixed	Needs repair	Yes	0	0	Moderate
Tibuloy	BHS	MLSA	2	1	56	N/A	Concrete	Fair	No	3	6	Moderate
Tibuloy	Elementary School	MLSA	2	1	21115	10 Classrooms	Mixed	Needs repair	Yes	0	0	Moderate
New Carmen	BHS	MLSA	2	1	36	N/A	Concrete	Fair	No	3	6	Moderate
New Carmen	Elementary School	MLSA	2	1	15085	9 classrooms	Mixed	Needs repair	Yes	3	6	Moderate

MAJOR DECISION AREAS

The exposure of government structures to risks such as flooding and landslide is presented in this chapter. The identified risks cover structures and facilities utilized in the extension of social services thus, the creation of resilient communities will be realized when impacts of disaster are properly mitigated. One option available is by retrofitting of structures situated within areas identified to have an exposure of moderate to high risk to flood and landslide.

The transferring of social services structures will not be recommended since it will take away the access to service from the people in the community. Instead, structures will be refurbished to remain sturdy and withstand the occurrence of disasters at a certain degree in the future.

The table below is a summary of the government structures that are exposed to risks including the level of risks and type of facilities:

Table CP– 19. Summary of Government Structures Exposed to Risk, Davao City

Facility Type	FLOOD			LANDSLIDE		
	No. of Facilities	Risk Category		No. of Facilities	Risk Category	
		Moderate	High		Moderate	High
Barangay Hall	3	1	2	2	1	1
Barangay Health Station	13	10	3	13	10	3
Day Care Center	62	61	1	76	62	14
Elementary School	13	6	7	111	56	55
Police Outpost	5	0	5			
Police Sub-Station	7	0	7			
Secondary School	6	3	3	22	11	11
SIR Fire Station	1	1	0			

Of the total number of police sub-stations, 2 have very high risk exposure to flood belonging to Barangay Tomas Monteverde and Ubalde. Both structures are within urban areas and within Agdao District.

Based on the Climate Change and Disaster Risk Assessment undertaken, the following implications came out in the discussion when flooding occurs and unmitigated:

- Possible delayed response during emergency due to damaged structure
- Potential casualties during flood occurrence
- Potential damage to facilities, buildings and properties
- Disruption of services
- Displacement of students
- Increase in expenditures for repair or construction of facilities

The policy interventions recommended are:

- Rehabilitation and retrofitting of existing structure with hazard resilient design
- Construction of flood control projects like river/ seawalls, riverbank riprapping, and flood control gates and pumping stations
- Regular declogging of canals and other water ways
- Future construction of facilities and buildings should adopt hazard-resilient designs
- Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program)
- Strengthen community early warning system and disaster-preparedness activity in the community
- Establish service delivery networks

For the structures exposed to landslide, the following implications were arrived at in case landslide occurs in areas where structures are exposed:

- Potential destruction and damage to the facilities if heavy onslaught of landslide occurs.
- Probable delays in emergency response during landslides due to damages in structure.
- Possible disruption of basic services.
- Displacement of pupils.
- Increase in expenditures for repair and construction of facilities.
- Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design

To mitigate the implications of the occurrence of landslide, the following policy interventions are recommended:

- Rehabilitation and retrofitting of existing structure that employs hazard resilient design.
- Future construction of critical point facilities should follow standards for hazards resiliency.
- Forging partnerships with private and non-government organizations in construction of new facilities.
- Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards.

- Strengthen the coordination and service delivery system of agencies and LGU to the affected community.
- Enhance the early warning system and disaster preparedness of the communities.

These policy interventions recommended should be mainstreamed to form part of the city’s major and current efforts to fortify its level of resiliency, most especially, structures that operate as channels of social services that reach out to its people.

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
12	Talomo Proper	<p>The boundaries: north- Catalunan Pequeño south - Davao gulf east - Matina Crossing west - Bago Aplaya</p> <p>Locational Characteristics : Coastal/ Riverbank (along the talomo river on the east side)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 8 Day Care facilities that are moderately risk while 2 police outpost and 2 elementary schools are high risk to flood. • A total estimated area of 17, 129 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like river/ seawalls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
A	B	C	D	E	F
11	Brgy. 76-A	<p>The boundaries: north- Matina Crossing south - Davao gulf east - 40-D west - Matina Aplaya</p> <p>Locational Characteristics : Coastal (traverse by Davao river)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 9 Day Care facilities and 2 police stations are moderately risk to flood. • A total estimated area of 1,266 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard resilient design • Construction of flood control projects like river/ seawalls and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
10	Calinan	<p>The boundaries: north- Dacudao south - Wangan east - Talomo River west - Malagos</p> <p>Locational Characteristics : Inland and Riverside (along Talomo River and Cugan Creek)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 8 Day Care facilities and 1 elementary school are moderately risk while 1 health center is in high risk to flood. • A total estimated area of 7,390 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard resilient design • Construction of flood control projects like riverwalls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
A	B	C	D	E	E
7	Matina Apla-ya	<p>The boundaries: north- Matina Crossing south - Davao Gulf east - Bucana west - Talomo</p> <p>Locational Characteristics : Coastal (along Matina River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 5 Day Care facilities are moderately risk while 1 police outpost and 1 elementary school are high risk to flood. • A total estimated area of 1,027 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
4	Brgy. Leon Garcia	<p>The boundaries: north- Agdao proper south - Poblacion east - Davao Gulf west - Tomas Monteverde</p> <p>Locational Characteristics : Coastal (along Davao Gulf)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 2 elementary schools are moderately risk and 2 Police facilities (sub-station and outpost) are high risk to flood. • A total estimated area of 1,033 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like seawalls, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
A	B	C	D	E	E
4	Matina Crossing	<p>The boundaries: north- Matina Pangi south - Matina Aplaya east - Bucana west - Talomo Proper</p> <p>Locational Characteristics : Inland and Riverbank (traverse by Matina River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 Police sub-station, 1 health center, and 2 school facilities are high risk to flood. • A total estimated area of 676,659 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
3	Barangay 1-A	<p>The boundaries: north- 2-A south - 40-D east - 40-D & 39-D west - Davao River</p> <p>Locational Characteristics : Riverbank (along Davao River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 day care center, 1 barangay hall, and 1 health center are moderately risk to flood. • A total estimated area of 191.94 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like seawalls, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
3	Barangay 2-A	<p>The boundaries: north- 3-A south - 1-A east - 3-A west - Davao River</p> <p>Locational Characteristics : Riverbank (along Davao River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 day care center, 1 elementary school, and 1 health center are moderately risk to flood. • A total estimated area of 10,556 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls and riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
3	P. Bangoy	<p>The boundaries: north- Buhangin south - Agdao Proper east - W. Aquino west - Poblacion</p> <p>Locational Characteristics : Inland and Creek (Dacudao Avenue)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 2 day care facilities are moderately risk and 1 police station is high risk to flood. • A total estimated area of 185 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
3	Sasa	<p>The boundaries: north- Panacan south - Pampanga east - Davao Gulf west - Communal</p> <p>Locational Characteristics : Coastal (along Davao Gulf)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 3 day care facilities are moderately risk to flood. • A total estimated area of 400 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like seawalls and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
3	Tigatto	<p>The boundaries: north- Mandug south - Pampanga east - Davao Gulf west - Waan</p> <p>Locational Characteristics : Riverbank (along Davao River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 3 day care facilities are moderately risk to flood. • A total estimated area of 450 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like river-walls and riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
3	Lasang	<p>The boundaries: north- Davao del Norte south - Bunawan/ Davao Gulf east - Davao Gulf west - San Isidro</p> <p>Locational Characteristics : Coastal/ Riverbank (along Maduao River, Licanan River and Lasang River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 2 day care facilities are moderately risk and 1 elementary school facilities are high risk to flood. • A total estimated area of 22,194 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like river/ seawalls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
3	Ma-a	<p>The boundaries: north- Magtuod south - Matina Crossing/ Matina Aplaya east - Buhangin Proper west - Langub</p> <p>Locational Characteristics : Inland/ Riverbank (Davao River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 2 day care facilities are moderately risk and 1 police station are high risk to flood. • A total estimated area of 356 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls and riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
A	B	C	D	E	
2	Barangay 19-B	<p>The boundaries: north- Ma-a south - 12-B east - 18-B west - 10-A</p> <p>Locational Characteristics : Riverbank (along Davao River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 day care is moderately risk and 1 day care is high risk to flood. • A total estimated area of 200 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls and riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
2	W. Aquino	<p>The boundaries: north- Lanang south - Agdao Proper east - San Antonio west - Bangoy</p> <p>Locational Characteristics : Inland</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 day care and 1 health center are moderately risk to flood. • A total estimated area of 120 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
2	Riverside	<p>The boundaries: north- Talomo River south - Los Amigos east - Biao Guianga west - Wangan</p> <p>Locational Characteristics : Riverbank (along Talomo River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 health center is moderately risk and 1 elementary school facilities is high risk to flood. • A total estimated area of 16,214 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls and riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
2	Bago Aplaya	<p>The boundaries: north- Bago Gallera south - Davao Gulf east - Talomo Proper west - Dumoy</p> <p>Locational Characteristics : Coastal (along Davao Gulf and traverse by Bago creek)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 2 day care facilities are moderately risk to flood. • A total estimated area of 112 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like river/ seawalls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
2	Bago Gallera	<p>The boundaries: north- Catalunan Pequeño south - Dumoy east - Talomo Proper west - Baliok</p> <p>Locational Characteristics :Inland and creek (traverse by Bago creek and along by Libby creek)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 2 day care facilities are moderately risk to flood. • A total estimated area of 100 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like creek riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
2	Matina Pangli	<p>The boundaries: north- Langub south - Matina Crossing east - Maa west - Talomo Proper</p> <p>Locational Characteristics : Riverbank (traverse by Matina River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 day care facility is moderately risk and 1 baranagy hall is high risk to flood. • An estimated area of 258 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like river/ seawalls, riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	Barangy 8-A	<p>The boundaries: north- 9-A south - 5-A east - 7-A west - Davao River</p> <p>Locational Characteristics : Riverbank (along Davao River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 day care facility is moderately risk to flood. • An estimated area of 45 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls and riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
1	Barangay 15-B	<p>The boundaries: north- 16-B south - 27-C east - Agdao Proper west - 14-B</p> <p>Locational Characteristics : Inland</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 day care facility is moderately risk to flood. • An estimated area of 50 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	Brgy. 37-D	<p>The boundaries: north-33-D south - Davao Gulf east - 31-D west - 36-D</p> <p>Locational Characteristics :Inland</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 secondary school is moderately risk to flood. • An estimated area of 1816 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
1	Agdao Proper	<p>The boundaries: north- W. Aquino south - L. Garcia/ T. Monteverde east - Leon Garcia west - Poblacion</p> <p>Locational Characteristics : Inland</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 day care facility is moderately risk to flood. • An estimated area of 65 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
A	B	C	D	E	E
1	Centro Agdao	<p>The boundaries: north- R. Castillo south - L. Garcia/ T. Monteverde east - Davao Gulf west - San Antonio</p> <p>Locational Characteristics : Coastal (along Davao Gulf)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 health center facility is moderately risk to flood. • An estimated area of 125 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like seawalls and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
1	Lapu-lapu	<p>The boundaries: north- V. Hizon south - Centro east - Davao Gulf west - R. Castillo</p> <p>Locational Characteristics : Coastal (along Davao Gulf)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 day care facility is moderately risk to flood. • An estimated area of 200 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like seawalls and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	Tomas Monte Verde	<p>The boundaries: north- Agdao proper south - Poblacion east - L. Garcia west - Poblacion</p> <p>Locational Characteristics : Inland</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 police station facility is very high risk to flood. • An estimated area of 25 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
1	Ubalde Agdao	<p>The boundaries: north- Pampanga south - Centro east - Centro west - San Antonio</p> <p>Locational Characteristics : Inland</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 police outpost facility is very high risk to flood. • An estimated area of 6 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	Gumalang	<p>The boundaries: north- Tamugan/ Lamanan south - Wines/ Malagos east - Lacson west - Tamugan</p> <p>Locational Characteristics : Riverbank (Traverse by Wines creek and Gumalang Creek)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 day care facility is moderately risk to flood. • An estimated area of 150 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like creek riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
1	Buhangin	<p>The boundaries: north- Cabantian south - Agdao District east - Pampanga west - Tigatto</p> <p>Locational Characteristics : Inland</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 day care facility is moderately risk to flood. • An estimated area of 65 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	Mandug	<p>The boundaries: north- Acacia south - Tigatto east - Indangan west - New Carmen</p> <p>Locational Characteristics : Riverbank (along Davao River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 day care facility is moderately risk to flood. • An estimated area of 400 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls, riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
1	Waan	<p>The boundaries: north- Mandug south - Maa east - Tigatto west - Magtuod</p> <p>Locational Characteristics : Riverbank (along Davao River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 day care facility is moderately risk to flood. • An estimated area of 40 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls, riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
A	B	C	D	E	E
1	PANACAN	<p>The boundaries: north- Ilang south - Sasa east - Davao Gulf west - Indangan</p> <p>Locational Characteristics : Coastal (along Davao Gulf)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 barangay facility is high risk to flood. • An estimated area of 143.70 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like seawalls and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
1	Bunawan	<p>The boundaries: north- San Isidro/ Lasang south - Mahayag east - Davao Gulf west - San Isidro/ Mahayag</p> <p>Locational Characteristics : Coastal (along Davao Gulf and traverse by Licanan River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 day care facility is moderately risk to flood. • An estimated area of 150 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like seawalls and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	Dominga	<p>The boundaries: north- Sumimao south - Dacudao east - Dalagdag west - Lamanan</p> <p>Locational Characteristics : Riverbank (traverse by Kilatanan Creek and along Davao River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 elementary school facility is moderately risk to flood. • An estimated area of 20,000 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls, riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
1	Inayangan	<p>The boundaries: north- Mengkawayan south - Lamanan east - Sumimao west - Saloy</p> <p>Locational Characteristics : Inland/ Creek (along Lapunan River and Kilatanan Creek)</p> <p>Area classification: Rural</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 elementary school facility is moderately risk to flood. • An estimated area of 19,900 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like creek riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	Brgy. Lacson	<p>The boundaries: north- Lamanan south - Malagos east - Dacudao west - Gumalang</p> <p>Locational Characteristics : Riverbank (along Davao River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 police station facility is very high risk to flood. • An estimated area of 25 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls, riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
1	Saloy	<p>The boundaries: north- Malabog south - Lamanan east - megkayawan/ Inayangan west - Malabog</p> <p>Locational Characteristics : Inland (traverse by Lapunan River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 elementary school facility is moderately risk to flood. • An estimated area of 19,241 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
A	B	C	D	E	E
1	Tamugan	<p>The boundaries: north- Malamba south - Gumalang east - Lamanan west - Suawan</p> <p>Locational Characteristics : Riverbank (along Tamugan River and Pagan Creek)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 elementary school facility is high risk to flood. • An estimated area of 20,000 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls, riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
1	Sumimao	<p>The boundaries: north- Malabog south - Fatima east - Dominga/ Dalagdag west - Lamanan/ Megkawayan</p> <p>Locational Characteristics : Inland/ Creek (Kilatan Creek)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 elementary school facility is moderately risk to flood. • An estimated area of 18,990 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like creek riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
A	B	C	D	E	E
1	Catalunan Grande	<p>The boundaries: north- Tacunan south - Matina Pangi/ Catalunan Pequeño east - Langub west - Catalunan Pequeño/Mintal</p> <p>Locational Characteristics : Inland/ Riverbank (along Matina River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 day care facility is moderately risk to flood. • An estimated area of 56 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls, riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
1	Catalunan Pequeño	<p>The boundaries: north- Catalunan Grande south - Bago Gallera east - Catalunan Grande west - Bago Oshiro/ Sto. Niño</p> <p>Locational Characteristics : Inland/ Riverbank (along Talomo River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 health center facility is moderately risk to flood. • An estimated area of 133 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls, riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	Marapangi	<p>The boundaries: north- Bato south - Sirawan east - Crossing Bayabas west - Bayabas/ Catigan</p> <p>Locational Characteristics : Lipadas River</p> <p>Area classification: Rural</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 health center facility is high risk to flood. • An estimated area of 111 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls and riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
1	Angalan	<p>The boundaries: north- Balengaeng/ Los Amigos south - Manambulan east - Tugbok Proper/ Los Amigos west - tagakpan</p> <p>Locational Characteristics : Inland/ Riverbank (Talomo River tributary)</p> <p>Area classification: Rural</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 health center facility is moderately risk to flood. • An estimated area of 117 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	Balengaeng	<p>The boundaries: north- Wangan south - Angalan east - Los Amigos west - Tagakpan</p> <p>Locational Characteristics : Inland/ Creek (Talomo River tributary)</p> <p>Area classification: Rural</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 health center facility is moderately risk to flood. • An estimated area of 63 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls and riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
1	Biao Guianga	<p>The boundaries: north- Balengaeng south - Riverside east - Ula west - Biao Escuela</p> <p>Locational Characteristics : Inland</p> <p>Area classification: Rural</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 health center facility is moderately risk to flood. • An estimated area of 72 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls and riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	Matina Biao	<p>The boundaries: north- New Carmen south - Magtuod east - Tacunan west - Ula</p> <p>Locational Characteristics : Riverbank (traverse by Malogbok Creek)</p> <p>Area classification: Rural</p> <p>Expected Flood Depth: less than one meter</p>	<ul style="list-style-type: none"> • A total of 1 health center facility is moderately risk to flood. • An estimated area of 150 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls and riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
1	Mintal	<p>The boundaries: north- Tugbok Proper south - Bago Oshiro east - Sto. Niño west - Mulig Toril</p> <p>Locational Characteristics : Riverbank (traverse by Acliban Creek)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 elementary school facility is moderately risk to flood. • An estimated area of 3167 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls and riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 20 Issues Matrix Critical Point Facilities for Flood Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
A	B	C	D	E	F
1	Tugbok Proper	<p>The boundaries: north- Los Amigos south - Mintal east - Tacunan west - Manambulan/ Angalan</p> <p>Locational Characteristics : Riverbank (traverse by Talomo River and has tributary river)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 secondary school facility is high risk to flood. • An estimated area of 17,000 sq m in barangay is significantly affected by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls and riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities and buildings should adopt hazard-resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 21. Issues Matrix Critical Point Facilities for Landslide Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
43	<u>Marilog</u>	<p>Boundaries North: Malamba South: Salaysay East: Gumitan West: Magsaysay</p> <p>Area Classification: Rural</p> <p>Soil Classification: Miral Clay Loam</p>	<p>There are 43 identified critical point facilities that are susceptible to landslides in Marilog Proper area:</p> <ul style="list-style-type: none"> • 19 Day Care Centers, • 22 Elementary Schools, • 1 Secondary School, and • 1 Barangay Health Station <p>Among these facilities, 16 CPF are considered moderate risk while 27 CPF are categorized as high risk.</p> <p>Estimated Land Area of CPFs: 515,504 Sq. m.</p> <p>Moderate-Frequent landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. Possible disruption of basic services. • Displacement of pupils. Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
23	<u>Malabog</u>	<p>Boundaries North: Malamba South: Salaysay East: Gumitan West: Magsaysay</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>There are 23 identified critical point facilities that are susceptible to landslides in Malabog area:</p> <ul style="list-style-type: none"> • 8 Day Care Centers, • 12 Elementary Schools, and • 3 Secondary Schools <p>All of the CPFs are considered moderate risk.</p> <p>Estimated Land Area of CPFs: 244,741 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

Table CP– 21. Issues Matrix Critical Point Facilities for Landslide Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
15	<u>Tamugan</u>	<p>Boundaries North: Malamba South: Gumalang East: Lamanan West: Suawan</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>There are 15 identified critical point facilities that are susceptible to landslides in Tamugan area:</p> <ul style="list-style-type: none"> • 12 Day Care Centers, and • 3 Elementary Schools <p>Among these facilities, 5 CPF are considered moderate risk while 10 CPF are categorized as high risk.</p> <p>Estimated Land Area of CPFs: 47,467 Sq. m.</p> <p>Frequent landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
12	<u>Tapak</u>	<p>Boundaries North: Talaingod, Davao del Norte South: Colasas East: Mapula West: Malamba</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>There are 12 identified critical point facilities that are susceptible to landslides in Tapak area:</p> <ul style="list-style-type: none"> • 6 Day Care Centers, • 4 Elementary Schools, and • 2 Secondary Schools <p>Among these facilities, 5 CPF are considered moderate risk while 7 CPF are categorized as high risk.</p> <p>Estimated Land Area of CPFs: 179,538 Sq. m.</p> <p>Frequent landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

Table CP– 21. Issues Matrix Critical Point Facilities for Landslide Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
8	<u>Suawan</u>	<p>Boundaries North: Salaysay South: Tambobong East: Tamugan West: Dalag</p> <p>Area Classification: Rural</p> <p>Soil Classification: Miral Clay Loam</p>	<p>There are 8 identified critical point facilities that are susceptible to landslides in Suawan area:</p> <ul style="list-style-type: none"> • 6 Day Care Centers, and • 2 Elementary Schools <p>Among these facilities, 6 CPF are considered moderate risk while 2 CPF are categorized as high risk.</p> <p>Estimated Land Area of CPFs: 61,090 Sq. m.</p> <p>Moderate landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
7	<u>Inayangan</u>	<p>Boundaries North: Megkawayan South: Lamanan East: Sumimao West: Saloy</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>There are 7 identified critical point facilities that are susceptible to landslides in Inayangan area:</p> <ul style="list-style-type: none"> • 3 Day Care Centers, • 3 Elementary Schools, and • 1 Secondary School <p>Among these facilities, 3 CPF are considered moderate risk while 4 CPF are categorized as high risk.</p> <p>Estimated Land Area of CPFs: 54,380 Sq. m.</p> <p>Moderate landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
6	<u>Colosas</u>	<p>Boundaries North: Davao del Norte South: Davao del Norte East: Pandaitan West: Mapula</p> <p>Area Classification: Rural</p> <p>Soil Classification: Camansa Sandy Loam</p>	<p>There are 6 identified critical point facilities that are susceptible to landslides in Colosas area:</p> <ul style="list-style-type: none"> • 1 Day Care Center, • 4 Elementary Schools, and • 1 Secondary School <p>All CPF are considered moderate risk.</p> <p>Estimated Land Area of CPFs: 121,046 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
6	<u>Salaysay</u>	<p>Boundaries North: Magsaysay South: Dalag East: Marilog Proper West: North Cotabato</p> <p>Area Classification: Rural</p> <p>Soil Classification: Miral Clay Loam</p>	<p>There are 6 Elementary Shools that are susceptible to landslides in Salaysay area:</p> <p>All CPF are categorized as high risk.</p> <p>Estimated Land Area of CPFs: 81,494 Sq. m.</p> <p>Moderate landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
5	<u>Fatima</u>	<p>Boundaries North: Mabuhay South: Panabo City East: Lampiano West: Sumimao</p> <p>Area Classification: Rural</p> <p>Soil Classification: Camansa Sandy Loam</p>	<p>There are 5 identified critical point facilities that are susceptible to landslides in Fatima area:</p> <ul style="list-style-type: none"> • 1 Barangay Hall, • 3 Elementary Schools, and • 1 Secondary School <p>Among these facilities, 1 CPF is considered moderate risk while 4 CPF are categorized as high risk.</p> <p>Estimated Land Area of CPFs: 65,788 Sq. m.</p> <p>Occasional landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
5	<u>Malamba</u>	<p>Boundaries North: Bukidnon South: Marilog Proper East: Tapak West: Buda</p> <p>Area Classification: Rural</p> <p>Soil Classification: Miral Clay Loam</p>	<p>There are 5 identified critical point facilities that are susceptible to landslides in Malamba area:</p> <ul style="list-style-type: none"> • 4 Elementary Schools, and • 1 Secondary School <p>All CPF are considered moderate risk.</p> <p>Estimated Land Area of CPFs: 150,046 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
5	<u>Tambobong</u>	<p>Boundaries North: Tambobong/ Wines South: Cadalian East: Baguio Proper West: Mt. Apo Natural Park</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>There are 5 identified critical point facilities that are susceptible to landslides in Tambobong area:</p> <ul style="list-style-type: none"> • 4 Elementary Schools, and • 1 Barangay Health Station <p>All CPF are categorized as high risk.</p> <p>Estimated Land Area of CPFs: 32,540 Sq. m.</p> <p>Moderate landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
4	<u>Dalag</u>	<p>Boundaries North: Salaysay South: Baguio Proper East: Suawan West: North Cotabato</p> <p>Area Classification: Rural</p> <p>Soil Classification: Kidapawan Clay</p>	<p>There are 4 identified critical point facilities that are susceptible to landslides in Dalag area:</p> <ul style="list-style-type: none"> • 2 Elementary Schools, and • 2 Day Care Centers <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 12,300 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
4	<u>Datu Salumay</u>	<p>Boundaries North: Buda South: Marilog Proper East: Malamba West: Bukidnon</p> <p>Area Classification: Rural</p> <p>Soil Classification: Kidapawan Clay</p>	<p>There are 4 identified critical point facilities that are susceptible to landslides in Datu Salumay area:</p> <ul style="list-style-type: none"> • 3 Elementary Schools, and • 1 Secondary School <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 170,000 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
4	<u>Magsaysay</u>	<p>Boundaries North: Baganihan South: Salaysay East: Marilog Proper West: North Cotabato</p> <p>Area Classification: Rural</p> <p>Soil Classification: Miral Clay Loam</p>	<p>There are 4 identified critical point facilities that are susceptible to landslides in Magsaysay area:</p> <ul style="list-style-type: none"> • 1 Elementary Schools, • 1 Barangay Health Station, and • 1 Day Care Center <p>Among these facilities, 2 CPF are considered moderate risk while another 2 CPF are categorized as high risk.</p> <p>Estimated Land Area of CPFs: 43,483 Sq. m.</p> <p>Occasional landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
4	<u>Megkawayan</u>	<p>Boundaries North: Paquibato South: Inayangan East: Malabog/ Sumimao West: Saloy</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>There are 4 identified critical point facilities that are susceptible to landslides in Megkawayan area:</p> <ul style="list-style-type: none"> • 1 Elementary Schools, • 1 Barangay Health Station, and • 1 Day Care Center <p>Among these facilities, 2 CPF are considered moderate risk while another 2 CPF are categorized as high risk.</p> <p>Estimated Land Area of CPFs: 43,483 Sq. m.</p> <p>Moderate landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
4	<u>Pandaitan</u>	<p>Boundaries North: Carmen, davao del Norte South: Paradise Embac East: Paradise Embac West: Mapula/ Paradise Embac</p> <p>Area Classification: Rural</p> <p>Soil Classification: Cabantian Clay</p>	<p>There are 4 identified critical point facilities that are susceptible to landslides in Pandaitan area:</p> <ul style="list-style-type: none"> • 2 Elementary Schools, • 1 Secondary School, and • 1 Barangay Health Station <p>All CPF are considered as moderate risk.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
4	<u>Paradise Embac</u>	<p>Boundaries North: Pandaitan South: Carmen, davao del Norte East: Mabuhay West: Pañalum</p> <p>Area Classification: Rural</p> <p>Soil Classification: Cabantian Clay</p>	<p>There are 4 identified critical point facilities that are susceptible to landslides in Paradise Embac area:</p> <ul style="list-style-type: none"> • 1 Elementary Schools, • 1 Secondary School, and • 2 Day Care Centers <p>All CPF are considered as moderate risk.</p> <p>Estimated Land Area of CPFs: 26,479 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
4	<u>Sumimao</u>	<p>Boundaries North: Malabog South: Fatima East: Dominga/ Dalagdag West: Lamanan/ Megkawayan</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>There are 4 identified critical point facilities that are susceptible to landslides in Sumimao area:</p> <ul style="list-style-type: none"> • 2 Elementary Schools, • 1 Secondary School, and • 1 Day Care Center <p>Among these facilities, 1 CPF is considered moderate risk while 3 CPF are categorized as high risk.</p> <p>Estimated Land Area of CPFs: 35,150 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
3	<u>Daliaon Plantation</u>	<p>Boundaries North: Manuel Guianga South: Tungkalan East: Camansi West: Mt. Apo Natural Park</p> <p>Area Classification: Rural</p> <p>Soil Classification: San Miguel Clay Loam</p>	<p>There are 3 identified critical point facilities that are susceptible to landslides in Daliaon Plantation area:</p> <ul style="list-style-type: none"> • 2 Elementary Schools, and • Barangay Health Station <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 11,257 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
3	<u>Eden</u>	<p>Boundaries North: Tagluno South: Bayabas East: Bayabas West: Mt. Apo Natural Park</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>There are 3 identified critical point facilities that are susceptible to landslides in Lamanan area:</p> <ul style="list-style-type: none"> • 1 Elementary School, and • 2 Day Care Centers <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 25,800 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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	A	B	C	D	E
3	<u>Lamanan</u>	<p>Boundaries North: Inayangan South: Lacson/ Dacudao East: Dominga West: Riverbank</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>There are 3 identified critical point facilities that are susceptible to landslides in Eden area:</p> <ul style="list-style-type: none"> • 1 Elementary School, • 1 Secondary School, and • 1 Barangay Health Station <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 30,062 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
3	<u>Lumiad</u>	<p>Boundaries North: Mapula South: Salapawan/ Pandaitan/ Paradise Embac East: Paquibato/ Marilog West: Gumitan</p> <p>Area Classification: Rural</p> <p>Soil Classification: Camansa Sandy Loam</p>	<p>There are 3 identified critical point facilities that are susceptible to landslides in Lumiad area:</p> <ul style="list-style-type: none"> • 1 Elementary School, • 1 Barangay Hall, and • 1 Barangay Health Station <p>Among these facilities, 1 CPF is considered moderate risk while 2 CPF are categorized as high risk.</p> <p>Estimated Land Area of CPFs: 50,816 Sq. m.</p> <p>Moderate landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

Table CP– 21. Issues Matrix Critical Point Facilities for Landslide Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
2	<u>Acacia</u>	<p>Boundaries North: Gatungan South: Indangan East: Mudiang/ Tibungco West: New Valencia</p> <p>Area Classification: Rural</p> <p>Soil Classification: Cabantian and Faraon Clay</p>	<p>There are 1 Barangay Health Station and a Secondary School that have been identified as susceptible to landslides in Acacia Area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 35 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
2	<u>Atan-awe</u>	<p>Boundaries North: Baracatan South: Baracatan East: Davao del Sur West: Sibulan</p> <p>Area Classification: Rural</p> <p>Soil Classification: San Miguel Loam Clay</p>	<p>There are 1 Day Care Center and an Elementary School that have been identified as susceptible to landslides in Atan-awe Area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 10,150 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

Table CP– 21. Issues Matrix Critical Point Facilities for Landslide Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
2	<u>Bantol</u>	<p>Boundaries North: Malamba South: Malamba East: Malabog West: Marilog Proper</p> <p>Area Classification: Rural</p> <p>Soil Classification: Miral Clay Loam</p>	<p>There are 2 Elementary Schools that have been identified as susceptible to landslides in Bantol Area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 39,000 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
2	<u>Buda</u>	<p>Boundaries North: Bukidnon South: Datu Salumay East: Malamba West: North Cotabato</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>There 2 schools both elementary and secondary that have been identified as susceptible to landslide in Buda area.</p> <p>All CPF are categorized as high risk.</p> <p>Estimated Land Area of CPFs: 19,000 Sq. m.</p> <p>Moderate landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
2	<u>Cabantian</u>	<p>Boundaries North: Indangan South: Buhangin East: Sasa West: Tigatto</p> <p>Area Classification: Rural</p> <p>Soil Classification: Cabantian and Faraon Clay</p>	<p>There are 2 Elementary Schools that have been identified as susceptible to landslide in Cabantian area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 6,195 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
2	<u>Dominga</u>	<p>Boundaries North: Sumimao South: Dacudao East: Dalagdag West: Lamanan</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>There are 2 Elementary Schools that have been identified as susceptible to landslide in Dominga area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 40,000 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
2	<u>Gatungan</u>	<p>Boundaries North: Davao del Norte South: Mahayag East: Mahayag/ Tibungco West: Callawa</p> <p>Area Classification: Rural</p> <p>Soil Classification: Faraon Clay</p>	<p>There is an Elementary School and a Barangay Health Station that were identified as susceptible to landslide in Gatungan area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 6,688 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
2	<u>Langub</u>	<p>Boundaries North: Magtuod South: Matina Pangi East: Catalunan Grande West: Inland/ Riverbank</p> <p>Area Classification: Rural</p> <p>Soil Classification: Cabantian Clay/ Bolinao Clay</p>	<p>There is a Day Care Center and a Barangay Health Station that were identified as susceptible to landslide in Langub area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 290 Sq. m.</p> <p>Occasional landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
2	<u>Ma-a</u>	<p>Boundaries North: Magtuod South: Matina Crossing/ Matina Aplaya East: Buhangin Proper West: Langub</p> <p>Area Classification: Urban</p> <p>Soil Classification: Cabantian Clay</p>	<p>There are 2 Day Care Centers that were identified as susceptible to landslide in Ma-a area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 285 Sq. m.</p> <p>Occasional landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
2	<u>Mapula</u>	<p>Boundaries North: Salapawan/ Tapak South: Salapawan/ Pandaitan/ Paradise Embac East: Lumiad West: Gumitan</p> <p>Area Classification: Rural</p> <p>Soil Classification: Camansa Sandy Loam</p>	<p>There are 2 Elementary Schools that were identified as susceptible to landslide in Mapula area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 24,000 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
2	<u>Matina Crossing</u>	<p>Boundaries North: Matina Pangi South: Matina Aplaya East: Bucana West: Talomo Proper</p> <p>Area Classification: Urban</p> <p>Soil Classification: San Manuel Silty Clay Loam</p>	<p>There are 2 Elementary Schools that were identified as susceptible to landslide in Matina Crossing area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 21,000 Sq. m.</p> <p>Frequent landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
2	<u>Mudiang</u>	<p>Boundaries North: Tibungco South: Indangan East: Ilang West: Acacia</p> <p>Area Classification: Urban</p> <p>Soil Classification: Faraon Clay</p>	<p>A Barangay Health Station and an Elementary School were identified as susceptible to landslide in Mudiang area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 10,103 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
2	<u>New Car-men</u>	<p>Boundaries North: New Valencia South: Langub East: Mandua West: Biao Escuela</p> <p>Area Classification: Urban</p> <p>Soil Classification: Tugbok Clay</p>	<p>A Barangay Health Station and an Elementary School were identified as susceptible to landslide in Mudiang area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 15,121 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
2	<u>Pangyan</u>	<p>Boundaries North: Dalagdag South: Talandag East: Lampiano West: Dacudao</p> <p>Area Classification: Urban</p> <p>Soil Classification: Tugbok Clay</p>	<p>A Day Care Center and an Elementary School were identified as susceptible to landslide in Mudiang area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 25,060 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
2	<u>Salapawan</u>	<p>Boundaries North: Colosas South: Colosas East: Mapula/ Pandaitan West: Tapak/ Mapula</p> <p>Area Classification: Rural</p> <p>Soil Classification: Cabantian Clay</p>	<p>2 Elementary School were identified as susceptible to landslide in Mudiang area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 30,000 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
2	<u>Sibulan</u>	<p>Boundaries North: Mt. Apo Natural Park/ Catigan South: Davao del Sur East: Catigan/ Baracatan/ Atanawe West: Mt. Apo Natural Park</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>2 schools both Elementary and Secondary were identified as susceptible to landslide in Sibulan area.</p> <p>All CPF are categorized as moderate risk.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
2	<u>Tamayong</u>	<p>Boundaries North: Carmen/ Cadalian South: Mt. Apo Natural Park East: Sirib West: Carmen/ Mt. Apo Natural Park</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>A Day Care Center and an Elementary School were identified as susceptible to landslide in Tamayong area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 20,100 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
2	<u>Tibuloy</u>	<p>Boundaries North: Carmen/ Sirawan South: Baracatan East: Binugao West: Catigan/ Baracatan</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>A Barangay Health Station and an Elementary School were identified as susceptible to landslide in Tibuloy area.</p> <p>All CPF are categorized as moderate risk.</p> <p>Estimated Land Area of CPFs: 21,171 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

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Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	<u>19-B</u>	<p>Boundaries North: Ma-a South: 12-B East: 18-B West: 10-A</p> <p>Area Classification: Urban</p> <p>Soil Classification: Matina Clay, Cabantian Clay and Faraon Clay</p>	<p>A Day Care Center was identified as susceptible to landslide in Brgy. 19-B area.</p> <p>The CPF is categorized as moderate risk.</p> <p>Estimated Land Area of CPF: 100 Sq. m.</p> <p>Occasional landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
1	<u>Baganihan</u>	<p>Boundaries North: Datu Salumay South: Magsaysay East: Gumitan West: North Cotabato</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>An Elementary School was identified as susceptible to landslide in Baganihan area.</p> <p>The CPF is categorized as high risk.</p> <p>Estimated Land Area of CPF: 3,000 Sq. m.</p> <p>Moderate landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

Table CP– 21. Issues Matrix Critical Point Facilities for Landslide Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	<u>Baracatan</u>	<p>Boundaries North: Alambre South: Marapangi East: Lubogan West: Bayabas</p> <p>Area Classification: Rural</p> <p>Soil Classification: San Miguel Loam Clay</p>	<p>An Elementary School was identified as susceptible to landslide in Baracatan area.</p> <p>The CPF is categorized as moderate risk.</p> <p>Estimated Land Area of CPF: 5,000 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
1	<u>Bato</u>	<p>Boundaries North: Tibuloy South: Davao del Sur East: Binugao West: Ata-awe</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>An Elementary School was identified as susceptible to landslide in Bato area.</p> <p>The CPF is categorized as moderate risk.</p> <p>Estimated Land Area of CPF: 10,000 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

Table CP– 21. Issues Matrix Critical Point Facilities for Landslide Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	<u>Buhangin</u>	<p>Boundaries North: Cabantian South: Agdao District East: Pampanga West: Tigatto</p> <p>Area Classification: Urban</p> <p>Soil Classification: Cabantian and Faraon Clay</p>	<p>An Elementary School was identified as susceptible to landslide in Buhangin area.</p> <p>The CPF is categorized as high risk.</p> <p>Estimated Land Area of CPF: 8,881 Sq. m.</p> <p>Moderate landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
1	<u>Gumitan</u>	<p>Boundaries North: Malamba South: Bantol East: Mapula West: Marilog Proper</p> <p>Area Classification: Rural</p> <p>Soil Classification: Miral Clay Loam/San Miguel Clay Loam</p>	<p>An Elementary School was identified as susceptible to landslide in Gumitan area.</p> <p>The CPF is categorized as high risk.</p> <p>Estimated Land Area of CPF: 20,000 Sq. m.</p> <p>Moderate landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

Table CP– 21. Issues Matrix Critical Point Facilities for Landslide Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	<u>Lampianoa</u>	<p>Boundaries North: Dalagdag/ Fatima South: Callawa East: Fatima West: Pangyan</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>An Elementary School was identified as susceptible to landslide in Lampianoa area.</p> <p>The CPF is categorized as moderate risk.</p> <p>Estimated Land Area of CPF: 20,000 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
1	<u>Magtuod</u>	<p>Boundaries North: Waan South: Ma-a East: Waan West: Langub</p> <p>Area Classification: Rural</p> <p>Soil Classification: Miral Clay Loam/San Miguel Clay Loam</p>	<p>A Day Care Center was identified as susceptible to landslide in Magtuod area.</p> <p>The CPF is categorized as moderate risk.</p> <p>Estimated Land Area of CPF: 150 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

Table CP– 21. Issues Matrix Critical Point Facilities for Landslide Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	<u>Mahayag</u>	<p>Boundaries North: San Isidro South: Tibungco East: Bunawan West: Gatungan</p> <p>Area Classification: Urban Soil Classification: Faraon Clay</p>	<p>A Day Care Center was identified as susceptible to landslide in Mahayag area.</p> <p>The CPF is categorized as high risk.</p> <p>Estimated Land Area of CPF: 100 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
1	<u>Mandug</u>	<p>Boundaries North: Acacia South: Tigatto East: Indangan West: New Carmen</p> <p>Area Classification: Rural Soil Classification: Cabantian and Faraon Clay</p>	<p>A Elementary School was identified as susceptible to landslide in Mandug area.</p> <p>The CPF is categorized as moderate risk.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

Table CP– 21. Issues Matrix Critical Point Facilities for Landslide Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	<u>Paíalum</u>	<p>Boundaries North: Colosas/ Pandaitan South: Carmen, Davao del Norte East: Paradise Embac West: Mapula/ Paradise Embac</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>An Elementary School was identified as susceptible to landslide in Mahayag area.</p> <p>The CPF is categorized as moderate risk.</p> <p>Estimated Land Area of CPF: 10,000 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
1	<u>Saloy</u>	<p>Boundaries North: Malabog South: Lamanan East: Megkawayan/ Inayangan West: Malabog</p> <p>Area Classification: Rural</p> <p>Soil Classification: Tugbok Clay</p>	<p>A Day Care Center was identified as susceptible to landslide in Mahayag area.</p> <p>The CPF is categorized as moderate risk.</p> <p>Estimated Land Area of CPF: 300 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

Table CP– 21. Issues Matrix Critical Point Facilities for Landslide Hazard

Number of Facility	Decision Area/s	Description	Problems/ Hazards	Implications	Policy Interventions
	A	B	C	D	E
1	<u>Tibungco</u>	<p>Boundaries North: Mahayag South: Mudiang/ Ilang East: Davao Gulf West: Acacia</p> <p>Area Classification: Urban</p> <p>Soil Classification: Faraon Clay</p>	<p>An Elementary School was identified as susceptible to landslide in Mahayag area.</p> <p>The CPF is categorized as moderate risk.</p> <p>Estimated Land Area of CPF: 20,831 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

Table CP– 22. Critical Point Facilities Major Decision Areas

Number of Facility	Decision Areas	Description	Problems/ Hazards	Implications	Policy Interventions
MDA I					
District III					
43	<u>Marilog</u>	<p>Boundaries North: Malamba South: Salaysay East: Gumitan West: Magsaysay Area Classification: Rural Soil Classification: Miral Clay Loam</p>	<p>There are 43 identified critical point facilities that are susceptible to landslides in Marilog Proper area:</p> <ul style="list-style-type: none"> • 19 Day Care Centers, • 22 Elementary Schools, • 1 Secondary School, and • 1 Barangay Health Station <p>Among these facilities, 16 CPF are considered moderate risk while 27 CPF are categorized as high risk.</p> <p>Estimated Land Area of CPFs: 515,504 Sq. m.</p> <p>Moderate-Frequent landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
15	<u>Tamugan</u>	<p>Boundaries North: Malamba South: Gumalang East: Lamanan West: Suawan Area Classification: Rural Soil Classification: Tugbok Clay</p>	<p>There are 15 identified critical point facilities that are susceptible to landslides in Tamugan area:</p> <ul style="list-style-type: none"> • 12 Day Care Centers, and • 3 Elementary Schools <p>Among these facilities, 5 CPF are considered moderate risk while 10 CPF are categorized as high risk.</p> <p>Estimated Land Area of CPFs: 47,467 Sq. m.</p> <p>Frequent landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

Table CP– 22. Critical Point Facilities Major Decision Areas

Number of Facility	Decision Areas	Description	Problems/ Hazards	Implications	Policy Interventions
MDA I					
District III					
8	<u>Suawan</u>	<p>Boundaries North: Salaysay South: Tambobong East: Tamugan West: Dalag Area Classification: Rural Soil Classification: Miral Clay Loam</p>	<p>☒ There are 8 identified critical point facilities that are susceptible to landslides in Suawan area:</p> <ul style="list-style-type: none"> • 6 Day Care Centers, and • 2 Elementary Schools <p>☒ Among these facilities, 6 CPF are considered moderate risk while 2 CPF are categorized as high risk.</p> <p>☒ Estimated Land Area of CPFs: 61,090 Sq. m.</p> <p>☒ Moderate landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

Table CP– 22. Critical Point Facilities Major Decision Areas

Number of Facility	Decision Areas	Description	Problems/ Hazards	Implications	Policy Interventions
Number of Facility					
District II					
23	Malabog	<p>Boundaries North: Malamba South: Salaysay East: Gumitan West: Magsaysay Area Classification: Rural Soil Classification: Tugbok Clay</p>	<p>☒There are 23 identified critical point facilities that are susceptible to landslides in Malabog area:</p> <ul style="list-style-type: none"> • 8 Day Care Centers, • 12 Elementary Schools, and • 3 Secondary Schools <p>☒All of the CPFs are considered moderate risk.</p> <p>☒Estimated Land Area of CPFs: 244,741 Sq. m.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
12	Tapak	<p>Boundaries North: Talaingod, Davao del Norte South: Colasas East: Mapula West: Malamba Area Classification: Rural Soil Classification: Tugbok Clay</p>	<p>☒There are 12 identified critical point facilities that are susceptible to landslides in Tapak area:</p> <ul style="list-style-type: none"> • 6 Day Care Centers, • 4 Elementary Schools, and • 2 Secondary Schools <p>☒Among these facilities, 5 CPF are considered moderate risk while 7 CPF are categorized as high risk.</p> <p>☒Estimated Land Area of CPFs: 179,538 Sq. m.</p> <p>☒Frequent landslide incidents are experienced.</p>	<ul style="list-style-type: none"> • Potential destruction and damage to the facilities if heavy onslaught of landslide occurs. • Probable delays in emergency response during landslides due to damages in structure. • Possible disruption of basic services. • Displacement of pupils. • Increase in expenditures for repair and construction of facilities. • Reconstruction and/or retrofitting of existing critical point facility that employs hazard resilient design. 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard-resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.

Table CP– 22. Critical Point Facilities Major Decision Areas

Number of Facility	Decision Areas	Description	Problems/ Hazards	Implications	Policy Interventions
MDA III					
District I					
12	Talomo Proper	<p>The boundaries: north- Catalanun Pequeño south - Davao gulf east - Matina Crossing west - Bago Aplaya</p> <p>Locational Characteristics : Coastal/ Riverbank (along the talomo river on the east side)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 8 Day Care facilities that are moderately risk while 2 police outpost and 2 elementary schools are high risk to flood. • A total estimated area of 17, 129 sq m in barangay is significantly affect by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like river/ sea-walls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks
11	Brgy. 76-A	<p>The boundaries: north- Matina Crossing south - Davao gulf east - 40-D west - Matina Aplaya</p> <p>Locational Characteristics : Coastal (traverse by Davao river)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 9 Day Care facilities and 2 police stations are moderately risk to flood. • A total estimated area of 1,266 sq m in barangay is significantly affect by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like river/ sea-walls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Table CP– 22. Critical Point Facilities Major Decision Areas

Number of Facility	Decision Areas	Description	Problems/ Hazards	Implications	Policy Interventions
MDA III					
District I					
7	Matina Aplaya	<p>The boundaries: north- Matina Crossing south - Davao Gulf east - Bucana west - Talomo</p> <p>Locational Characteristics : Coastal (along Matina River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 5 Day Care facilities are moderately risk while 1 police out-post and 1 elementary school are high risk to flood. • A total estimated area of 1,027 sq m in barangay is significantly affect by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties <ul style="list-style-type: none"> • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like river/ seawalls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community
4	Matina Crossing	<p>The boundaries: north- Matina Pangi south - Matina Aplaya east - Bucana west - Talomo Proper</p> <p>Locational Characteristics : Inland and Riverbank (traverse by Matina River)</p> <p>Area classification: Urban</p> <p>Expected Flood Depth: more than one meter</p>	<ul style="list-style-type: none"> • A total of 1 Police sub-station, 1 health center, and 2 school facilities are high risk to flood. • A total estimated area of 676,659 sq m in barangay is significantly affect by flood 	<ul style="list-style-type: none"> • Possible delayed response during emergency due to damaged structure. • Potential casualties during flood occurrence. • Potential damage to facilities, buildings and properties <ul style="list-style-type: none"> • Disruption of services • Displacement of students • Increase in expenditures for repair or construction of facilities 	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard-resilient design • Construction of flood control projects like riverwalls, riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks

Map 3.10 Critical Points Facilities Major Decision Areas, Davao City

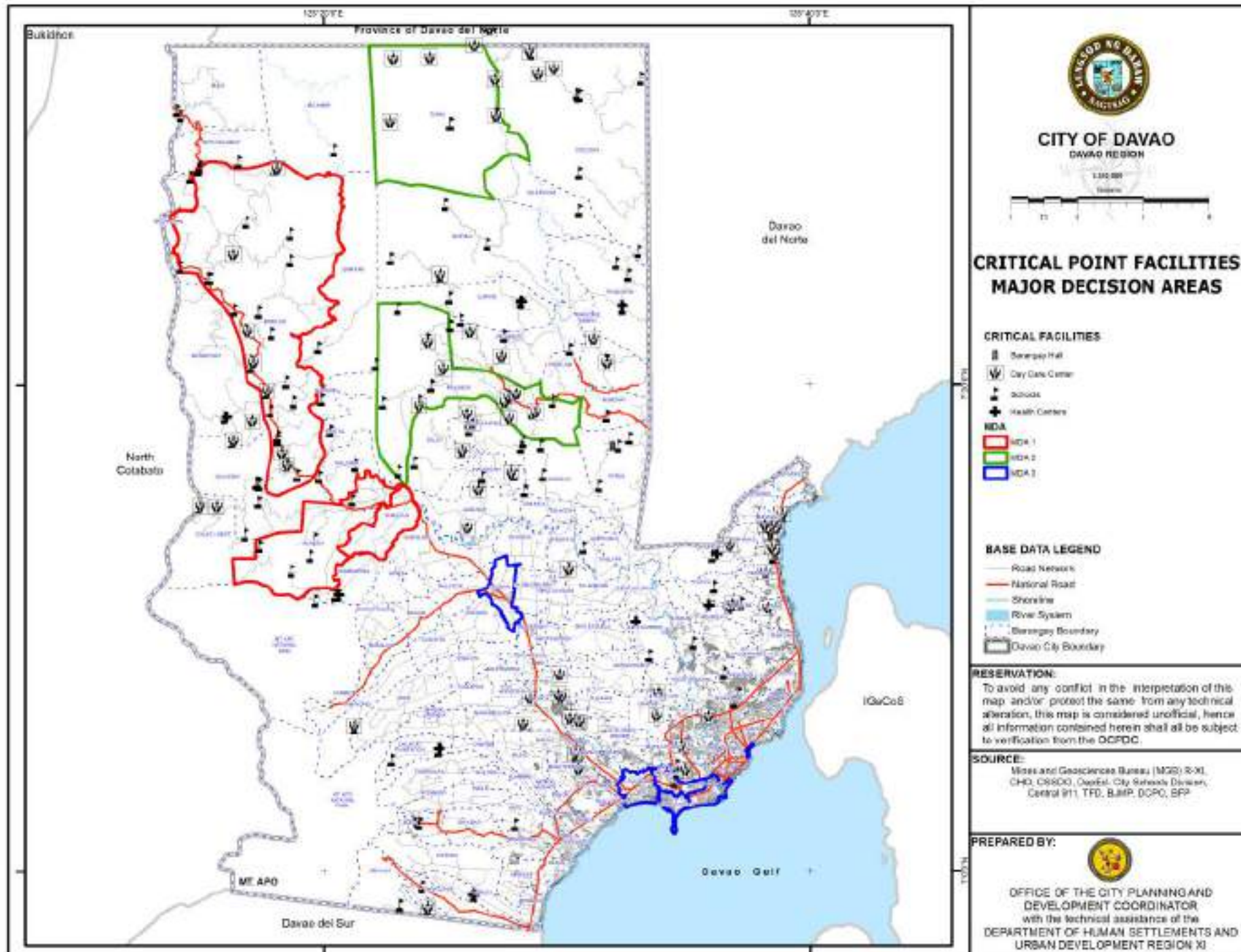


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Climate and Disaster Risk Assessment

Overview

Davao City's climate has changed through the years just as the Philippines has, being a direct recipient of global climate change phenomenon, necessitating systematic and comprehensive approach to address adaptation and mitigation measures. From experiencing zero typhoons, the city is now feeling, and reeling from, the impact of typhoons and low-pressure areas, resulting in floods, rain-induced landslides, and other geophysical and ecological hazard events.

With frequency of occurrences of these hazards, in Davao City and across Mindanao, the city is embarking on a roadmap to become a center of excellence in climate change adaptation and disaster-resiliency through the conduct of Climate and Disaster Risk Assessment (CDRA). This is pursuant to Republic Act No. 10121 or the National Disaster Risk Reduction and Management Act that mandates the national and local government units to mainstream disaster risk reduction and climate change in development processes. The processes involve policy formulation, socioeconomic development planning, budgeting, and governance, particularly in the areas of environment, agriculture, water, energy, health, education, poverty reduction, land use and urban planning, and public infrastructure and housing, among others.

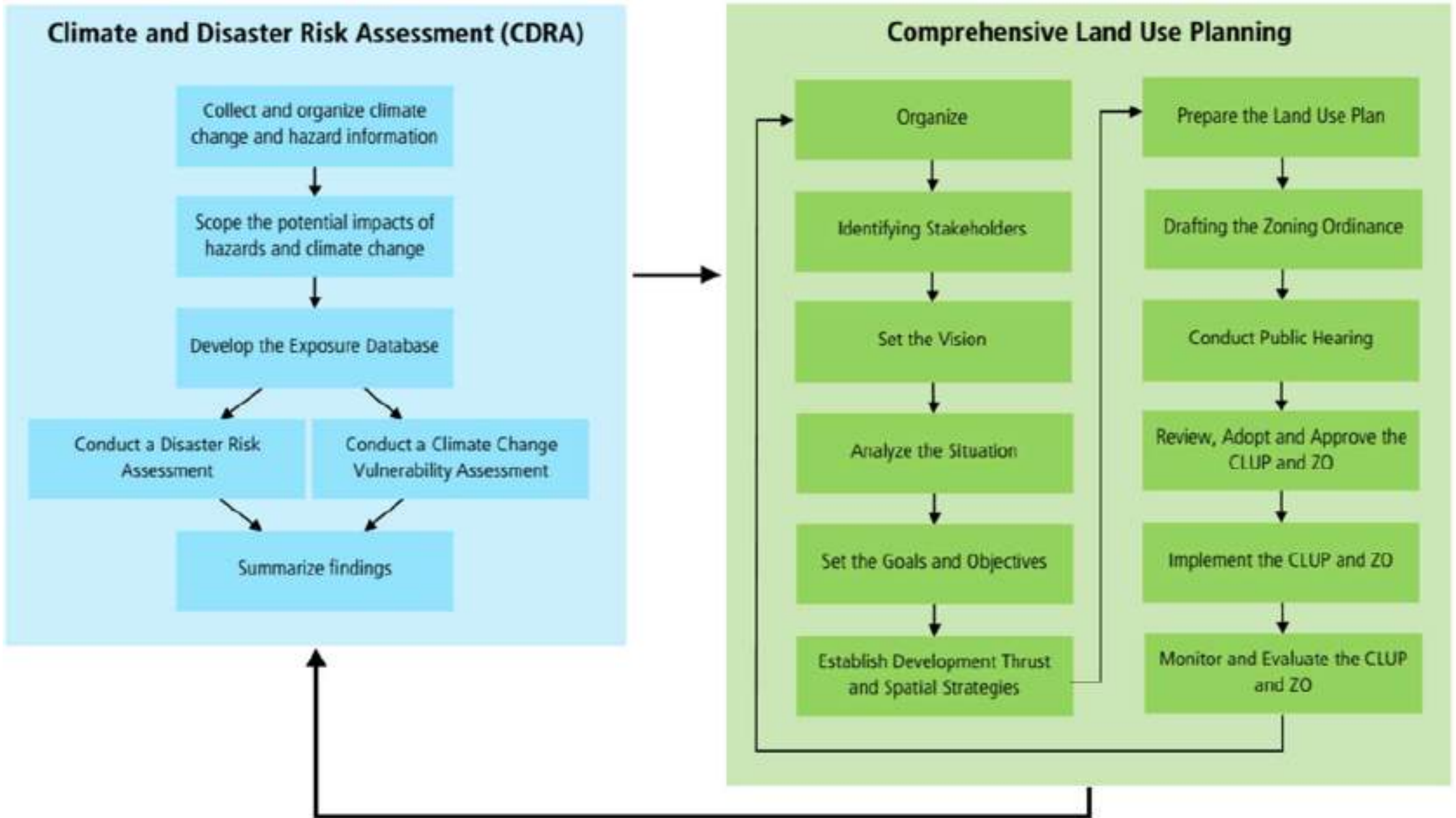
The CDRA is both risk assessment and climate change vulnerability assessment. Risk assessment involves identifying the nature and behaviour of the hazards to which the city is exposed to. Climate Change Vulnerability Assessment (CCVA) is a tool which identifies the vulnerabilities of the locality to the various climate related stimuli.

The combination of assessment tools, CCVA and DRA is used to determine key decision areas for climate change-adaptation and disaster risk-reduction. Both are intended to describe the elements exposed to hazards, identify underlying factors contributing to sensitivities and vulnerabilities, and assess their respective adaptive capacities to establish a measure of risks and vulnerabilities. The information derived from the process shall allow identification of spatial-based intervention policies and strategies to reduce risks and vulnerabilities.

This vital assessment, thus, enables the city government to craft the strategies, policies and regulations to reduce disaster in highly susceptible areas, identify safe areas for future urban development, and distinguish climate adaptation measures for the vulnerable population. All of these are buoyed upon the vision to continually make Davao City as globally liveable.

Under this CCVA and CDRA framework are measurements or estimates on: **degree of impact** of a certain identified climate change event (e.g. landslide, storm surge) to the residents in the place of occurrence, to the government facilities therein, and to the natural and other forms of resources in the place. This maybe measured or estimated as moderate to high; **adaptive capacity** or the ability of the population, facilities and resource to withstand or whether away a climate change event; and the **vulnerability index**, the amount or degree of exposure of these same elements to any of the climate change event.

Mainstreaming CDRA Framework into the CLUP



THE CDRA PROCESS

- STEP 1. Collection and organization of climate change and hazard information** - This process involves the identification of local climate change projections using Climate Change in the Philippines published by PAGASA in February 2011 as the basic source of the climate change information for local government units. The report contains the projections for 2020 and 2050 under the high, medium, and low emission scenarios. The outputs of this step include data on: Local Climate Change Projections; Inventory of natural hazards and their characteristics; Tabular compilation of historical disaster damage/loss data; and Summary barangay level hazard inventory matrix.
- Step 2. Scope the potential impacts of climate hazards and climate change on the LGU** - This involves the identification of the various climate stimuli, derived from climate trends, climate change projections and hazards that will likely affect the municipality and the generation of impact chains to identify the possible direct and indirect that may likely affect the various development sectors. The output include: summary of potential climate change impacts and potentially exposed units and impact chain diagrams.
- Step 3. Exposure Database Development** - The Exposure Database provides the baseline information pertaining to the elements at risk. It shall provide the location, vulnerability/sensitivity and adaptive capacity attributes of the exposed elements which are necessary information when conducting a climate change vulnerability assessment (CCVA) and disaster risk assessment (CDRA). The output include: exposure maps (population, urban use areas, natural resource-based production areas, critical points, lifeline/infrastructure) and attribute information on exposure, sensitivity/adaptive capacity of the various exposure units
- Step 4. Conduct of a Climate Change Vulnerability Assessment (CCVA)** -The Climate Change Vulnerability Assessment (CCVA) is a tool which assesses the vulnerabilities of the locality to the various climate related stimuli. The tool is qualitative in approach and hopes to determine the level of vulnerability of identified areas or sectors of interest. Vulnerability shall be based on the extent of exposure, and an analysis of the sensitivities and adaptive capacities. The output for this step include: CCVA summary decision areas and issues matrix; CCVA vulnerability assessment map.
- Step 5. Conduct a Disaster Risk Assessment (DRA)** - Disaster Risk Assessment (DRA) is a methodology to determine the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihood and the environment on which they depend. The outputs of this step include: DRA summary decision areas and issues matrix and risk maps.
- Step 6. Summarize Findings** – This process take place after identification of priority areas. Spatial development issues and concerns are analysed and policy interventions are provided to address and reduce risks at tolerable levels. The outputs of this step includes: Identified major decision areas and list of risk management and adaptation/mitigation measures.

Climate and Hazard Information

A. Climate Change Information

Davao City falls under the Type IV climate of the Coronas Climate Classification System of the Philippine Atmospheric, Geophysical and Astronomical Sciences Administration (PAGASA). This climate type connotes that the rainfall is almost evenly distributed throughout the year.

For this CCVA, the provincial data of Davao del Sur is utilized with climate trends that have baseline period from 1971 to 2000 and projected changes for the years 2036 to 2065 as indicated in the Climate Change in the Philippines publication of PAGASA (Table CD – 1 and Table CD – 2, see next page). A representative concentration pathway (RCP) scenario of 8.5, a simulation of a worst case scenario, is integrated in the climate trends to determine the climate outcome whenever there are high levels of greenhouse gas emissions. The simulation of worst case scenario provides an image on what are the mitigating measures that should be pursued and established to prevent high levels of greenhouse gas emissions.

The projected temperature data of Davao del Sur. By 2036 to 2065, Davao del Sur's temperature is projected to slightly increase to 30°C from 27.8°C particularly in the months of March, April, and May. On the other hand, Table CD – 2 shows the projected rainfall data of Davao del Sur, which is projected to increase to 584.4 millimeters (mm) by 2036 to 2065 from 494.1 mm in baseline period of 1971 to 2000 in the months of June, July, and August when *Habagat* or southwest monsoon prevails. The southwest monsoon usually brings heavy rainfall, which usually occurs in the months of June to October.

Table CD – 1. Seasonal Temperature Increases in 2036-2065 Under High-Range Emission Scenario, Davao del Sur

Province	Observed (in °C) 1971 – 2000				Scenario	Range	Projected (in °C) 2036-2065							
	DJF	MAM	JJA	SON			DJF (Dec-Jan-Feb)		MAM (Mar-Apr-May)		JJA (Jun-Jul-Aug)		SON (Sept-Oct-Nov)	
							% Change	Projected Value	% Change	Projected Value	% Change	Projected Value	% Change	Projected Value
Davao del Sur	26.9	27.8	26.9	27.1	High Emission (RCP 8.5)	Lower Bound	1.3	28.2	1.4	29.2	1.3	28.2	1.3	28.4
						Median	1.6	28.5	1.7	29.5	1.6	28.5	1.6	28.7
						Upper Bound	2.2	29.1	2.3	30.1	2.3	29.2	2.2	29.3

Source: PAGASA Final Observed Climate Trends and Projected Climate Change in the Philippines, 2018

Table CD – 2. Seasonal Rainfall Change in 2036-2065 Under High-Range Emission Scenario, Davao del Sur

Province	Observed (in mm) 1971 – 2000				Scenario	Range	Projected (in mm) 2036-2065							
	DJF	MAM	JJA	SON			DJF (Dec-Jan-Feb)		MAM (Mar-Apr-May)		JJA (Jun-Jul-Aug)		SON (Sept-Oct-Nov)	
							% Change	Projected Value	% Change	Projected Value	% Change	Projected Value	% Change	Projected Value
Davao del Sur	288.1	347.1	494.1	442.3	High Emission (RCP 8.5)	Lower Bound	-8.4	263.9	-6.4	325	-7.1	459.2	-14.4	378.5
						Median	-0.9	285.6	2.1	354.2	4.4	515.6	-10.1	397.8
						Upper Bound	16	334.2	15.4	400.4	18.3	584.4	8.2	478.4

Source: PAGASA Final Observed Climate Trends and Projected Climate Change in the Philippines, 2018

Climate Trends Using CLIRAM Tool

The Climate Information Risk Analysis Matrix (CLIRAM) provides the projected changes in climate variables, particularly for temperature and rainfall, in the mid-21st century, from 2036 to 2065 based on the 1971 to 2000 baseline period.

Under Table CD – 3 (see next page), the months of March, April, and May are projected to be the hottest season with temperature of 29°C to 30°C by 2036 to 2065 from 27.8°C in the same months of 1971 to 2000. The coldest season is expected to persist in the months of December to February with temperature of 28°C to 29.1°C from 26.9°C in the same months of 1971 to 2000.

Making projections under this matrix enables the city government to anticipate projected impacts, such as the emergence of heat-related illnesses and skin diseases during the hot season. The possibilities of water and power supply shortages, decline in crop production and rat infestation should also be factored in. Thus, it is an important information or more educational campaigns on health hazards, greening initiatives and activities, plant disaster-resilient crops and the promotion on the use of renewable energy.

Table CD – 4-A and 4-B (see pages 6 and 7) provides information on the projected seasonal rainfall in Davao del Sur for the mid-21st century. The highest possible future rainfall change will ensue during the southwest monsoon months, particularly from June to August, with an increase of 18.3% from 494.1 mm in the same months of 1971 to 2000.

The projected rainfall increase will lead to flood incidents especially in areas near waterways and sea level rise along coastal areas. This will further result to damage to properties, decrease in crop production pest and disease infestation, clogged canals, transport disruption, class suspension, loss of lives due to drowning, and decrease in economic activities. To avert adverse impact on people and properties, the local government shall ensure: 1) conduct of pre-emptive evacuation; 2) provide crop insurance for farmers; 3) plant climate-resilient varieties of crops; and 4) establish hazard resilient facilities. Residents in exposed communities shall be also required to wear protective gears as prevention to leptospirosis. Likewise, the City Health Office, shall ensure adequate supply of prophylaxis.

Table CD – 3. Accomplished CLIRAM of the Projected Seasonal Mean Temperature in Davao del Sur for the Mid-21st Century (2036-2065);

Season	Scenario	Range	Projected Change		Information About Patterns of Change	Potential Impacts	Adaptation Options
			Change in °C	Projected Seasonal Mean Temperature (°C)			
December -January - February (DJF) Observed baseline=26.9	High Emission (RCP 8.5)	Lower Bound	1.3	28.2	Coldest Season 28.2 - 29.1	<ul style="list-style-type: none"> Exposure to respiratory infections Decrease in yield/ Production 	<ul style="list-style-type: none"> Intensify Information, Education Campaign on all health hazards Expand immunization coverage on all ages (pneumonia, flu, measles) Planting of disaster-resilient crops Use of renewable energy
		Median	1.6	28.5			
		Upper Bound	2.2	29.1			
March - April - May (MAM) Observed baseline = 27.8	High Emission (RCP 8.5)	Lower Bound	1.4	29.2	Hottest Season 29.2 - 30.1	<ul style="list-style-type: none"> Decrease in yield/production due to crop damage Increase in the usage of electricity (more usage of cooling fans and air-condition units) Possible water and power shortage Rat Infestation Coral reef bleaching Increase in fuel consumption 	<ul style="list-style-type: none"> Strict enforcement of 10% green spaces Increase urban greening activity Crop rotation (change in planting season) Encourage the use of energy-efficient appliances Encourage the use of fuel-efficient vehicles Encourage vertical or containerized gardening
		Median	1.7	29.5			
		Upper Bound	2.3	30.1			
June - July - August (JJA) Observed baseline = 26.9	High Emission (RCP 8.5)	Lower Bound	1.3	28.2	28.2 - 29.2	<ul style="list-style-type: none"> Exposure to respiratory infections Decrease in yield/ Production 	<ul style="list-style-type: none"> Intensify Information, Education Campaign on all health hazards Expand immunization coverage on all ages (pneumonia, flu, measles) Planting of disaster-resilient crops Use of renewable energy
		Median	1.6	28.5			
		Upper Bound	2.3	29.2			
September - October - November (SON) = 27.1	High Emission (RCP 8.5)	Lower Bound	1.3	28.4	28.4 - 29.3	<ul style="list-style-type: none"> Decrease in yield/production due to crop damage Increase in the usage of electricity (more usage of cooling fans and air-condition units) Possible water and power shortage Rat Infestation Coral reef bleaching Increase in fuel consumption 	<ul style="list-style-type: none"> Strict enforcement of 10% green spaces Increase urban greening activity Crop rotation (change in planting season) Encourage the use of energy-efficient appliances Encourage the use of fuel-efficient vehicles Encourage vertical or containerized gardening

Source: PAGASA Final Observed Climate Trends and Projected Climate Change in the Philippines, 2018

**Table CD – 4A. Accomplished CLIRAM of the Projected Seasonal Total Rainfall in Davao del Sur for the Mid-21st Century (2036-2065);
Baseline Period: 1971-2000**

Season	Scenario	Range	Projected Change		Projected Seasonal Rainfall Amount (mm)	Information about patterns of change	Potential Impacts	Adaptation Options
			Percent (%)	Rainfall amount (mm)				
December-January-February (DJF) Observed baseline = 288.1	High Emission (RCP 8.5)	Lower Bound	-8.4	-24.2	263.9	Slight decrease in rainfall amount	-	-
		Median	-0.9	-2.5	285.6	Minimal to no change in rainfall amount	-	-
		Upper Bound	16	46.1	334.2	The highest possible future rainfall change during the Northeast Monsoon shows an increase of 16%.	Occurrence of floods in areas near waterways, landslide and possible sea level rise in coastal barangays/communities, which will result to: > damage to properties > decrease in crop production > pest and disease infestation > clogged canals > transport disruption > class suspension	> Conduct pre-emptive evacuation > Provision crop insurance > Empower farmers by enrolling them in Farmer-Field School > Introduce climate-resilient varieties of crops > Build hazard-resistant facilities. > Require communities to wear protective gears as prevention to leptospirosis > Ensure supply of prophylaxis
March - April - May (MAM) Observed baseline = 347.1	High Emission (RCP 8.5)	Lower Bound	-6.4	-22.1	325	Slight decrease in rainfall amount	-	-
		Median	2.1	7.1	354.2	Slight increase in rainfall amount	-	-
		Upper Bound	15.4	53.3	400.4	The highest possible future rainfall change during the Northeast Monsoon shows an increase of 15.4%.	Occurrence of floods in areas near waterways, landslide and possible sea level rise in coastal barangays/communities, which will result to: > damage to properties > decrease in crop production > pest and disease infestation > clogged canals > transport disruption > class suspension > decrease in economic activities	> Conduct pre-emptive evacuation > Farmers should be insured with risk financing programs/crop insurance > Empower farmers by enrolling them in Farmer-Field School > Introduce climate-resilient varieties of crops > Build hazard-resistant facilities. > Require communities to wear protective gears to leptospirosis > Ensure supply of prophylaxis

Source: PAGASA Final Observed Climate Trends and Projected Climate Change in the Philippines, 2018

**Table CD – 4C. Accomplished CLIRAM of the Projected Seasonal Total Rainfall in Davao del Sur for the Mid-21st Century (2036-2065);
Baseline Period: 1971-2000**

Season	Scenario	Range	Projected Change		Projected Seasonal Rainfall Amount (mm)	Information about patterns of change	Potential Impacts	Adaptation Options
			Percent (%)	Rainfall amount (mm)				
June - July - August (JJA) Observed baseline = 494.1	High Emission (RCP 8.5)	Lower Bound	-7.1	-34.9	459.2	Slight decrease in rainfall amount	-	-
		Median	4.4	21.5	515.6	Slight increase in rainfall amount	-	-
		Upper Bound	18.3	90.3	584.4	The highest possible future rainfall change during South-west Monsoon shows an increase of 18.3%. This is the highest percent change among the four seasons.	Occurrence of floods in areas near waterways, landslide and possible sea level rise in coastal barangays/communities, which will result to: <ul style="list-style-type: none"> > damage to properties > decrease in crop production > pest and disease infestation > clogged canals > transport disruption > class suspension > possible loss of lives due to drowning 	<ul style="list-style-type: none"> > Conduct pre-emptive evacuation > Provision crop insurance > Empower farmers by enrolling them in Farmer-Field School > Introduce climate-resilient varieties of crops > Build hazard-resistant facilities. > Require communities to wear protective gears as prevention to leptospirosis > Ensure supply of prophylaxis

Source: PAGASA Final Observed Climate Trends and Projected Climate Change in the Philippines, 2018

**Table CD – 4D. Accomplished CLIRAM of the Projected Seasonal Total Rainfall in Davao del Sur for the Mid-21st Century (2036-2065);
Baseline Period: 1971-2000**

Season	Scenario	Range	Projected Change		Projected Seasonal Rainfall Amount (mm)	Information about patterns of change	Potential Impacts	Adaptation Options
			Percent (%)	Rainfall amount (mm)				
September - October - November (SON) = 442.3	High Emission (RCP 8.5)	Lower Bound	-14.4	-63.8	378.5	The rainfall amount is projected to be the lowest at -63.8% due to incoming Northeast Monsoon.	Possible dry season that will result to: >occurrence of health problems (e.g., heat stroke, dengue) >pest infestation > decrease in economic activities > power loss from hydroelectric plants	> Install water reservoir and irrigation systems > Strict implementation of Rainwater Catchment Ordinance > Ensure stable water supply > Intensify vaccination program >Introduce drought-resistant crops >No obstruction of structures above waterways >Strict implementation of Proper Environmental Sanitation Policies
		Median	-10.1	-44.5	397.8	Notable decrease in rainfall amount	-	-
		Upper Bound	8.2	36.1	478.4	Slight increase in rainfall amount	Occurrence of floods, which will result to: > damage to properties > decrease in crop production > pest and disease infestation > clogged canals > transport disruption > class suspension > decrease in economic activities	> Conduct pre-emptive evacuation >Farmers should be insured with risk financing programs/crop insurance > Empower the farmers > Plant climate-resilient crops >Build hazard-resistant facilities. >Require communities to wear protective gears to leptospirosis >Ensure supply of prophylaxis

Source: PAGASA Final Observed Climate Trends and Projected Climate Change in the Philippines, 2018

**Table CD – 4B. Accomplished CLIRAM of the Projected Seasonal Total Rainfall in Davao del Sur for the Mid-21st Century (2036-2065);
Baseline Period: 1971-2000**

Season	Scenario	Range	Projected Change		Projected Seasonal Rainfall Amount (mm)	Information about patterns of change	Potential Impacts	Adaptation Options
			Percent (%)	Rainfall amount (mm)				
December-January-February (DJF) Observed baseline = 288.1	High Emission (RCP 8.5)	Lower Bound	-8.4	-24.2	263.9	Slight decrease in rainfall amount	-	-
		Median	-0.9	-2.5	285.6	Minimal to no change in rainfall amount	-	-
		Upper Bound	16	46.1	334.2	The highest possible future rainfall change during the Northeast Monsoon shows an increase of 16%.	Occurrence of floods in areas near waterways, landslide and possible sea level rise in coastal barangays/communities, which will result to: > damage to properties > decrease in crop production > pest and disease infestation > clogged canals > transport disruption > class suspension	> Conduct pre-emptive evacuation > Provision crop insurance > Empower farmers by enrolling them in Farmer-Field School > Introduce climate-resilient varieties of crops > Build hazard-resistant facilities. > Require communities to wear protective gears as prevention to leptospirosis > Ensure supply of prophylaxis
March - April - May (MAM) Observed baseline = 347.1	High Emission (RCP 8.5)	Lower Bound	-6.4	-22.1	325	Slight decrease in rainfall amount	-	-
		Median	2.1	7.1	354.2	Slight increase in rainfall amount	-	-
		Upper Bound	15.4	53.3	400.4	The highest possible future rainfall change during the Northeast Monsoon shows an increase of 15.4%.	Occurrence of floods in areas near waterways, landslide and possible sea level rise in coastal barangays/communities, which will result to: > damage to properties > decrease in crop production > pest and disease infestation > clogged canals > transport disruption > class suspension > decrease in economic activities	> Conduct pre-emptive evacuation > Farmers should be insured with risk financing programs/crop insurance > Empower farmers by enrolling them in Farmer-Field School > Introduce climate-resilient varieties of crops > Build hazard-resistant facilities. > Require communities to wear protective gears to leptospirosis > Ensure supply of prophylaxis

Source: PAGASA Final Observed Climate Trends and Projected Climate Change in the Philippines, 2018

Hazard Maps

Davao City is susceptible to five different hazards such as flood, landslide, storm surge, liquefaction, and earthquake. Of the hazards, 75% or three of every four barangays, in Davao City are vulnerable to flood especially in areas along the Davao Gulf, Davao River, and other waterways. The areas are plotted in the hazard maps. Below are the details of the hazard maps:

Flood Map

A total of 142 barangays of the city are highly susceptible to flood (Flood Susceptibility Map, see page 9). These include the commonly flooded areas such as Matina Pangi, Matina Aplaya and Tigatto.

Landslide Map

A total of 99, or 54.39%, of the city's barangays are highly susceptible to landslides (Landslide see page 10). They include Baganihan, Mandug, Matina Crossing, Matina Pangi and Megkawayan.

Storm Surge Map

Of the 182 barangays, 41 or 22.52% of the barangays may be submerged by up to five-meter storm surge notably those close to the coast (Storm Surge Map, see page 11). The extent of the potential storm surge varies per area. A certain barangay may experience a storm surge with a height of two (2) meters up to five (5) meters.

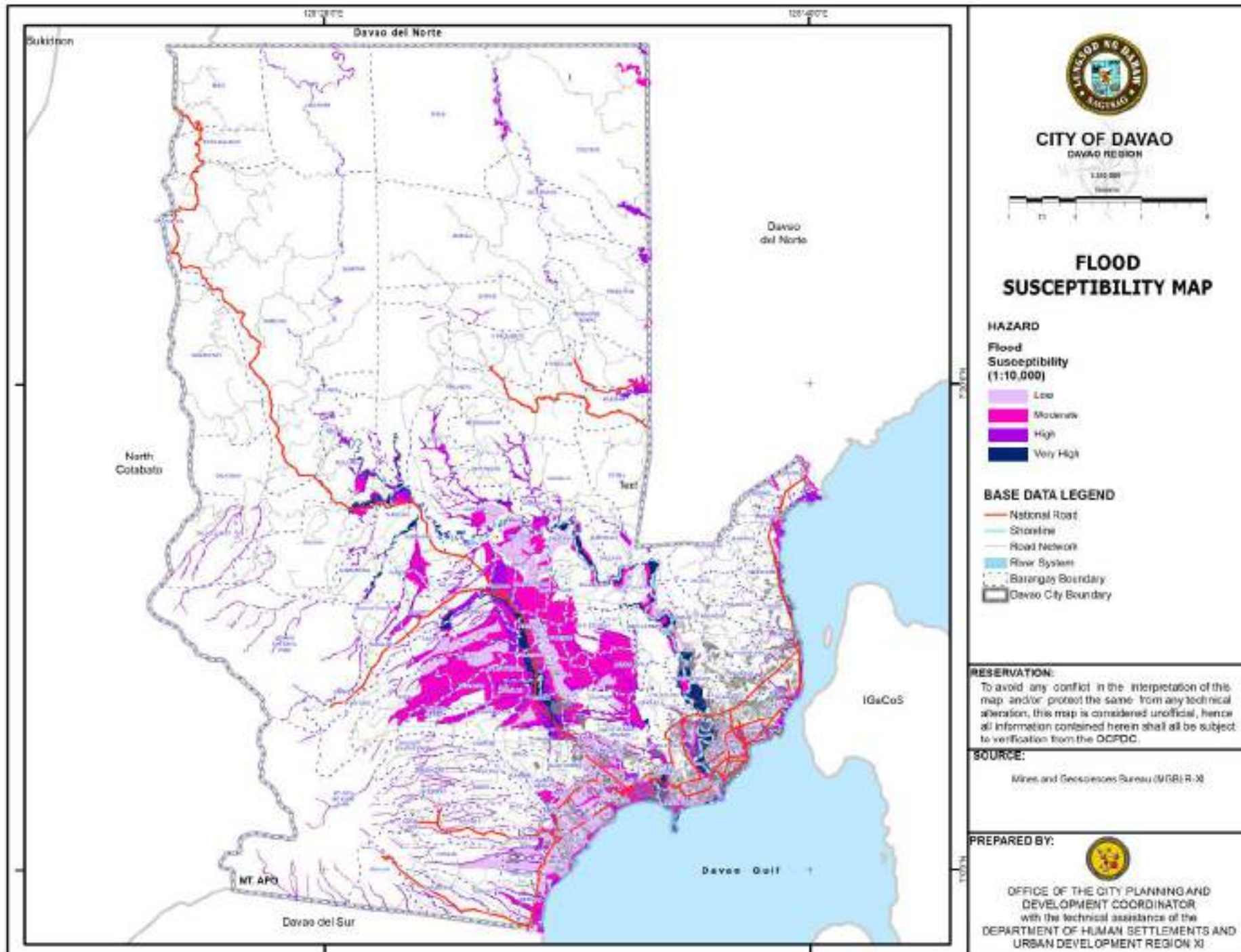
Active Fault Line Map

Fifty-five (55) barangays are traversed by the Colosas fault line, Dacudao fault line, Lacson fault line, New Carmen fault line, Pangyan-Biao Escuela fault line and Tamugan fault line. (Active Fault Line Map, see page 12).

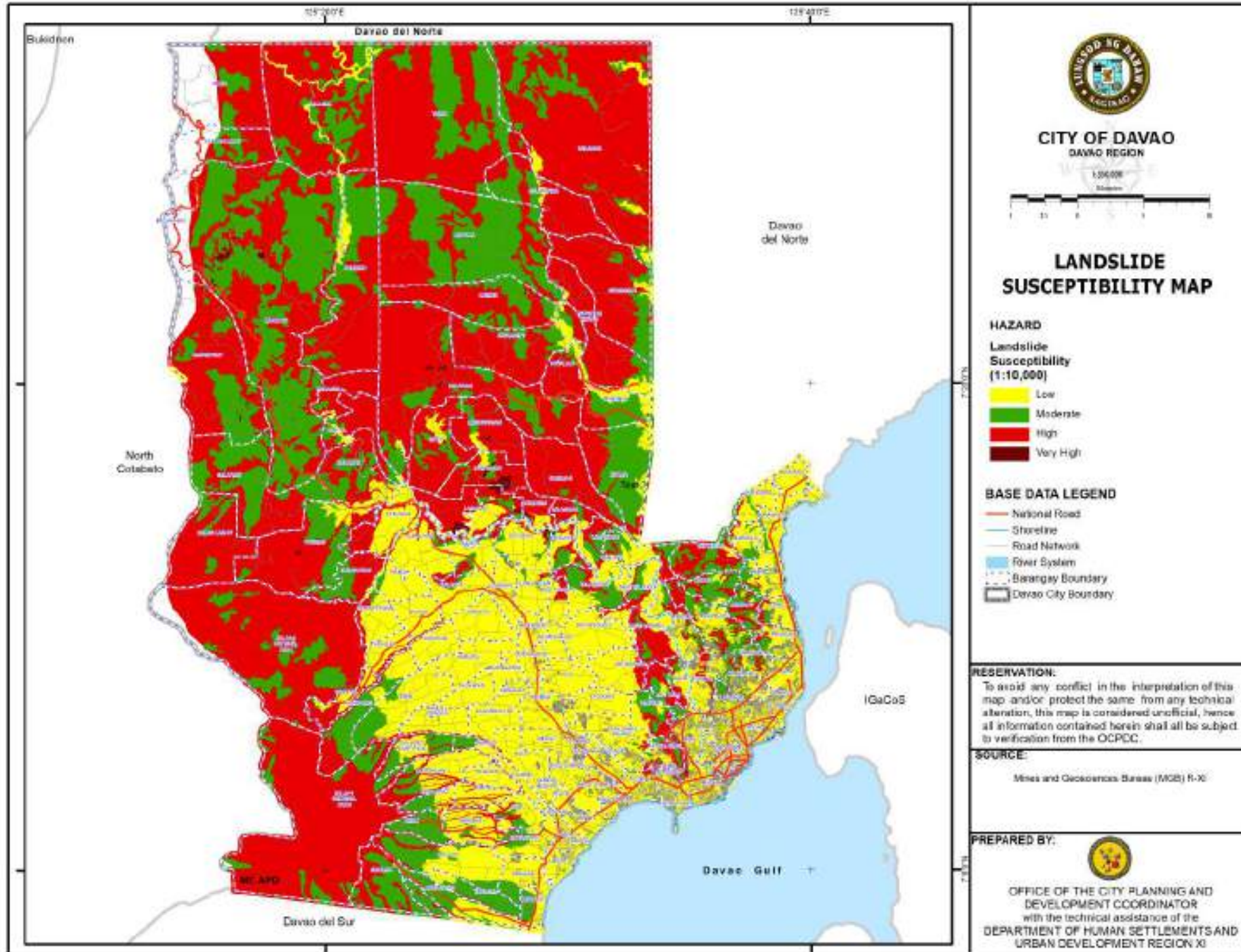
Liquefaction Map

Forty-two percent (42.30%), or 77 barangays, of the city are highly susceptible to liquefaction. These areas are situated near the waterways or those that were originally part of a water body. Among these barangays are Ma-a, Dumoy, Bago Aplaya, Lasang and Panacan (Liquefaction Susceptibility Map, see page 13).

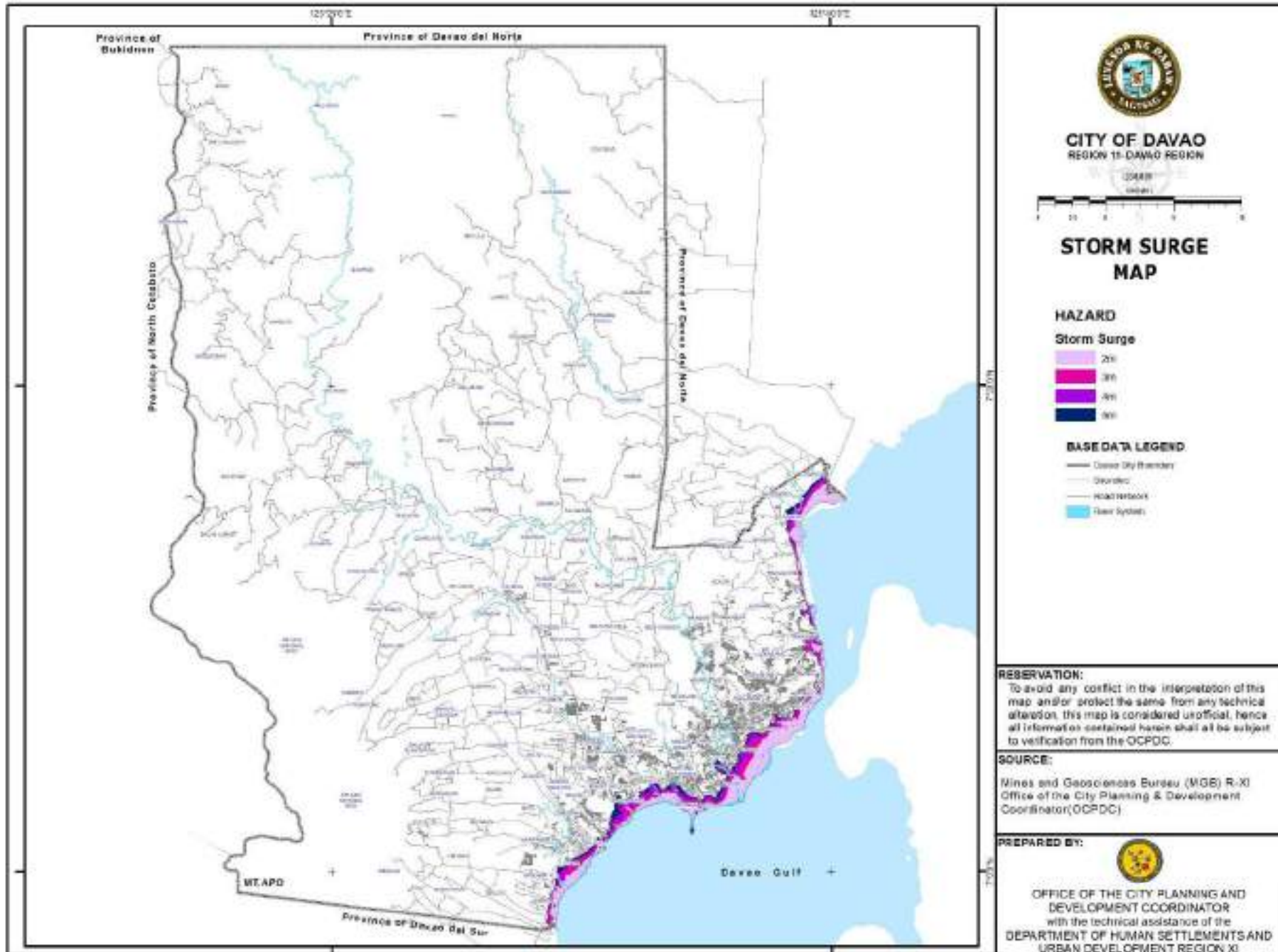
Map 1. 1. Flood Susceptibility Map, Davao City



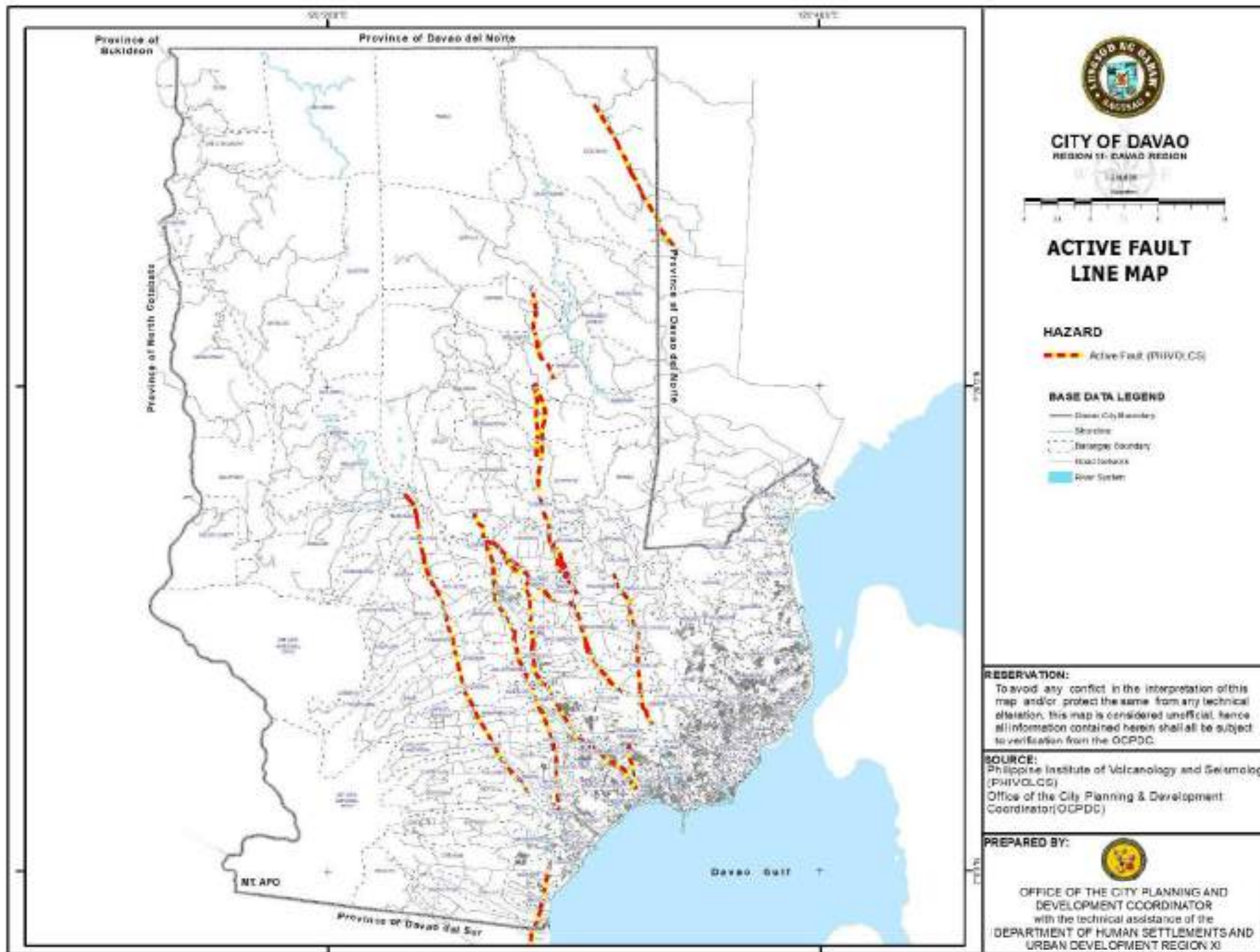
Map 1 2. Landslide Susceptibility Map, Davao City



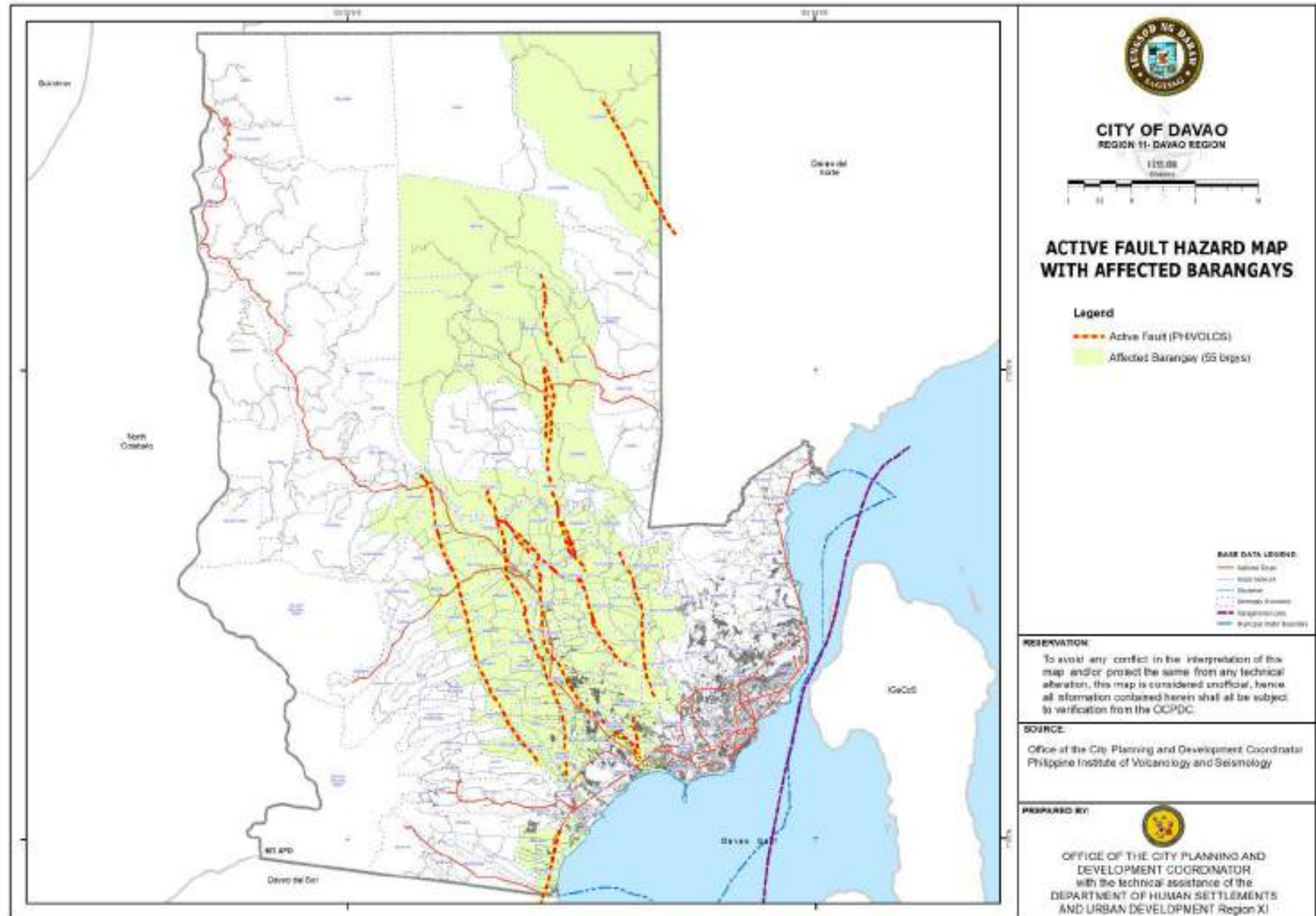
Map 1. 3. Storm Surge Susceptibility Map, Davao City



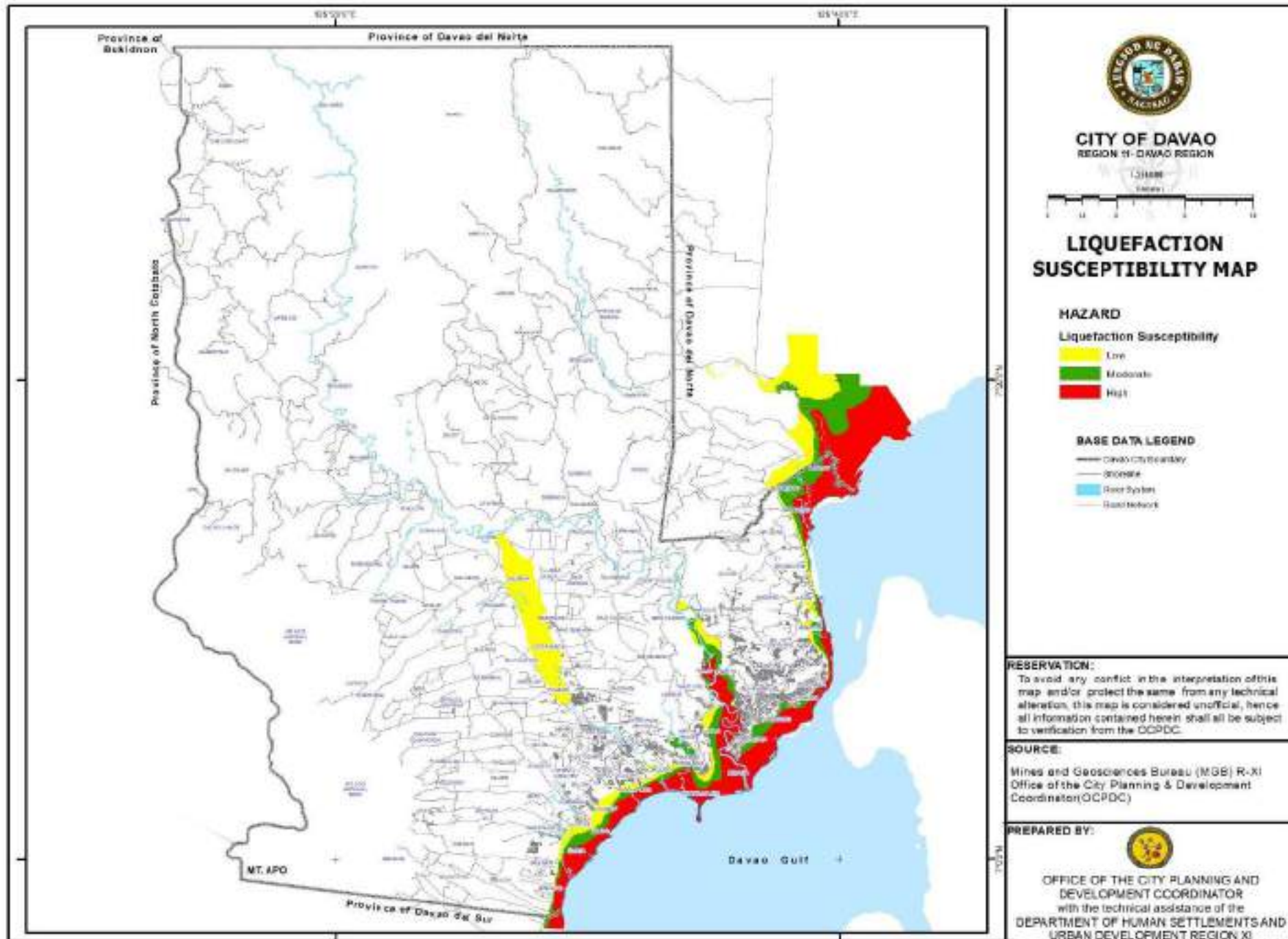
Map 1. 4. Active Fault Line Map, Davao City



Map 1. 5. Active Fault Line Hazard Map with affected Barangays, Davao City



Map 1. 5. Liquefaction Susceptibility Map, Davao City



Inventory of Hazards

Davao City is susceptible to flood, landslide, storm surge, and liquefaction. The city has also two (2) active fault systems, namely: Central Davao Fault System and Colosas Fault System.

Davao's susceptibility to these hazards is attributed to its geographical location, topography and soil type. Flood susceptibility is linked to the existence of landforms of topographic lows such as active river channels and areas along rivers which become natural catch basin of rainfall and makes the areas prone to flashfloods. Some areas of the city have steep to very steep slopes and underlain by weak materials making it susceptible to landslides. Escarpments and tension cracks from recent landslides and human-initiated utilization of slopes are also identified as aggravating factor for landslides. As portions of the city are facing the Davao Gulf, storm surge may also occur and can be brought by severe and unpredictable weather conditions such as typhoons. Meanwhile, there are also portions of the city which have loose to moderately saturated granular soils such as sand, that are susceptible to liquefaction. Presence of active fault systems in the city and presence of nearby fault lines make the city susceptible to damage brought by earthquakes.

Flooding incidents is a recurring problem in the city. The same hazard plagues 78% of the barangays in the city, with notable exception to barangays in mountainous areas namely Baganihan, Buda, Datu Salumay, and Magsaysay. At least 123 barangays and 100 barangays have low and moderate susceptibility to floods, respectively. Those with high susceptibility to floods are those areas that experience flood heights of more than one (1) meter, which takes place in over three (3) days. Barangays with moderate susceptibility to floods sustain flood heights of only 0.5 to one (1) meter for one (1) to three (3) days. Floods are experienced in less than a day with flood depth of less than 0.5 meter in barangays that have low susceptibility to floods.

Barangays near riverbanks, creeks, and other waterways, areas near them are also in danger of liquefaction. A total of 45 barangays, 47 barangays, and 77 barangays have low, moderate, and high susceptibility to liquefaction, respectively. Liquefaction occurs in loose to moderately saturated granular soils, where the space between the individual particles is completely filled with water.

Another hazard which adversely affect the public is landslide. As shown in Table CD – 5 (see next page), 178 barangays, 89 barangays, and 99 barangays have low, moderate, and high susceptibility to landslides, respectively. On the other hand, the Mines and Geosciences Bureau (MGB) – XI cites the barangays with low susceptibility to landslides are those located in gently sloping areas. Those with moderate susceptibility to landslides, on the other hand, are situated in areas with moderately steep slopes. The barangays with high susceptibility to landslides are positioned in areas with very steep slopes, or sloping areas with weak or weakened soil foundation.

Areas which are susceptible to storm surge are the barangays that face the Davao Gulf. A total of 45 barangays are susceptible to storm surge with a height of four (4) to five (5) meters. These areas have a potential to experience severe damage to coastal communities, which may occur in 24 hours. A storm surge with a height of two (2) to three (3) meters may also happen in 55 barangays. These barangays may experience a very high risk storm surge within 36 hours.

The city is also vulnerable to land movements with the presence of active fault systems which traverse through different areas. The Central Davao Fault System includes Dacudao Fault, Lacson Fault, New Carmen Fault, Pangyan-Biao Escuela Fault and Tamugan Fault, which run through 26 barangays, with many of these areas traversed multiple times by two or more fault lines. According to the Philippine Institute of Volcanology and Seismology (PHIVOLCS), these different fault line systems can trigger a strong magnitude earthquake. The 25-kilometer Tamugan Fault, 33-kilometer Lacson Fault, 18-kilometer Dacudao Fault, 33-kilometer Pangyan-Biao Fault, and 12-kilometer New Carmen

Fault can produce 6.7 magnitude earthquake, 6.8 magnitude earthquake, 6.5 magnitude earthquake, 6.8 magnitude earthquake, and 6.3 magnitude earthquake, respectively. Another active fault line system is the Colosas Fault System in Colosas, Paquibato District.

Table CD – 5A. Inventory of Hazards, Davao City

Map Information				Hazard Description			
Hazard	Source	Scale	Format/Date/Reference System	Susceptibility	Speed of Onset	Likelihood of Occurrence	Areas Covered
Flood	MGB	1:10,000	Vector File/PRS92-Phil. V	Very high to high	1 meter and above	Areas likely to experience flood heights of greater than 1 meter and/or flood duration of more than 3 days. These areas are immediately flooded during heavy rains; include landforms of topographic lows such as active river channels, abandoned river channels and areas along river banks; and prone to flashfloods.	1-A, 2-A, 5-A, 8-A, 19-B, 21-C, 22-C, 23-C, 27-C, 31-D, 37-D, 39-D, 40-D, Rafael Castillo, Centro, Gov. Vicente Duterte, Leon Garcia Sr., Lapu – Lapu, San Antonio, Ubalde, Baguio, Cadalian, Carmen, Gumalang, Malagos, Tambobong, Tawan-Tawan, Wines, Acacia, Buhangin, Cabantian, Callawa, Communal, Indangan, Mandug, Pampang, Sasa, Tigatto, Waan, A. Angliongto, V. Hizon, Bunawan, Gatungan, Ilang, Lasang, Mahayag, Mudiang, Panacan, San Isidro, Tibungco, Biao Joaquin, Calinan, Cawayan, Dacudao, Dalagdag, Dominga, Inayangan, Lacson, Lamanan, Lampianao, Megkawayan, Pangyan, Riverside, Saloy, Sirib, Subasta, Talomo River, Tamayong, Wangan, Bantol, Salaysay, Suawan, Tamugan, Colosas, Lumiad, Mabuhay, Malabog, Mapula, Pandaitan, Pañalum, Paquibato, Paradise Embac, Salapawan, Sumimao, Tapak, Bago Aplaya, Bago Gallera, Bucana, Catalunan Grande, Catalunan Pequeño, Dumoy, Langub, Ma-a, Magtuod, Matina Aplaya, Matina Crossing, Matina Pang, Talomo, Alambre, Atan-Awe, Bankas Heights, Baracatan, Bato, Bayabas, Crossing Bayabas, Binugao, Camansi, Catigan, Daliaon Plantation, Eden, Kilate, Lizada, Lubogan, Marapangi, Mulig, Sibulan, Sirawan, Tagluno, Tagurano, Tibuloy, Tungkalan, Angalan, Bago Oshiro, Balengaeng, Biao Escuela, Biao Guianga, Matina Biao, Los Amigos, Manambulan, Manuel Guianga, Mintal, New Carmen, New Valencia, Sto. Niño, Tacunan, Tagakpan, Tugbok, and Ula

Source: MGB, DOST, and PHIVOLCS, Region XI

Table CD – 5B. Inventory of Hazards, Davao City

Map Information				Hazard Description			
Hazard	Source	Scale	Format/Date/Reference System	Susceptibility	Speed of Onset	Likelihood of Occurrence	Areas Covered
Flood	MGB	1:10,000	Vector File/PRS92-Phil. V	Moderate	0.5 meter to 1 meter	Areas likely to experience flood heights of 0.5 to 1 meter and/or flood duration of 1 to 3 days. These areas are subject to widespread inundation during prolonged and extensive heavy rainfall or extreme weather condition. Fluvial terraces, alluvial fans, and infilled valleys are areas moderately subjected to flooding.	15-B, 31-D, Agdao Proper, Wilfredo Aquino, Paciano Bangoy, Centro, Gov. Vicente Duterte, Leon Garcia Sr., Lapu – Lapu, Tomas Monteverde, San Antonio, Baguio, Cadalian, Gumalang, Malagos, Tawan-Tawan, Wines, Buhangin, Cabantian, Callawa, Communal, Mandug, Pampanga, Sasa, Tigatto, Waan, A. Angliongto, V. Hizon, Bunawan, Ilang, Lasang, Mahayag, Panacan, San Isidro, Tibungco, Biao Joaquin, Calinan, Cawayan, Dacudao, Dalagdag, Dominga, Lacson, Lamanan, Lampianao, Pangyan, Riverside, Saloy, Sirib, Talomo River, Tamayong, Wangan, Malamba, Suawan, Tamugan, Colosas, Fatima, Pandaitan, Paradise Embac, Sumimao, Tapak, Bago Aplaya, Bago Gallera, Baliok, Bucana, Catalunan Grande, Catalunan Pequeño, Dumoy, Langub, Ma-a, Matina Aplaya, Matina Crossing, Matina Pang, Talomo, Bankas Heights, Crossing Bayabas, Binugao, Daliao, Lizada, Marapangi, Mulig, Sirawan, Angalan, Bago Oshiro, Balengaeng, Biao Escuela, Biao Guianga, Matina Biao, Los Amigos, Manambulan, Manuel Guianga, Mintal, New Carmen, New Valencia, Sto. Niño, Tacunan, Tagakpan, Talandang, Tugbok, and Ula
Flood	MGB	1:10,000	Vector File/PRS92-Phil. V	Low	0.5 meter	Areas likely to experience flood heights of less than 0.5 meter and/or flood duration of less than 1 day. These areas include low hills and gentle slopes.	1-A, 2-A, 3-A, 4-A, 5-A, 6-A, 7-A, 8-A, 9-A, 10-A, 11-B, 12-B, 13-B, 14-B, 15-B, 16-B, 17-B, 18-B, 19-B, 20-B, 21-C, 22-C, 23-C, 24-C, 25-C, 26-C, 27-C, 28-C, 29-C, 30-D, 31-D, 32-D, 33-D, 34-D, 35-D, 36-D, 37-D, 38-D, 39-D, Agdao Proper, Wilfredo Aquino, Paciano Bangoy

Source: MGB, DOST, and PHIVOLCS, Region XI

Table CD – 5C. Inventory of Hazards, Davao City

Map Information				Hazard Description			
Hazard	Source	Scale	Format/Date/Reference System	Susceptibility	Speed of Onset	Likelihood of Occurrence	Areas Covered
Flood	MGB	1:10,000	Vector File/PRS92-Phil. V	Low	0.5 meter	Areas likely to experience flood heights of less than 0.5 meter and/or flood duration of less than 1 day. These areas include low hills and gentle slopes.	Rafael Castillo, Centro, Gov. Vicente Duterte, Leon Garcia Sr., Lapu – Lapu, Tomas Monteverde, San Antonio, Ubalde, Baguio, Malagos, Acacia, Buhangin, Cabantian, Callawa, Communal, Indangan, Mandug, Pampanga, Sasa, Tigatto, A. Angliongto, V. Hizon, Bunawan, Gatungan, Ilang, Lasang, Mahayag, Mudiang, Panacan, San Isidro, Tibungco, Biao Joaquin, Calinan, Cawayan, Dacudao, Dominga, Lacson, Lamanan, Lampianao, Pangyan, Riverside, Sirib, Subasta, Talomo River, Wangan, Pandaitan, Bago Aplaya, Bago Gallera, Baliok, Bucana, Catalunan Grande, Catalunan Pequeño, Dumoy, Ma-a, Matina Aplaya, Matina Crossing, Talomo, Bankas Heights, Bato, Crossing Bayabas, Binugao, Catigan, Daliao, Lizada, Lubogan, Marapangi, Sirawan, Toril, Bago Oshiro, Biao Guianza, Matina Biao, Los Amigos, Manambulan, Mintal, New Carmen, New Valencia, Sto. Niño, Tacunan, Talandang, Tugbok, and Ula
Land-slide	MGB	1:10,000	Vector File/ PRS92-Phil. V	Very high to high	-	Areas usually with steep to very steep slopes and underlain by weak materials. Recent landslides, escarpments and tension cracks are present. Human initiated effects could be an aggravating factor.	19-B, Acacia, Alambre, Atan-awe, Baganihan, Baguio, Bantol, Baracata, Bato, Bayabas, Biao Escuela, Biao Joaquin, Binugao, Buda, Buhangin, Cabantian, Cadalian, Calinan, Callawa, Camansi, Carmen, Catalunan Grande, Catigan, Cawayan, Colosas, Communal, Dacudao, Dalag Lumot, Dalagdag, Daliaon Plantation, Datu Salumay, Dominga, Eden, Fatima, Gatungan, Gumalang, Gumitan, Ilang, Inayangan, Indangan, Kilate, Lacson, Lamanan, Lampianao, Langub, Lumiad, Ma-a, Mabuhay, Magsaysay

Source: MGB, DOST, and PHIVOLCS, Region XI

Table CD – 5D. Inventory of Hazards, Davao City

Map Information				Hazard Description			
Hazard	Source	Scale	Format/Date/ Reference System	Susceptibility	Speed of Onset	Likelihood of Occurrence	Areas Covered
Land-slide	MGB	1:10,000	Vector File/ PRS92-Phil. V	Very high to high	-	Areas usually with steep to very steep slopes and underlain by weak materials. Recent landslides, escarpments and tension cracks are present. Human initiated effects could be an aggravating factor. Also, areas with numerous old/inactive landslide	Magtuod, Mahayag, Malabog, Malagos, Malamba, Manambulan, Mandug, Manuel Guianga, Mapula, Marapangi, Marilog, Matina Biao, Matina Crossing, Matina Pangi, Megkawayan, Mudiang, Mulig, New Carmen, New Valencia, Pañalum, Panacan, Pandaitan, Pangyan, Paquibato, Paradise Embac, Salapawan, Salsaysay, Saloy, San Isidro, Sasa, Sibulan, Sirib, Suawan, Sumimao, Tagluno, Tagurano, Talandang, Talomo, Talomo River, Tamayong, Tambobong, Tamugan, Tapak, Tawan-Tawan, Tibuloy, Tibungco, Tigatto, Tungkalan, Waan and Wines
Land-slide	MGB	1:10,000	Vector File/ PRS92-Phil. V	Moderate	-	Areas with moderately steep slopes. Soil creep and other indications for possible landslide occurrence are present.	A. Angliongto, Acacia, Atan-Awe, Baganihan, Bantol, Baracatan, Bato, Bayabas, Biao Joaquin, Binugao, Buda, Buhangin, Bunawan, Cabantian, Calinan, Callawa, Camansi, Carmen, Catalunan Grande, Catigan, Colosas, Communal, Dacudao Dalag Lumot, Dalagdag, Daliaon Plantation, Datu Salumay, Dominga, Eden, Fatima, Gatungan, Gumalang, Gumitan, Ilang, Inayangan, Indangan, Lacson, Lamanan and Lampianao
Land-slide	MGB	1:10,000	Vector File/ PRS92-Phil. V	Low	-	Gently sloping areas with no identified landslides	10-A, 11-B, 12-B, 13-B, 14-B, 15-B, 16-B, 17-B, 18-B, 19-B, 1-A, 20-B, 21-C, 22-C, 23-C, 24-C, 25-C, 26-C, 27-C, 28-C, 29-C, 2-A, 30-D, 31-D, 32-D, 33-D, 34-D, 35-D, 36-D, 37-D, 38-D, 39-D, 3-A, 40-D, 4-A, 5-A, 6-A, 7-A, 8-A, 9-A, Angliongto, Acacia, Agdao Proper, Alambre, Angalan, Atan-Awe, Bago Aplaya, Bago Gallera, Bago Oshiro, Baguio, Balengaeng, Baliok, Bankas Heights, Bantol, Baracatan, Bato, Bayabas, Biao Escuela, Biao Guianga, Biao Joaquin, Binugao, Bucana, Buda, Buhangin, Bunawan, Cabantian

Source: MGB, DOST, and PHIVOLCS, Region XI

Table CD – 5E. Inventory of Hazards, Davao City

Map Information				Hazard Description			
Hazard	Source	Scale	Format/Date/ Reference System	Susceptibility	Speed of Onset	Likelihood of Occurrence	Areas Covered
Land- slide	MGB	1:10,000	Vector File/ PRS92- Phil. V	Low	-	Gently sloping areas with no identified landslides	Cadalian, Calinan, Callawa, Camansi, Carmen, Catalunan Grande, Catalunan Pequeño, Catigan, Cawayan, Centro, Colosas, Communal, Crossing Bayabas, Dacudao, Dalagdag, Daliao, Daliaon Plantation, Dominga, Dumoy, Eden, Fatima, Gatungan, Gov. Vicente Duterte, Gumalang, Gumitan, Ilang, Inayangan, Indangan, Kilate, Lacson, Lamanan, Lampianao, Langub, Lapu-Lapu, Lasang, Leon Garcia Sr., Lizada, Los Amigos, Lubogan, Lumiad, Ma-a, Mabuhay, Magsaysay, Magtuod, Mahayag, Malabog, Malagos, Malamba, Manambulan, Mandug, Manuel Guianga, Mapula, Marapangi, Marilog, Matina Aplaya, Matina Biao, Matina Crossing, Matina Pangi, Megkawayan, Mintal, Mudiang, Mulig, New Carmen, New Valencia, Pañalum, Paciano Bangoy, Pampanga, Panacan Pandaitan, Pangyan, Paquibato, Paradise Embac Rafael Castillo, Riverside, Salapawan, Salaysay, Saloy, San Antonio, San Isidro, Sasa, Sirawan, Sirib, Sto. Niño, Sua-wan,Subasta, Sumimao, Tacunan, Tagakpan, Tagluno, Tagurano, Talandang, Talomo, Talomo River, Tamayong, Tambobong, Tamugan, Tapak, Tawan-Tawan, Tibuloy, Tibungco, Tigatto, Tomas Monteverde, Toril, Tugbok, Tungkalan, Ubalde, Ula, V. Hizon, Waan, Wangan, Wilfredo Aquino, and Wines

Source: MGB, DOST, and PHIVOLCS, Region XI

Table CD – 5F. Inventory of Hazards, Davao City

Map Information				Hazard Description			
Hazard	Source	Scale	Format/Date/ Reference System	Susceptibility	Speed of Onset	Likelihood of Occurrence	Areas Covered
Storm Surge	DOST	-	Vector File/ PRS92-Phil. V	4 meters to 5 meters and above	-	Severe damage to coastal communities may occur due to storm surge that is expected within 24 hours or is already happening	10-A, 11-B, 12-B, 13-B, 14-B, 18-B, 19-B, 20-B, 2-A, 30-D, 3-A, 4-A, 5-A, 6-A, 7-A, 8-A, 9-A, A. Angliongto, Bago Aplaya, Bago Gallera, Binugao, Bucana, Bunawan, Daliao, Dumoy, Ilang, Lapu – Lapu, Lasang, Lizada, Ma-a, Mahayag, Matina Aplaya, Matina Crossing, Paciano Bangoy, Pampanga, Panacan, Rafael Castillo, San Antonio, Sasa, Sirawan, Talomo, Tibungco, Ubalde, V. Hizon, and Wilfredo Aquino
Storm Surge	DOST	-	Vector File/ PRS92-Phil. V	3 meters to 2 meters	-	High to very high risk storm surge may occur and is expected to impact coastal communities within 36 hours.	10-A, 11-B, 13-B, 14-B, 15-B, 16-B, 17-B, 18-B, 19-B, 1-A, 26-C, 27-C, 28-C, 29-C, 2-A, 30-D, 31-D, 32-D, 33-D, 34-D, 35-D, 36-D, 37-D, 38-D, 39-D, 3-A, 40-D, 4-A, 5-A, A. Angliongto, Agdao Proper, Bago Aplaya, Binugao, Bucana, Bunawan, Daliao, Dumoy, Gov. Vicente Duterte, Ilang, Lapu – Lapu, Lasang, Leon Garcia Sr., Lizada, Ma-a, Mahayag, Matina Aplaya, Matina Crossing, Paciano Bangoy, Pampanga, Panacan, Rafael Castillo, San Antonio, Sasa, Sirawan, Talomo, Tibungco, Tomas Monteverde, Ubalde, V. Hizon, and Wilfredo Aquino
Liquefaction	PHIVOLCS-DOST	-	Vector File/ PRS92-Phil. V	High	-	To occur in loose to moderately saturated granular soils (such as sand), that is, soils in which the space between the individual particles is completely filled with water	10-A, 11-B, 12-B, 13-B, 14-B, 15-B, 16-B, 17-B, 19-B, 1-A, 21-C, 22-C, 23-C, 24-C, 27-C, 28-C, 29-C, 2-A, 30-D, 31-D, 32-D, 33-D, 34-D, 35-D, 36-D, 37-D, 38-D, 39-D, 3-A, 40-D, 4-A, 5-A, 6-A, 7-A, 8-A, 9-A, A. Angliongto, Agdao Proper, Bago Aplaya, Bago Gallera, Binugao, Bucana, Buhangin, Bunawan, Centro, Daliao, Dumoy, Gov. Vicente Duterte, Ilang, Lapu-Lapu, Lasang, Leon Garcia Sr., Lizada, Ma-a, Mahayag

Source: MGB, DOST, and PHIVOLCS, Region XI

Table CD – 5G. Inventory of Hazards, Davao City

Map Information				Hazard Description			
Hazard	Source	Scale	Format/Date/ Reference System	Susceptibility	Speed of Onset	Likelihood of Occurrence	Areas Covered
Liquefaction	PHIVOLCS-DOST	-	Vector File/ PRS92-Phil. V	High	-	To occur in loose to moderately saturated granular soils (such as sand), that is, soils in which the space between the individual particles is completely filled with water	Mandug, Matina Aplaya, Matina Crossing, New Carmen, Paciano Bangoy, Pampanga, Panacan, Rafael Castillo, San Antonio, San Isidro, Sasa, Sirawan, Talomo, Tigatto, Tomas Monteverde, Toril, Ubalde, Vicente Hizon, Waan, and Wilfredo Aquino
Liquefaction	PHIVOLCS-DOST	-	Vector File/ PRS92-Phil. V	Moderate	-	To occur in loose to moderately saturated granular soils (such as sand), that is, soils in which the space between the individual particles is completely filled with water	10-A, 11-B, 12-B, 13-B, 14-B, 16-B, 17-B, 18-B, 19-B, 20-B, 7-A, 8-A, 9-A, A. Angliongto, Bago Aplaya, Bago Gallera, Binugao, Buhangin, Bunawan, Catalunan Grande, Crossing Bayabas, Daliao, Dumoy, Ilang, Lasang, Lizada, Ma-a, Mahayag, Mandug, Marapangi, Matina Aplaya, Matina Crossing, Matina Pangi, New Carmen, Paciano Bangoy, Pampanga, Panacan, San Isidro, Sasa, Sirawan, Talomo, Tibungco, Tigatto, Toril, Vicente Hizon, Waan, and Wilfredo Aquino
Liquefaction	PHIVOLCS-DOST	-	Vector File/ PRS92-Phil. V	Low	-	To occur in loose to moderately saturated granular soils (such as sand), that is, soils in which the space between the individual particles is completely filled with water	Angalan, Bago Aplaya, Bago Gallera, Balengaeng, Baliok, Binugao, Bunawan, Calinan, Callawa, Catalunan Grande, Catalunan Pequeño, Crossing Bayabas, Dacudao, Daliao, Dumoy, Ilang, Lacson, Lasang, Lizada, Los Amigos, Lubogan, Ma-a, Mahayag, Malagos, Mandug, Marapangi, Matina Aplaya, Matina Crossing, New Carmen, New Valencia, Panacan, Riverside, San Isidro, Sasa, Sirawan, Subasta, Talandang, Talomo, Talomo River, Tibungco, Tigatto, Toril, Tugbok, Ula, and Wangan

Source: MGB, DOST, and PHIVOLCS, Region XI

Table CD – 5I. Inventory of Hazards, Davao City

Map Information				Hazard Description			
Hazard	Source	Scale	Format/Date/Reference System	Susceptibility	Speed of Onset	Likelihood of Occurrence	Areas Covered
Ground or Surface Rupture (Active Fault System)	PHIVOLCS	-	Vector File/ PRS92-Phil. V	<i>New Carmen Fault</i>	-		Biao Escuela, Lampianao, Langub, Matina Biao, New Carmen, New Valencia, and Talandang
Ground or Surface Rupture (Active Fault System)	PHIVOLCS	-	Vector File/ PRS92-Phil. V	<i>Pangyan-Biao Escuela Fault</i>	-	Presence of thrust or reverse fault in which the hanging wall has moved upward relative to the footwall. Reverse faults occur where two blocks of rock are forced together by compression	Biao Escuela, Biao Guianga, Biao Joaquin, Dacudao, Dominga, Lumiad, Malabog, Mapula, Matina Biao, Pañalum, Pangyan, Paquibato, Sumimao, Tacunan, and Talandang
Ground or Surface Rupture (Active Fault System)	PHIVOLCS	-	Vector File/ PRS92-Phil. V	<i>Tamugan Fault</i>	-		Alambre, Baguio, Camansi, Cawayan, Gumalang, Malagos, Manambulan, Subasta, Tagakpan, Tagluno, and Tamugan
Ground or Surface Rupture (Active Fault System)	PHIVOLCS	-	Vector File/ PRS92-Phil. V	Colosas Fault System	-	Presence of strike-slip fault, a fault in which surfaces on opposite side of the fault plane moved horizontally and parallel to the strike of the fault	Colosas

Source: MGB, DOST, and PHIVOLCS, Region XI

Table CD – 5H. Inventory of Hazards, Davao City

Map Information				Hazard Description			
Hazard	Source	Scale	Format/Date/ Reference System	Susceptibility	Speed of Onset	Likelihood of Occurrence	Areas Covered
Ground or Surface Rupture (Active Fault System)	PHIVOLCS	-	Vector File/ PRS92-Phil. V	Central Davao Fault System	-		Dacudao Fault, Lacson Fault, New Carmen Fault, Pangyan-Biao Escuela Fault
Ground or Surface Rupture (Active Fault System)	PHIVOLCS	-	Vector File/ PRS92-Phil. V	<i>Dacudao Fault</i>	-	Presence of thrust or reverse fault in which the hanging wall has moved upward relative to the footwall. Reverse faults occur where two blocks of rock are forced together by compression.	Biao Joaquin, Calinan, Catalunan Grande, Catalunan Pequeño, Dacudao, Lacson, Lamanan, Los Amigos, Mintal, Riverside, Sto. Niño, Talomo, Talomo River, Tugbok, and Ula
Ground or Surface Rupture (Active Fault System)	PHIVOLCS	-	Vector File/ PRS92-Phil. V	<i>Lacson Fault</i>	-		Angalan, Bago Oshiro, Balengaeng, Baliok, Bankas Heights, Binugao, Calinan, Lacson, Lizada, Los Amigos, Lubogan, Malagos, Mintal, Mulig, Sirawan, Subasta, Tugbok and Wangan

Source: MGB, DOST, and PHIVOLCS, Region XI

Records of Previous Disasters

Floods and landslides are two (2) of the most common natural disasters in Davao City, which frequently recur in a year. The city's location with a lot of watersheds, gulf, mountains, and hills, makes it vulnerable to these.

Flood Incidents

Disaster records from 2000-2019 show that flooding incidents usually happen during the first quarter of the year, when the city experiences the coldest season brought by rainy weather. In February 2000, a total of 3,938 families in Talomo Proper, Matina Crossing, Matina Pangí, Catalunan Grande and Bago Aplaya were affected, while in January of 2002, at least 17,784 families were affected in the flooding of Poblacion, Talomo, Buhangin, Bunawan and Calinan.

In 2006, about 1,049 families were affected in the flooding of Talomo Proper. Of the four (4) major reported incidents, it was the flooding in March 2008 that recorded the highest number of families, which affected 297 families or 1,017 dependents. The flooding occurred in six (6) barangays such as Calinan Proper, Riverside, Wangan, Baguio Proper, Malagos, and Los Amigos, all of which are located in the Third District.

For 2010, there were 16 reported flooding incidents, one (1) happened during the first month of the year while 15 happened in the second half of the year. Of the 15 incidents, six (6) occurred during the month of September, five (5) happened on September 13 in Suawan, Magsaysay, Marilog Proper, Salaysay and Malamba and one (1) on September 21 in Mandug.

June 2011 registered the most number of flooding incidents that year with 18 from a total of 55, in the whole year of 2011. The flashflood incident on June 29, 2011 was the worst natural disaster to hit the city with 30 deaths. It also affected 3,307 families and damaged 765 houses in Ma-a, Matina Pangí, Matina Aplaya, Matina Crossing, and Talomo Proper. The flashflood occurred when Matina Pangí River overflowed due to heavy downpour. It took six (6) hours for the floodwaters to subside, which reached up to 10 feet or three (3) meters. The flood also destroyed the Balusong Bridge, Matina Pangí Bridge, and other bamboo and hanging bridges in Matina Crossing.

In August 2014, a total of eight (8) flooding incidents were recorded with 146 affected families in Barangays Matina Pangí, Matina Crossing, and Matina Aplaya and within downtown areas.

Only three (3) flooding incidents were recorded in 2015 and 2016. Barangays Talomo, Sto. Niño and Gumitan experienced flooding in 2015, while Barangays 10-A, Gumitan and Suawan suffered the same fate in 2016. Both years recorded the number of lowest flood incidents in the City from 2000-2019.

There were no recorded flood incidents during the first quarter of 2017; while the rest of the year recorded 30 incidents, affecting 10 barangays with a total number of 38 dependents.

The six (6) incidents in 2018 happened in barangays Riverside, Sto. Nino, Catalunan Pequeno, Tugbok Proper, Talomo Proper and Catalunan Grande. For 2019, only two (2) were reported involving Barangays Bato and Daliao in Toril District such flooding incidents were recorded in January.

Landslide Incidents

Landslides frequently hit the northern mountain areas of the city.

The year 2002 recorded the most number of families affected by landslide with 2,697 or 10,481 dependents in Barangays Marilog, Paquibato, Baguio and Calinan. There were zero reported landslide incidents in 2003, 2004 and 2005.

In 2006, only three (3) incidents were reported in Carmen, San Isidro and Marilog Proper, which affected 114 families. The year 2007 recorded the lowest occurrence, with only one (1) incident, but resulted to the death of two (2) persons in Brgy. Ma-a, Talomo District.

No incidents were recorded in 2009 and 2010, while 2011 recorded five (5) landslide incidents, which affected 1,331 families. In 2012, there were two incidents of landslide involving Barangays Magsaysay, Marilog and Fatima; while the year 2013 recorded two (2) cases in Buhangin Hills and Sto Niño. In 2014, there were nine (9) incidents were reported in Guadalupe Village, Pansoy Compound, Matina Crossing, Baganihan, Suawan, Salaysay, and Lumiad. In Tambobong, there were three (3) reported landslides, which happened in February, May and November 2014.

Landslide incidents occurred in June, September, and October 2015 and in April, June, and October 2016. In 2017, a total of 16 landslide incidents happened in April to July and August to December that affected 83 families, including areas in Diversion Road where huge boulders fell down from the hilly parts of Ma-a, Langub, Matina Pangi, and Matina Crossing. The occurrence of landslides in the said areas prompted the temporary closure of Diversion Road from October 5 to November 30, 2017.

Only two (2) landslides happened in 2018 particularly in Barangays Langub and Cabantian.

In 2019, there is one landslide incident recorded in Barangay Malabog.

Table CD – 6A. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Flood, February 16, 2000	Talomo Proper, Matina Crossing, Matina Pangi, Catalunan Garande, Bago Aplaya	3,938	14511	25	2	-	-	155	155
Flood, April 20, 2000	Sto. Niño	215	651	-	-	-	-	1	
Flood, April 20, 2000	Crossing Bayabas	8		-	-	-	-	1	1
Flood, June 4, 2000	Maa, Bago Aplaya	30	119	10	-	-	-	-	-
Flood, June 7, 2000	Marapangi, Sirawan, Cyphone, Lizada, Bago Gallerra, Sto.Niño	91	383	2	2	-	-	3	5
Flood, July 6, 2000	La Verna, San Isidro, San Vicente, Hillside Subd.	87	77	-	-	-	-	-	-
Flood, October 5, 2000	Matina Pangi	95	347	-	-	-	-	10	6
Flood, October 5, 2000	Matina Crossing			-	-	-	-		
Flood, November 18, 2001	Dumoy	15	69	-	-	-	-	4	11
Flood, November 21, 2001	Crossing Bayabas	123	459	-	-	-	-	7	8
Flood, November 21, 2001	Marapangi	28	36	-	-	-	-	2	16
Flood, November 21, 2001	Daliao	28	122	-	-	-	-	-	3
Flood, November 21, 2001	Sirawan	9	25	-	-	-	-	2	-
Flood, November 21, 2001	Bayabas	1	5	-	1	-	-	-	-
Flood, November 21, 2001	Tagluno	-	-	-	-	-	-	-	-

Source: City Social Services and Development Office, Davao City

Table CD – 6B. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Flood, January 4, 2002	Poblacion - A	3,548	16,430	-	7	18	1	55	106
Flood, January 4, 2002	Poblacion - B	78	468	-	-	-	-	3	3
Flood, January 4, 2002	Talomo	10,264	37,732	-	-	-	-	20	35
Flood, January 4, 2002	Buhangin	2,118	8,087	-	-	-	-	59	320
Flood, January 4, 2002	Bunawan	1,854	11,236	-	-	-	-	9	11
Flood, January 4, 2002	Tugbok	51	306	-	-	-	-	2	-
Flood, January 4, 2002	Marilog	197	748	-	-	-	-	1	5
Landslide, January 4,	Marilog	393	1,293	-	-	-	-	-	-
Landslide, January 4,	Baguio	306	-	-	-	-	-	1	-
Landslide, January 4,	Paquibato	757	2,912	-	-	-	-	1	-
Landslide, January 4,	Calinan	1,241	6,276	-	-	-	-	6	2
Flood, May 7, 2003	Tugbok Proper	4	15	-	-	-	-	1	-
Flood, May 7, 2003	Mintal	12	30	-	-	-	-	-	2
Flood, May 7, 2004	Talomo Proper	445	-	-	-	-	-	-	-
Flood, June 1, 2003	Mintal	4	13	-	-	-	-	-	-
Flood, August 20, 2003	Maa	6	16	-	-	-	-	2	3
Flood, April 16, 2004	Matina Pangi	12	47	-	-	-	-	5	6

Source: City Social Welfare and Development Office, Davao City

Table CD – 6C. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Flood, April 16, 2004	Brgy. 74-A	2	9	-	-	-	-	1	1
Flood, January 26, 2006	Bunawan Proper	2	10	-	-	-	-	2	-
Flood, March 2, 2006	Crossing Bayabas	2	7	-	-	-	-	2	-
Landslide, March 2, 2006	Carmen	101	-	-	-	-	-	-	-
Flood, March 5, 2006	Talomo Proper	1,047	-	-	-	-	-	-	-
Landslide, October 30, 2006	San Isidro	2	6	-	1	-	-	-	2
Landslide, November 21, 2006	Marilog Proper	11	-	-	-	-	-	5	-
Flood, June 18, 2007	Saloy	1	-	-	1	6	-	1	-
Landslide, July 4, 2007	Maa	10	46	-	1	2	-	-	-
Flood, August 29, 2007	Catalunan Pequeño	9	38	-	-	-	-	-	-
Landslide, January 7, 2008	Tamugan		-	-	-	-	-	-	-
Landslide, January 14, 2008	Matina Pangi	6	19	-	-	-	-	2	2
Flood, March 17, 2008	Calinan Proper, Riverside, Wangan, Baguio Proper, Baguio Proper, Malagos, Los Amigos	297	1,017	-	-	2	-	19	25
Flood, June 7, 2008	San Antonio	23	129	-	-	-	-	2	9
Flood, June 7, 2008	Cabantian	2	11	-	-	-	-	2	

Source: City Social Welfare and Development Office, Davao City

Table CD – 6D. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Flood, June 18, 2008	Maa	140	-	-	-	-	-	-	
Flood, June 29, 2009	Talomo Proper	143	-	-	-	-	-	-	
Flood, June 29, 2009	Marapangi	7	-	-	-	-	-	1	
Flood, June 29, 2009	Crossing Bayabas	10	-	-	-	-	-	4	
Flood, June 29, 2010	Lizada	2	-	-	-	-	-	-	
Flood, June 29, 2010	Los Amigos	381	-	-	-	-	-	-	
Flood, June 29, 2010	Mintal	36	-	-	-	-	-	1	
Flood, June 29, 2010	Ula	6	-	-	-	-	-	-	
Flood, June 29, 2010	Tugbok Proper	95	-	-	-	-	-	1	
Flood, June 29, 2010	Manmbulan	2	-	-	-	-	-	-	
Flood, January 17, 2010	Calinan Proper & Riverside	83	-	-	-	-	-	2	
Flood, September 13, 2010	Suawan	67	134	-	-	-	-	10	
Flood, September 13, 2010	Magsaysay	1	7	-	-	-	-	1	
Flood, September 13, 2010	Marilog Proper	7	37	-	-	-	-	5	
Flood, September 13, 2010	Salaysay	2	6	-	-	-	-	1	

Source: City Social Welfare and Development Office, Davao City

Table CD – 6E. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Flood, September 21, 2010	Mandug	19	57	-	-	-	-	19	-
Flood, September 13, 2010	Malamba	4	9	-	-	-	-	1	-
Flood, October 26, 2010	Tigatto	2	-	-	-	-	-	1	-
Flood, November 29, 2010	Camansi	22	66	-	1	-	-	7	5
Flood, December 06, 2010	Calinan Poblacion	192	960	-	-	-	-	2	6
Flood, January 16, 2011	Km. 10 P16, Tigatto	1	2	-	-	-	-		1
Flood, January 16, 2011	Prk. 13,3A,1	3	10	-	1	-	-	1	1
Flood, January 17, 2011	Prk. 2A,4,5B,7,4	80	249	329	-	-	-	5	8
Flood, January 17, 2011	Mandug/Tigatto	140	495	-	-	-	-	-	-
Flood, January 17, 2011	Marapangi,Bayabas,Lizada	1,096	3,288	-	-	-	-	11	20
Flood, January 17, 2011	Inayangan	1	4	-	-	-	-	1	-
Landslide, January 17, 2011	Prk 13, Inayangan	1	4	-	-	-	-	1	-
Landslide, January 23, 2011	Km., 9 Matina Pangi	1	2	-	-	-	-	1	-
Flood, March 30, 2011	Poblacion/Tamayong	-	-	-	-	-	-		-
Flood, April 5, 2011	Communal	6	21	-	-	-	-	3	2

Source: City Social Welfare and Development Office, Davao City

Table CD – 6F. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Flood, April 5, 2011	Tigatto	427	-	-	-	-	-	4	210
Flood, April 5, 2011	P-26,Riverside, Maa	1	1	-	-	-	-	-	1
Flood, April 5, 2011	Bunawan	455	-	-	-	-	-	6	45
Flood, April 10, 2011	Gumalang	2	7	-	-	-	-	-	2
Flood, April 19, 2011	Pañalum	-	-	-	-	-	-	-	-
Flood, April 21, 2011	Talandang	22 farmers	-	-	-	-	-	-	-
Flood, April 21, 2011	Tigatto	-	-	-	-	-	-	4	11
Flood, April 21, 2011	Gumalang	3	9	-	-	-	-	2	1
Flood, April 21, 2011	Pangyan	3	-	-	-	-	-	-	-
Flood, April 21, 2011	Tambobong	1	5	-	-	-	-	-	1
Flood, April 22, 2011	Malamba	1	4	-	-	-	-	1	-
Flood, April 25, 2011	Sitio Quimosol	3	7	-	-	-	-	2	-
Flood, May 04, 2011	Panacan	597	3768	-	-	-	-	-	-
Flood, May 04, 2011	Mahayag	20	-	-	-	-	-	-	-
Flood, May 04, 2011	Panpanga	3	9	-	1	-	-	-	2
Flood, May 05, 2011	P-2, Malagos	2	4	-	-	-	-	-	2
Flood, June 2, 2011	P-3 San Vicente Ferrer	4	-	-	-	-	-	2	2
Landslide, June 2, 2011	San Vicente, Tigatto	4	11	-	-	-	-	2	2

Source: City Social Welfare and Development Office, Davao City

Table CD – 6G. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Flood, June 3, 2011	Barangay Dominga	1	-	-	-	-	-	1	-
Flood, June 8, 2011	Narra	7	-	-	-	-	-	4	3
Flood, June 8, 2011	Brgy. Tapak	3	-	-	-	-	-	3	-
Flood, June 8, 2011	P-Capricorn, Lasang	11	-	-	-	-	-	-	-
Flood, June 9, 2011	Brgy. Gumitan Proper	1	-	-	-	-	-	1	-
Flood, June 9, 2011	Sitio Davao Gulf, Brgy., Tamugan	4	-	-	-	-	-	1	3
Flood, June 9, 2011	P-Scorpio, Lasang	250	-	-	-	-	-	-	-
Flood, June 9, 2011	Sto Niño Bucana, lasang	50	-	-	-	-	-	-	1
Landslide, June 9, 2011	Davao Gulf, Tamugan	1,080	-	-	-	-	-	-	-
Flood, June 9, 2011	Paquibato Proper, P-Narra	31	102	-	-	-	-	4	-
Landslide, June 10, 2011	Campo Santos, Marilog	1	-	-	-	-	-	-	-
Flood, June 12, 2011	Brgy. Buda	6	-	-	-	-	-	1	5
Flood, June 13, 2011	Brgy. Tamugan	1	-	-	-	-	-	1	-
Flood, June 14, 2011	Brgy Mandug	14	-	-	-	-	-	14	-
Landslide, June 16, 2011	Gumitan	224	-	-	-	-	-	1	3
Landslide, June 16, 2011	Buda	23	-	-	-	-	-	1	5
Flood, June 29, 2011	NHA Bangkal	403	-	-	1	-	-	44	-
Flood, June 29, 2011	Matina Aplaya	83	-	-	1	-	-	50	33

Source: City Social Welfare and Development Office, Davao City

Table CD – 6H. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Flood, June 29, 2011	Matina Crossing	1,120	-	-	26	-	1	380	159
Flood, June 29, 2011	Matina Pangi	1104	-	-	2	-	-	97	1
Flood, June 29, 2011	Ma-a	497	-	-	-	-	-	1	-
Flood, July 3, 2011	Brgy. Bunawan	1	-	-	-	-	-	1	-
Flood, July 10, 2011	Brgy. Magsaysay	1	-	-	-	-	-	1	-
Flood, July 19, 2011	Brgy Bantol	5	-	-	-	-	-	4	1
Flood, October 7, 2011	Ma-a	3	-	-	-	-	-	2	1
Flood, November 6, 2011	Brgy. Binugao	1	-	-	-	-	-	1	-
Flood, November 6, 2011	Brgy. Sirawan	2	-	-	-	-	-	2	-
Flood, February 25 & 28, 2012	Calinan, Wangan Centro Purok 1	52 farmers	-	-	-	-	-	-	-
Flood, February 27, 2012	Tawan-Tawan	32 farmers	-	-	-	-	-	-	-
Flood, February 28, 2012	Saloy	135 farmers	-	-	-	-	-	-	-
Flood, March 23, 2012	Brgy. Tugbok		29	-	-	-	-	-	-
Flood, April 8, 2012	Brgy. Marapangi	3	8	-	-	-	-	2	-
Landslide, May 21, 2012	Brgy. Fatima	2	4	-	-	-	-	2	-
Landslide, June 11, 2012	Brgy. Marilog	9	32	-	1	-	-		-
Flood, July 04, 2012	North San Juan	1	3	-	-	-	-	1	-

Source: City Social Welfare and Development Office, Davao City

Table CD – 6I. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Flood, July 23, 2012	Brgy. Magsaysay	1	5	-	-	-	-	1	-
Flood, July 23, 2012	Datu Salumay	16	65	-	-	-	-	16	-
Flood, July 24, 2012	Gumitan, Sitio Dumalogdog	-	-	-	-	-	-	-	-
Flood, July 26, 2012	Sitio Kulafo, Magsaysay	17	69	-	-	-	-	7	10
Flood, December 4, 2012	Agdao,Tibungco,Bunawan,Iasang	214	57	-	-	-	-	5	5
Flood, December 4, 2012	Toril,Marilog,Marahan,Baganihan	235	4,368	-	-	-	-	1	13
Flood, December 4, 2012	Talomo,Ma-a,Matina Aplaya, Matina Crossing	349	-	-	-	-	-	1	7
Flood, December 7, 2012	Paquibato Proper	3	-	-	-	-	-	-	-
Flood, December 7, 2012	Tigatto	1	2	-	-	-	-	-	-
Flood, December 8, 2012	Brgy. Malamba	1	4	-	-	-	-	-	1
Landslide, December 15, 2012	Brgy. Magsaysay	1	1	-	-	-	-	-	-
Flood, January 19, 2013	Brgy. Malungon	5	21	-	-	-	-	5	-
Flood, January 19, 2013	Brgy.Tamugan	6	15	-	-	-	-	6	-
Flood, January 20, 2013	Calinan Pob.	2	-	-	-	-	-	2	-

Source: City Social Welfare and Development Office, Davao City

Table CD – 6J. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Flood, January 20, 2013	Brgy.Waan	1	2	-	-	-	-	-	1
Flood, January 20, 2013	Brgy.Lasang, Paquibato	4	-	-	-	-	-	-	4
Flood, January 20, 2013	Talomo B (3 BRGYS)	-	3,709	-	-	-	-	-	
Flood, January 20, 2013	City Poblacion (7 BRGYS)	-	3,642	-	-	-	-	107	116, A = 2, 404
Flood, January 20, 2013	Buhangin Dist (3 BRGYS)	-	2, 411	-	-	-	-	-	-
Landslide, January 20, 2013	KM.7, P- Buhangin Hills	1	-	-	-	-	-	-	1
Flood, January 24, 2013	Brgy.Tamugan	2	-	-	-	-	-	2	-
Flood, January 24, 2013	Brgy. Calinan Pob.	62	161	-	-	-	-	62	-
Flood, February 09, 2013	Brgy.Calinan Pob.27	27	1,130	-	-	-	-	-	-
Flood, February 09, 2013	Brgy.Riverside	172	-	-	-	-	-	172	-
Flood, February 19, 2013	Brgy. Maa	2	8	-	-	-	-	-	2
Flood, March 07, 2013	Brgy. Calinan	2	3	-	-	-	-	-	2
Landslide, March 25, 2013	Sto.Niño	1	2	-	-	-	-	1	-
Landslide, February 1,2014	Guadalupe Village,Pansoy Comp.,Matina Crossing	1	7	-	-	2	-	1	-
Landslide, February 2, 2014	Brgy Baganihan	1	1	-	-	-	-	-	1
Landslide, February 19,2014	Brgy. Tambobong	1	2	-	-	-	-	1	

Source: City Social Welfare and Development Office, Davao City

Table CD – 6K. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Landslide, May 29, 2014	Brgy Suawan	1	2	-	-	-	-	1	-
Landslide, May 25, 2014	Brgy Tambobong	3	18	-	-	-	-	1	-
Landslide, May 31, 2014	Brgy Salaysay	1	5	-	-	-	-	-	1
Flood, June 16, 2014	Maa	3	11	-	-	-	-	3	-
Landslide, June 16, 2014	Purok 1	1	2	-	-	-	-	-	1
Flood, August 21, 2014	Brgy Lasang	50	-	-	-	-	-	-	-
Flood, August 25, 2014	Brgy Matina Pangi, Brgy Matina Crossing, Matina Aplaya, Downtown Areas	96	-	-	-	-	-	-	-
Flood, September 6, 2014	Brgy Tamugan	47	-	-	-	-	-	-	-
Landslide, September 07, 2014	Brgy. Lumiad	47	-	-	-	-	-	-	-
Flood, September 11, 2014	Brgy Tugbok Proper	1	2	-	-	-	-	1	-
Flood, September 11, 2014	Bago-Oshiro	1	4	-	-	-	-	-	1
Flood, October 28, 2014	Brgy. Bunawan	2	12	-	-	-	-	1	1
Landslide, November 17, 2014	Tambobong	1	5	-	-	-	-	-	1
Flood, November 22, 2014	Marapangi Toril	1	5	-	-	-	-	-	1

Source: City Social Welfare and Development Office, Davao City

Table CD – 6L. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Flood, January 9, 2015	Talomo	1	7	-	-	-	-	-	1
Landslide, January 9,	Talomo	1	7	-	-	-	-	-	1
Landslide, January	Prk 40 Upper Ulas Davao City	1	3	-	-	-	-	1	-
Flood, June 9, 2015	Brgy Sto. Niño	2	12	-	-	-	-	2	-
Landslide, June 14,	Brgy. Inayangan Calinan Davao	1	-	-	-	-	-	-	1
Flood, July 6, 2015	Brgy. Gumitan	-	-	-	-	-	-	-	-
Landslide, September	Brgy Buda	1	2	-	-	-	-	1	-
Landslide, October 11,	Brgy. Buda	-	-	-	-	-	-	1	-
Landslide, October 23,	Purok 12, Brgy. Buda	2	13	-	-	-	-	2	-
Landslide, April 9, 2016	Brgy. Matina Pangi	1	4	-	-	-	-	1	-
Landslide, June 26,	June 26, 2016/3:45 AM	1	1	-	-	-	-	1	-
Flood, June 26, 2016	Brgy. 10-A	1	2	-	-	-	-	1	-
Flood, June 21, 2016	Brgy. Gumitan	20	170	-	-	-	-	-	20
Landslide, October 9,	Sitio Panipasan Marilog Proper	1	1	-	-	-	-	1	-
Landslide, October 10,	Brgy. Buda	2	12	-	-	-	-	2	-

Source: City Social Welfare and Development Office, Davao City

Table CD – 6M. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Landslide, October 23,	Brgy. Suawan	1	1	-	-	-	-	-	1
Flood, October 23,	Brgy. Suawan	1	1	-	-	-	-	1	-
Landslide, April 21,	Brgy. Paquibato Prop.	-	5	-	-	-	-	-	1
Landslide, April 29,	Brgy. Pandaitan	1	5	-	-	-	-	-	1
Landslide, May 3, 2017	Brgy. Mandug	1	1	-	-	-	-	1	-
Flood, May 11, 2017	Brgy. Matina Pangi	2	9	-	-	-	-	1	1
Flood, May 11, 2017	Matina Aplaya 75-A	1	2	-	-	-	-	-	1
Flood, May 11, 2017	Brgy. 74-A Matina Crossing	1	5	-	-	-	-	1	-
Flood, May 11, 2017	Brgy. Langub	1	3	-	-	-	-	1	-
Flood, June 7, 2017	Barangay 5-A	4	11	-	-	-	-	4	-
Flood, May 11, 2017	Brgy. 74-A Matina Crossing	1	5	-	-	-	-	1	-
Flood, May 11, 2017	Brgy. Langub	1	3	-	-	-	-	1	-
Flood, June 7, 2017	Barangay 5-A	4	11	-	-	-	-	4	-
Landslide, June 7, 2017	Brgy. Malamba	1	6	-	-	-	-	1	-
Landslide, June 30,	Brgy. Catalunan Pequeño	1	-	-	-	-	-	-	1
Flood, June 30, 2017	Brgy. Mintal	1	7	-	-	-	-	1	-
Flood, June 30, 2017	Brgy. Baliok	1	3	-	-	-	-	-	1

Source: City Social Welfare and Development Office, Davao City

Table CD – 6N. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Flood, July 1, 2017	Bago Aplaya	1	1	-	-	-	-	1	-
Flood, July 6, 2017	Brgy. Matina Crossing	1	5	-	-	-	-	-	1
Flood, July 6, 2017	Matina Aplaya 75-A	3	10	-	-	-	-	2	1
Landslide, July 12, 2017	Brgy. Matina Pangí	-	-	-	-	-	-	-	-
Landslide, September 3, 2017	Brgy. 10-A	10	32	-	-	-	-	2	1
Landslide, September 11, 2017	Brgy. New Carmen	3	8	-	-	-	-	2	-
Landslide, September 11, 2017	Brgy. Catalunan Grande	2	11	-	-	-	-	1	1
Flood, September 11, 2017	Brgy. Talomo Proper	2	1	-	-	-	-	1	1
Flood, September 11, 2017	Matina Aplaya 75-A	1	2	-	-	-	-	1	-
Flood, September 11, 2017	Brgy. Matina Pangí	1	1	-	-	-	-	-	1
Flood, September 11, 2017	Brgy. Matina Pangí	1	2	-	-	-	-	-	1
Flood, September 12, 2017	Brgy. Panacan	7	17	-	-	-	-	-	7
Flood, September 12, 2017	Brgy. Bunawan	1	2	-	-	-	-	-	1
Flood, September 12, 2017	Brgy. Ilang	3	8	-	-	-	-	1	2
Landslide, September 30, 2017	Brgy. Langub	2	-	8	-	-	-	-	-

Source: City Social Welfare and Development Office, Davao City

Table CD – 60. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Flood, October 1, 2017	Brgy. Baliok	1	4	-	-	-	-	-	1
Landslide, October 5, 2017	Brgy. Langub	2	-	-	-	-	-	-	-
Landslide, October 9, 2017	Brgy. Langub and Brgy. Matina Pangi	53	-	-	-	-	-	-	-
Landslide, November 3, 2017	Brgy. Langub	-	-	-	-	-	-	-	-
Landslide, December 5, 2017	Brgy. Tigatto	4	8	-	-	-	-	-	2
Landslide, December 9, 2017	Brgy. Tamugan	1	2	-	-	-	-	1	-
Landslide, December	Brgy. Pandaitan	1	1	-	-	-	-	1	-
Landslide, December 19, 2017	Brgy. Pandaitan	1	1	-	-	-	-	1	-
Flood, December 22, 2017	Brgy 2-A	1	7	-	-	-	-	-	-
Flood, December 23, 2017	Brgy. Buhangin	-	-	-	-	-	-	-	-
Flood, December 23, 2017	Brgy. Bucana	67	-	122	-	-	-	-	-
Flood, December 23, 2017	Brgy. 5-A	-	-	1,500	-	-	-	-	-
Flood, December 23, 2017	Brgy. Bantol	-	-	-	-	-	-	23	-
Flood, December 23, 2017	Brgy. 8-A	-	-	1,500	-	-	-	-	-
Flood, December 31,	Bago Aplaya	1	1	-	-	-	-	1	-

Source: City Social Welfare and Development Office, Davao City

Table CD – 6P. Records of Previous Disasters, Davao City, 2000-2019

Hazard Events and Description	Affected Barangays	No. of Affected			No. of Casualties			No. of Casualties	
		Families	Dependents	Individuals	Dead	Injured	Missing	Partially Damaged	Totally Damaged
Flood, February 25, 2018	Brgy. Riverside	1	2	-	-	-	-	-	1
Landslide, April 4, 2018	Brgy. Langub	-	-	-	-	-	-	-	-
Flood, May 7, 2018	Brgy. Sto.Niño	1	6	-	-	-	-	1	-
Flood, May 7, 2018	Catalunan Pequeño	1	4	-	-	-	-	1	-
Flood, May 7, 2018	Brgy. Tugbok Proper	3	6	-	-	-	-	-	3
Flood, May 8, 2018	Brgy. Talomo Proper	3	10	-	-	-	-	-	3
Landslide, May 10, 2018	Brgy. Cabantian	3	5	-	-	-	-	1	-
Flood, August 23,2018	Brgy. Catalunan Grande	1	1	-	-	-	-	-	-
Flood, January 01,2019	Brgy. Bato	1	4	-	-	-	-	-	1
Flood, January 23,2019	Brgy. Daliao	9	21	-	-	-	-	5	1
Landslide, January 23, 2019	Brgy. Malabog	1	1	-	-	-	-	-	1

Source: City Social Welfare and Development Office, Davao City

Hazard Susceptibility Inventory Matrix

Two (2) out of 182 barangays in the city, which are Talomo Proper in Talomo District and Binugao in Toril District, are susceptible to all the identified five hazards, namely: flood, landslide, fault line, liquefaction, and storm surge. Over one-fourth or 27% are susceptible to both floods and landslides. At least 17% of the barangays are susceptible to flood, landslide and fault line while another 30 barangays are susceptible to both storm surge and liquefaction. Only barangays 18-B, Baguio Proper, Crossing Bayabas, and Toril Proper are susceptible to one hazard. Barangay 18-B is solely susceptible to storm surge while Baguio Proper, Crossing Bayabas, and Toril Proper are susceptible to fault line, flood, and liquefaction, respectively.

Table CD – 7A. Hazard Susceptibility Inventory Matrix, By Barangay, Davao City

Barangay	Hazard				
	Flood	Landslide	Fault Line	Liquefaction	Storm Surge
1-A	✓			✓	✓
2-A	✓			✓	✓
3-A				✓	✓
4-A				✓	✓
5-A	✓			✓	✓
6-A				✓	✓
7-A				✓	✓
8-A	✓			✓	✓
9-A				✓	✓
10-A				✓	✓
11-B				✓	✓
12-B				✓	✓
13-B				✓	✓
14-B				✓	✓
15-B				✓	✓
16-B				✓	✓
17-B				✓	✓
18-B					✓
19-B	✓	✓		✓	✓
20-B				✓	✓
21-C	✓			✓	✓

Source: MGB, DOST, and PHIVOLCS, Region XI

Table CD – 7B. Hazard Susceptibility Inventory Matrix, By Barangay, Davao City

Barangay	Hazard				
	Flood	Landslide	Fault Line	Liquefaction	Storm Surge
22-C	✓			✓	✓
23-C	✓			✓	✓
24-C				✓	✓
25-C				✓	✓
26-C				✓	✓
27-C	✓			✓	✓
28-C				✓	✓
29-C				✓	✓
30-C				✓	✓
31-D	✓			✓	✓
32-D				✓	✓
33-D	•			✓	✓
34-D				✓	✓
35-D	•			✓	✓
36-D	•			✓	✓
37-D	✓			✓	✓
38-D				✓	✓
39-D	✓			✓	✓
40-D	✓			✓	✓
A. Angliongto		✓		✓	✓
Acacia		✓	✓		
Agdao Proper				✓	✓
Alambre		✓	✓	✓	
Angalan		✓		✓	
Atan-Awe		✓	✓		
Baganihan			✓		
Bago Aplaya		✓		✓	✓
Bago Gallera		✓		✓	✓
Bago Oshiro		✓		✓	

Source: MGB, DOST, and PHIVOLCS, Region XI

Table CD – 7C. Hazard Susceptibility Inventory Matrix, By Barangay, Davao City

Barangay	Hazard				
	Flood	Landslide	Fault Line	Liquefaction	Storm Surge
Baguio	✓	✓	✓		
Balengaeng	✓		✓		
Baliok			✓		
Bankas Heights	✓		✓		
Bantol	✓	✓			
Baracatan	✓	✓			
Bato	✓	✓			
Bayabas	✓	✓			
Biao Escuela	✓	✓	✓		
Biao Guianga	✓		✓		
Biao Joaquin	✓	✓	✓		
Binugao	✓	✓	✓	✓	✓
Bucana	✓			✓	✓
Buda		✓			
Buhangin	✓	✓		✓	
Bunawan	✓			✓	✓
Cabantian	✓	✓			
Cadalian	✓	✓			
Calinan	✓	✓	✓		
Callawa	✓	✓			
Camansi	✓	✓	✓		
Carmen	✓	✓			
Catalunan Grande	✓	✓	✓		
Catalunan Pequeño	✓		✓		
Catigan	✓	✓			
Cawayan	✓	✓	✓		
Centro	✓			✓	✓
Colosas	✓	✓	✓		
Communal	✓	✓			

Source: MGB, DOST, and PHIVOLCS, Region XI

Table CD – 7D. Hazard Susceptibility Inventory Matrix, By Barangay, Davao City

Barangay	Hazard				
	Flood	Landslide	Fault Line	Liquefaction	Storm Surge
Crossing Bayabas	✓				
Dacudao	✓	✓	✓		
Dalag Lumot	✓	✓			
Dalagdag	✓	✓			
Daliao				✓	✓
Daliaon Plantation	✓	✓			
Datu Salumay		✓			
Dominga	✓	✓	✓		
Dumoy	✓			✓	✓
Eden	✓	✓			
Fatima		✓			
Gatungan	✓	✓			
Gov. Vicente Duterte	✓			✓	✓
Gumalang	✓	✓	✓		
Gumitan	✓	✓			
Ilang	✓	✓		✓	✓
Inayangan	✓	✓			
Indangan	✓	✓			
Kilate	✓	✓			
Lacson	✓	✓	✓		
Lamanan	✓	✓	✓		
Lampianao	✓	✓	✓		
Langub	✓	✓	✓		
Lapu - Lapu	✓			✓	✓
Lasang	✓			✓	✓
Leon Garcia Sr.	✓			✓	✓
Lizada	✓		✓	✓	✓
Los Amigos	✓		✓		
Lubogan	✓		✓		
Lumiad	✓	✓	✓		

Source: MGB, DOST, and PHIVOLCS, Region XI

Table CD – 7E. Hazard Susceptibility Inventory Matrix, By Barangay, Davao City

Barangay	Hazard				
	Flood	Landslide	Fault Line	Liquefaction	Storm Surge
Ma-a	✓	✓		✓	✓
Mabuhay	✓	✓			
Magsaysay		✓			
Magtuod	✓	✓			
Mahayag	✓	✓		✓	✓
Malabog	✓	✓	✓		
Malagos	✓	✓	✓		
Malamba	✓	✓			
Manambulan	✓	✓	✓		
Mandug	✓	✓		✓	
Manuel Guianga	✓	✓			
Mapula	✓	✓	✓		
Marapangi	✓	✓			
Marilog	✓	✓			
Matina Aplaya	✓			✓	✓
Matina Biao	✓	✓	✓		
Matina Crossing	✓	✓		✓	✓
Matina Pangi	✓	✓			
Megkawayan	✓	✓			
Mintal	✓		✓		
Mudiang	✓	✓			
Mulig	✓	✓	✓		
New Carmen	✓	✓	✓	✓	
New Valencia	✓	✓	✓		
Pampanga	✓			✓	✓
Panacan	✓	✓		✓	✓
Pañalum	✓	✓	✓		
Pandaitan	✓	✓			
Pangyan	✓	✓	✓		
Paquibato	✓	✓	✓		

Source: MGB, DOST, and PHIVOLCS, Region XI

Table CD – 7F. Hazard Susceptibility Inventory Matrix, By Barangay, Davao City

Barangay	Hazard				
	Flood	Landslide	Fault Line	Liquefaction	Storm Surge
Paradise Embac	✓	✓			
Rafael Castillo	✓			✓	✓
Riverside	✓		✓		
Salapawan	✓	✓			
Salaysay	✓	✓			
Saloy	✓	✓			
San Antonio	✓			✓	✓
San Isidro	✓	✓		✓	✓
Sasa	✓	✓		✓	✓
Sibulan	✓	✓			
Sirawan	✓		✓	✓	✓
Sirib	✓	✓			
Sto. Niño	✓		✓		
Suawan	✓	✓			
Subasta	✓		✓		
Sumimao	✓	✓	✓		
Tacunan	✓		✓		
Tagakpan	✓		✓		
Tagluno	✓	✓	✓		
Tagurano	✓	✓			
Talandang		✓	✓		
Talomo	✓	✓	✓	✓	✓
Talomo River	✓	✓	✓		
Tamayong	✓	✓			
Tambobong	✓	✓			
Tamugan	✓	✓	✓		
Tapak	✓	✓			
Tawan-Tawan	✓	✓			
Tibuloy	✓	✓			
Tibungco	✓	✓			✓

Source: MGB, DOST, and PHIVOLCS, Region XI

Table CD – 7G. Hazard Susceptibility Inventory Matrix, By Barangay, Davao City

Barangay	Hazard				
	Flood	Landslide	Fault Line	Liquefaction	Storm Surge
Tigatto	✓	✓		✓	
Tomas Monteverde				✓	✓
Toril				✓	
Tugbok	✓		✓		
Tungkalan	✓	✓			
Ubalde	✓			✓	✓
Ula	✓		✓		
V. Hizon	✓			✓	✓
Waan	✓	✓		✓	
Wangan	✓		✓		
Wilfredo Aquino				✓	✓
Wines	✓	✓			

Source: MGB, DOST, and PHIVOLCS, Region XI

Projected Changes in Climate Variables and Potential Affected Exposure Unit/s

Increases in rainfall and temperature may potentially affect different exposure units such as population, natural resource-based production areas, critical point facilities, urban use areas, and lifeline utilities.

All the five (5) exposure units may be affected when there is heavy downpour particularly in the months of June, July, and August when Southwest Monsoon winds are expected to prevail. These months are projected to have rainfall amount of 584.4 mm, which may result to flooding especially in areas near waterways.

Increases in rainfall may potentially damage the properties (residential units, commercial and industrial establishments, schools, barangay halls, and other critical point facilities, and lifeline utilities like roads, bridges, power and water distribution lines). This may also affect crops and other natural resources.

The rainy season affects the entire populace, increasing also their vulnerability to health hazards like malaria and dengue, both mosquito-borne diseases associated with this season. Another life threatening health hazard during rainy season is leptospirosis, a bacterial infection from rodents that affects humans and animals. According to the World Health Organization, person contract the disease through waters contaminated by the urine of infected rodents. The WHO further said that the number of cases may even reach epidemic proportions during the rainy season due to frequent flooding.

Heavy rains may also cause polio outbreak and cause contamination of water through sewage systems. Davao River recently tested positive of polio virus, and thus, may spread in the entire city. Households that lack sanitary toilets are at risk of contracting the disease. As of 2010, the Philippine Statistics Authority (PSA) reports that there are still 35,085 households or 10.49% of the total number of households that lacked water-sealed toilets.

The five (5) exposure units may also be affected when there would be dry season particularly in the months of September, October, and November. These months are projected to have the lowest rainfall amount with 378.5 mm.

Increases in temperature may as well affect the population, natural resource-based production areas, critical point facilities, urban use areas, and lifeline utilities particularly in the months of March, April, and May (Table CD – 9, see page 51). These months are projected to be the hottest season with temperature of 29°C to 30°C by 2036 to 2065.

The health of the population will be at risk as they may experience skin diseases, heat illnesses, and respiratory infections. Increases in temperature may also lead to cracks and damages to properties (residential units, commercial and industrial establishments, schools, barangay halls, and other critical point facilities, and lifeline utilities like roads, bridges, power and water distribution lines). The natural-based production areas, including agricultural areas, may also suffer the impact of dry season.

Table CD – 8A. Summary of Projected Changes in Rainfall and Potential Affected Exposure Unit/s, Davao City

Season	Scenario	Range *	Projected Change		Projected Seasonal Rainfall Amount (mm)	Information About Patterns of Change	Potential Impacts	Adaptation Option	Population	Natural Resources Based Production	Urban Areas	Critical Point Facilities	Lifeline Utilities
			%	Rainfall amount (mm)									
		Lower Bound	-8.4	-24.2	263.9	slight decrease in rainfall amount	-	-	No	No	No	No	No
		Median	-0.9	-2.5	285.6	minimal to no change in rainfall amount	-	-	No	No	No	No	No
		Upper Bound	16	46.1	334.2	The highest possible future rainfall change during the Northeast Monsoon shows an increase of 16%.	<p>Occurrence of floods in areas near waterways, landslide and possible sea level rise in coastal barangays/communities, which will result to:</p> <ul style="list-style-type: none"> > damage to properties (e.g., houses, bridges, roads, other establishments) > decrease in crop production > pest and disease infestation > clogged canals > transport disruption > class suspension > loss of lives due to drowning > decrease in economic activities 	<ul style="list-style-type: none"> > Conduct pre-emptive evacuation > Farmers should be insured with risk financing programs/ crop insurance > Empower farmers by enrolling them in Farmer-Field School (e.g., early harvests) > Introduce climate-resilient varieties of crops > Build hazard-resistant facilities. > Require communities to wear protective gears as prevention to leptospirosis > Ensure supply of prophylaxis 	Yes	Yes	Yes	Yes	Yes

Source: PAGASA Final Observed Climate Trends and Projected Climate Change in the Philippines, 2018

Table CD – 8B. Summary of Projected Changes in Rainfall and Potential Affected Exposure Unit/s, Davao City

Season	Scenario	Range *	Projected Change		Projected Seasonal Rainfall Amount (mm)	Information About Patterns of Change	Potential Impacts	Adaptation Option	Population	Natural Resources Based Production	Urban Areas	Critical Point Facilities	Lifeline Utilities
			%	Rainfall amount (mm)									
March - April - May (MAM) Observed baseline = 347.1	High Emission (RCP 8.5)	Lower Bound	-6.4	-22.1	325	slight decrease in rainfall amount	-	-	No	No	No	No	No
		Median	2.1	7.1	354.2	slight increase in rainfall amount	-	-	No	No	No	No	No
		Upper Bound	15.4	53.3	400.4	The highest possible future rainfall change during the Northeast Monsoon shows an increase of 15.4%.	Occurrence of floods in areas near waterways, landslide and possible sea level rise in coastal barangays/communities, which will result to: <ul style="list-style-type: none"> > damage to properties (e.g., houses, bridges, roads, other establishments) > decrease in crop production > pest and disease infestation > clogged canals > transport disruption > class suspension > loss of lives due to drowning > decrease in economic activities 	<ul style="list-style-type: none"> > Conduct pre-emptive evacuation > Farmers should be insured with risk financing programs/ crop insurance > Empower farmers by enrolling them in Farmer-Field School (e.g., early harvests) > Introduce climate-resilient varieties of crops > Build hazard-resistant facilities. > Require communities to wear protective gears as prevention to leptospirosis > Ensure supply of prophylaxis 	Yes	Yes	Yes	Yes	Yes

Source: PAGASA Final Observed Climate Trends and Projected Climate Change in the Philippines, 2018

Table CD – 8C. Summary of Projected Changes in Rainfall and Potential Affected Exposure Unit/s, Davao City

Season	Scenario	Range *	Projected Change		Projected Seasonal Rainfall Amount (mm)	Information About Patterns of Change	Potential Impacts	Adaptation Option	Population	Natural Resources Based Production	Urban Areas	Critical Point Facilities	Lifeline Utilities
			%	Rainfall amount (mm)									
June - July - August (JJA) Observed baseline = 494.1	High Emission (RCP 8.5)	Lower Bound	-7.1	-34.9	459.2	slight decrease in rainfall amount	-	-	No	No	No	No	No
		Median	4.4	21.5	515.6	slight increase in rainfall amount	-	-	No	No	No	No	No
		Upper Bound	18.3	90.3	584.4	The highest possible future rainfall change during Southwest Monsoon and Northeast Monsoon shows an increase of 18.3%. This is the highest percent change among the four seasons.	<p>Occurrence of floods in areas near waterways, landslide and possible sea level rise in coastal barangays/communities, which will result to:</p> <ul style="list-style-type: none"> > damage to properties (e.g., houses, bridges, roads, other establishments) > decrease in crop production > pest and disease infestation > clogged canals > transport disruption > class suspension > loss of lives due to drowning > decrease in economic activities 	<ul style="list-style-type: none"> > Conduct pre-emptive evacuation > Farmers should be insured with risk financing programs/ crop insurance > Empower farmers by enrolling them in Farmer-Field School (e.g., early harvests) > Introduce climate-resilient varieties of crops > Build hazard-resistant facilities. > Require communities to wear protective gears as prevention to leptospirosis > Ensure supply of prophylaxis 	Yes	Yes	Yes	Yes	Yes

Table CD – 8D. Summary of Projected Changes in Rainfall and Potential Affected Exposure Unit/s, Davao City

Season	Scenario	Range *	Projected Change		Projected Seasonal Rainfall Amount (mm)	Information About Patterns of Change	Potential Impacts	Adaptation Option	Population	Natural Resources Based	Urban	Critical Point Facilities	Lifeline
			%	Rainfall amount (mm)									
September - October - November (SON) = 442.3	High Emission (RCP 8.5)	Lower Bound	-14.4	-63.8	378.5	The rainfall amount is projected to be the lowest at -63.8% due to incoming Northeast Monsoon.	Possible dry season that will result to: >occurrence of health problems (e.g., heat stroke, dengue) >pest infestation > decrease in economic activities > power loss from hydroelectric plants	> Install water reservoir and irrigation systems > Strict implementation of Rainwater Catchment Ordinance > Ensure stable water supply > Intensify vaccination program >Introduce drought-resistant crops >No obstruction of structures above waterways	Yes	Yes	Yes	Yes	Yes
		Median	-10.1	-44.5	397.8	notable decrease in rainfall amount	-	-	No	No	No	No	No
		Upper Bound	8.2	36.1	478.4	slight increase in rainfall amount	Occurrence of floods in areas near waterways, landslide and possible sea level rise in coastal barangays/communities, which will result to: > damage to properties (e.g., houses, bridges, roads, other establishments) > decrease in crop production > pest and disease infestation > clogged canals > transport disruption > class suspension > loss of lives due to drowning > decrease in economic activities	> Conduct pre-emptive evacuation >Farmers should be insured with risk financing programs/ crop insurance > Empower farmers by enrolling them in Farmer-Field School (e.g., early harvests) > Introduce climate-resilient varieties of crops >Build hazard-resistant facilities. >Require communities to wear protective gears as prevention to leptospirosis >Ensure supply of prophylaxis	Yes	Yes	Yes	Yes	Yes

Source: PAGASA Final Observed Climate Trends and Projected Climate Change in the Philippines, 2018

Table CD – 8E. Summary of Projected Changes in Rainfall and Potential Affected Exposure Unit/s, Davao City

Season	Scenario	Range *	Projected Change		Projected Seasonal Rainfall Amount (mm)	Information About Patterns of Change	Potential Impacts	Adaptation Option	Population	Production	Natural Resources Based	Urban Areas	Critical Point Facilities	Lifeline Utilities
			%	Rainfall amount (mm)										
September - October - November (SON) = 442.3	High Emission (RCP 8.5)	Lower Bound	-14.4	-63.8	378.5	The rainfall amount is projected to be the lowest at -63.8% due to incoming Northeast Monsoon.	Possible dry season that will result to: >occurrence of health problems (e.g., heat stroke, dengue) >pest infestation > decrease in economic activities > power loss from hydroelectric plants	> Install water reservoir and irrigation systems > Strict implementation of Rainwater Catchment Ordinance > Ensure stable water supply > Intensify vaccination program >Introduce drought-resistant crops >No obstruction of structures above waterways >Strict implementation of Proper Environmental Sanitation Policies	Yes	Yes	Yes	Yes	Yes	
		Median	-10.1	-44.5	397.8	notable decrease in rainfall amount	-	-	No	No	No	No	No	

Source: PAGASA Final Observed Climate Trends and Projected Climate Change in the Philippines, 2018

Table CD – 8F. Summary of Projected Changes in Rainfall and Potential Affected Exposure Unit/s, Davao City

Season	Scenario	Range *	Projected Change		Projected Seasonal Rainfall Amount (mm)	Information About Patterns of Change	Potential Impacts	Adaptation Option	Population	Natural Resources Based Production	Urban Areas	Critical Point Facilities	Lifeline Utilities
			%	Rainfall amount (mm)									
		Upper Bound	8.2	36.1	478.4	slight increase in rainfall amount	<p>Occurrence of floods in areas near waterways, landslide and possible sea level rise in coastal barangays/communities, which will result to:</p> <ul style="list-style-type: none"> > damage to properties (e.g., houses, bridges, roads, other establishments) > decrease in crop production > pest and disease infestation > clogged canals > transport disruption > class suspension > loss of lives due to drowning > decrease in economic activities 	<ul style="list-style-type: none"> > Conduct pre-emptive evacuation > Farmers should be insured with risk financing programs/crop insurance > Empower farmers by enrolling them in Farmer-Field School (e.g., early harvests) > Introduce climate-resilient varieties of crops > Build hazard-resistant facilities. > Require communities to wear protective gears as prevention to leptospirosis > Ensure supply of prophylaxis 	Yes	Yes	Yes	Yes	Yes

Source: PAGASA Final Observed Climate Trends and Projected Climate Change in the Philippines, 2018

Table CD – 9A. Summary of Projected Changes in Temperature and Potential Affected Exposure Unit/s, Davao City

Season	Scenario	Range *	Projected Change		Information about Patterns of Change	Potential Impacts	Adaptation Option	Population	Natural Resources Based Production	Urban Areas	Critical Point Facilities	Lifeline Utilities
			Change in °C	Projected Seasonal Mean Temperature (°C)								
December - January - February (DJF) Observed	High Emission (RCP 8.5)	Lower Bound	1.3	28.2	Coldest Season 28.2 - 29.1	<ul style="list-style-type: none"> Exposure to respiratory infections Decrease in yield/ Production 	<ul style="list-style-type: none"> Intensify Information, Education Campaign on all health hazards Expand immunization coverage on all ages (pneumonia, flu, measles) Planting of disaster-resilient crops Use of renewable energy 	Yes	No	No	No	No
		Median	1.6	28.5				Yes	No	No	No	No
		Upper Bound	2.2	29.1				Yes	Yes	Yes	Yes	Yes
March - April - May (MAM) Observed baseline = 27.8	High Emission (RCP 8.5)	Lower Bound	1.4	29.2	Hottest Season 29.2 - 30.1	<ul style="list-style-type: none"> Exposure to skin diseases, heat illnesses, respiratory infections Decrease in yield/ Production due to crop damage Increase in the usage of electricity (more usage of cooling fans and air-condition units) Possible water and power shortage Rat Infestation Coral reef bleaching Increase in fuel consumption 	<ul style="list-style-type: none"> Strict enforcement of 10% green spaces Increase urban greening activity Crop rotation (change in planting season) Encourage the use of energy-efficient appliances Encourage the use of fuel-efficient vehicles Encourage vertical or containerized gardening 	Yes	Yes	Yes	Yes	Yes
		Median	1.7	29.5				Yes	Yes	Yes	Yes	Yes
		Upper Bound	2.3	30.1				Yes	Yes	Yes	Yes	Yes

Source: PAGASA Final Observed Climate Trends and Projected Climate Change in the Philippines, 2018

Table CD – 9B. Summary of Projected Changes in Temperature and Potential Affected Exposure Unit/s, Davao City

Season	Scenario	Range *	Projected Change		Information about Patterns of Change	Potential Impacts	Adaptation Option	Population	Natural Resources Based Production	Urban Areas	Critical Point Facilities	Lifeline Utilities
			Change in °C	Projected Seasonal Mean Temperature (°C)								
June - July - August (JJA) Observed baseline = 26.9	High Emission (RCP 8.5)	Lower Bound	1.3	28.2	28.2 - 29.2	<ul style="list-style-type: none"> Exposure to respiratory infections Decrease in yield/ Production 	<ul style="list-style-type: none"> Intensify Information, Education Campaign on all health hazards Expand immunization coverage on all ages (pneumonia, flu, measles) Planting of disaster-resilient crops Use of renewable energy 	Yes	No	No	No	No
		Median	1.6	28.5				Yes	No	No	No	No
		Upper Bound	2.3	29.2				Yes	Yes	Yes	Yes	Yes
September - October - November (SON) = 27.1	High Emission (RCP 8.5)	Lower Bound	1.3	28.4	28.4 - 29.3	<ul style="list-style-type: none"> Exposure to respiratory infections, skin diseases, heat illnesses Decrease in yield/ Production due to crop damage Increase in the usage of electricity (more usage of cooling fans and air-condition units) Possible water and power shortage Rat Infestation Coral reef bleaching Increase in fuel consumption 	<ul style="list-style-type: none"> Strict enforcement of 10% green spaces Increase urban greening activity Crop rotation (change in planting season) Encourage the use of energy-efficient appliances Encourage the use of fuel-efficient vehicles Encourage vertical or containerized gardening 	Yes	No	No	No	No
		Median	1.6	28.7				Yes	No	No	No	No
		Upper Bound	2.2	29.3				Yes	Yes	Yes	Yes	Yes

Source: PAGASA Final Observed Climate Trends and Projected Climate Change in the Philippines, 2018

Impact Chain Diagrams

The diagrams in the next pages are the combined outputs of the sectors during the workshops for this Climate and Disaster Risk Assessment in May 2019. These are the impact chain diagrams, which are important for the city government to easily identify the key development areas/sectors where climate change and disasters will likely impact; and to guide the detailed study of establishing the level of risks and vulnerabilities of the city.

Under Diagram CD – 1 (see next page), increases in rainfall may attribute to sea/river water level rise, floods, and landslides, which eventually will affect and damage the exposed critical facilities, settlements, production areas, lifeline utilities, and establishments in urban use areas. One exposure unit that is highly vulnerable is population, especially the dependent population (children and senior citizens), which may obtain severe diseases/illnesses or suffer from drowning that may result to the loss of his/her life. Communities especially those near the waterways may also be displaced due to damage of settlement. Another possible consequence is incurring food shortage if there would be a decline/loss in crops, livestock, poultry, and fish production. There might also be an interruption of services and disruption of people's mobility and communication access once the critical point facilities and lifeline utilities would be damaged, thereby resulting to the delay on the delivery of goods and services.

Incidents such as sea/river water level rise, floods, and landslides may as well affect parks/recreation, tourism, commercial, and industrial establishments. Owners may close their businesses, which may eventually result to the displacement of workers, thereby having income and employment loss.

Another impact chain is shown in Diagram CD – 1, which outlines consequences as a result of the temperature increase. As bared in the diagram, increases in temperature may lead to sea temperature rise and drought. The sea temperature may as well attribute to coastal erosion and red tide while drought is expected to cause heat wave and reduction of soil moisture. Among the worst consequences brought by these possible incidences include possible displacement of communities, high incidence of diseases, food shortage, rat infestation, reduction in vegetative cover, and economic losses.

Diagram CD – 1. Climate Change Impact Chain Multiple Sectors, Increase in Rainfall, Davao City

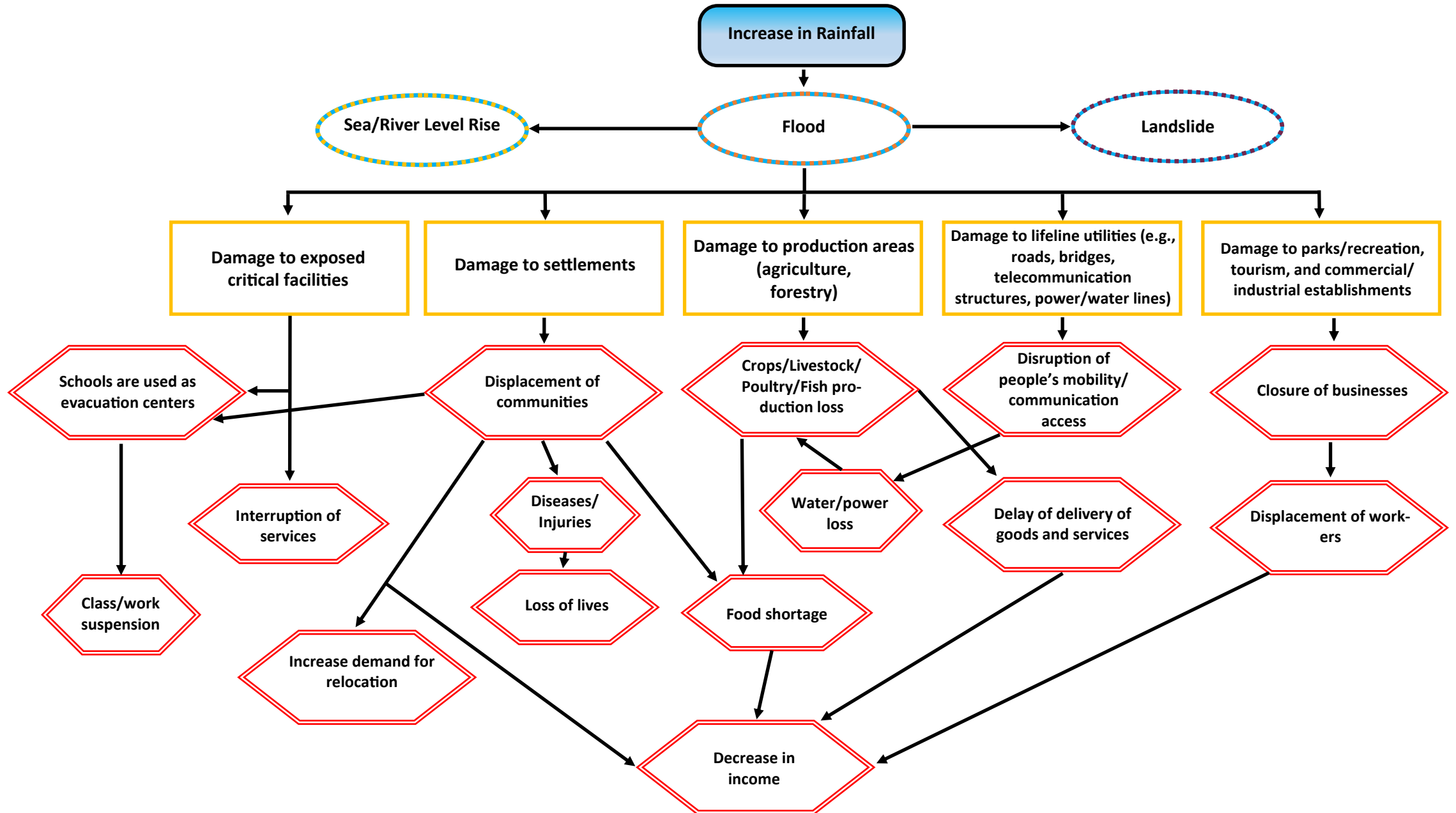
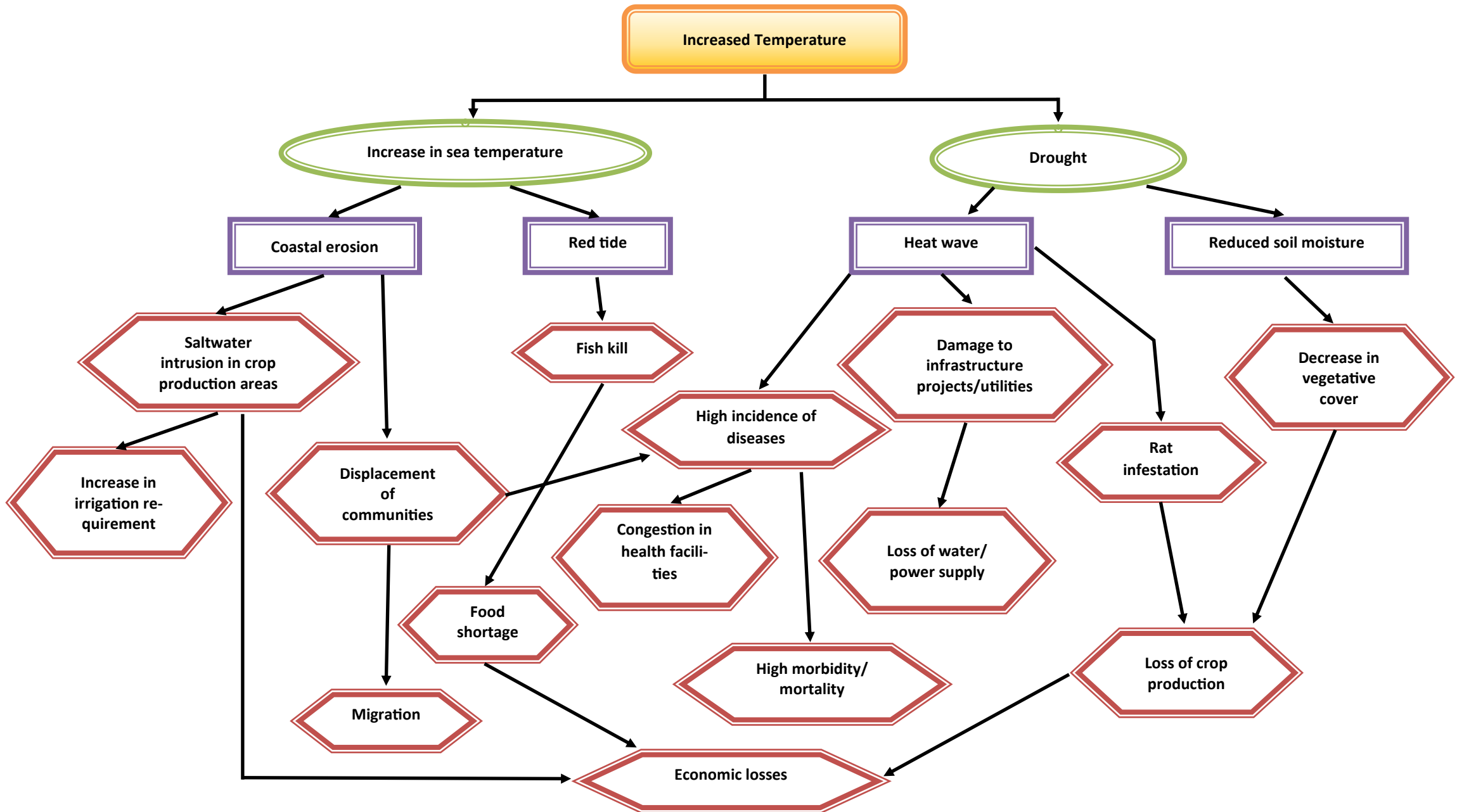


Diagram CD – 2. Climate Change Impact Chain Multiple Sectors, Temperature Rise, Davao City



Summary of Climate Change Impacts

The table below shows the summary of climate change impacts, which may greatly affect the exposure units such as population, natural resource based production areas, critical point facilities, urban use areas, and infrastructure and utilities whenever there are increases in rainfall and temperature. Increase in rainfall will potentially affect 142 barangays, which are highly susceptible to floods, while the rise in temperature may affect the entire city.

Table CD – 10. Summary of Climate Change Impacts, Davao City

Climate Variable	General Changes Expected in Climate Variables	Information About Patterns of Change	Population	Natural Resource Based Production Areas	Critical Point Facilities	Urban Use Areas	Infrastructure and Utilities	Potential Impact Areas
Rainfall	The highest rainfall amount is expected to range between 459.2mm – 584.4mm in the months of June, July, and August	The highest possible future rainfall change during Southwest Monsoon and Northeast Monsoon shows an increase of 18.3%. This is the highest percent change among the four seasons	Moderate to high	Moderate to high	Moderate to high	Moderate to high	Moderate to high	1-A, 2-A, 5-A, 8-A, 19-B, 21-C, 22-C, 23-C, 27-C, 31-D, 37-D, 39-D, 40-D, Rafael Castillo, Centro, Gov. Vicente Duterte, Leon Garcia Sr., Lapu – Lapu, San Antonio, Ubalde, Baguio, Cadalian, Carmen, Gumalang, Malagos, Tambobong, Tawan-Tawan, Wines, Acacia, Buhangin, Cabantian, Callawa, Communal, Indangan, Mandug, Pampanga, Sasa, Tigatto, Waan, A. Angliongto, V. Hizon, Bunawan, Gatungan, Ilang, Lasang, Mahayag, Mudiang, Panacan, San Isidro, Tibungco, Biao Joaquin, Calinan, Cawayan, Dacudao, Dalagdag, Dominga, Inayangan, Lacson, Lamanan, Lampianao, Megkawayan, Pangyan, Riverside, Saloy, Sirib, Subasta, Talomo River, Tamayong, Wangan, Bantol, Salaysay, Suawan, Tamugan, Colosas, Lumiad, Mabuhay, Malabog, Mapula, Pandaitan, Pañalum, Paquibato, Paradise Embac, Salapawan, Sumimao, Tapak, Bago Aplaya, Bago Gallera, Bucana, Catalunan Grande, Catalunan Pequeño, Dumoy, Langub, Ma-a, Magtuod, Matina Aplaya, Matina Crossing, Matina Pangi, Talomo, Alambre, Atan-Awe, Bankas Heights, Baracatan, Bato, Bayabas, Crossing Bayabas, Binugao, Camansi, Catigan, Daliaon Plantation, Eden, Kilate, Lizada, Lubogan, Marapangi, Mulig, Sibulan, Sirawan, Tagluno, Tagurano, Tibuloy, Tungkalan, Angalan, Bago Oshiro, Balengaeng, Biao Escuela, Biao Guianga, Matina Biao, Los Amigos, Manambulan, Manuel Guianga, Mintal, New Carmen, New Valencia, Sto. Niño, Tacunan, Tagakpan, Tugbok, and Ula
Temperature	The seasonal mean temperature will range to 29.2°C - 30.1°C	The months March, April, and May are projected to be the hottest Season	Moderate to high	Moderate to high	Moderate to high	Moderate to high	Moderate to high	Entire Davao City

Exposure Database Development

The Exposure Database provides the baseline information pertaining to the elements at risk. It shall provide the location, vulnerability/sensitivity and adaptive capacity attributes of the exposed elements which are necessary information when conducting a climate change vulnerability assessment (CCVA) and disaster risk assessment (CDRA).

For the purpose of this study, Exposure maps of five key elements were produced. These key elements are Population, Urban Use Areas, Natural Resource-based Production Areas, Critical Points, lifeline/infrastructure).

- Population: includes population of individuals in barangays.
- Critical Point Facilities: Social services facilities extended to the city's residents in the form of schools, hospitals, barangay halls, barangay health stations, police outposts and sub-stations, fire stations, among others.
- Lifeline Utilities: Roads, bridges, power, water, and communication facilities
- Natural Resource-Based Production areas: Areas for agriculture, forestry, and fishery production areas.

In this study, the Exposure Database which includes information off sensitivity/adaptive capacity of the various exposure units was accomplished. The exposure, sensitivity and adaptive capacity varies per exposed key element.

Climate Change Vulnerability Assessment

CCVA determines the nature and degree to which a system is exposed to climate variations, the degree to which it is affected adversely or beneficially, and the ability of the system to adjust to climate change.

Overall results of the CCVA show the levels of vulnerability of Davao City to five different hazards according to the topography of the metropolis. One identified hazard is landslide, especially in areas where there are mountain ranges. Floods and liquefaction may as well arise particularly in villages near Davao Gulf, Davao River, and other water bodies. The presence of Colosas fault line, Dacudao fault line, Lacson fault line, New Carmen fault line, Pangyan-Biao Escuela fault line and Tamugan fault line in 55 barangays may trigger tremors in the city.

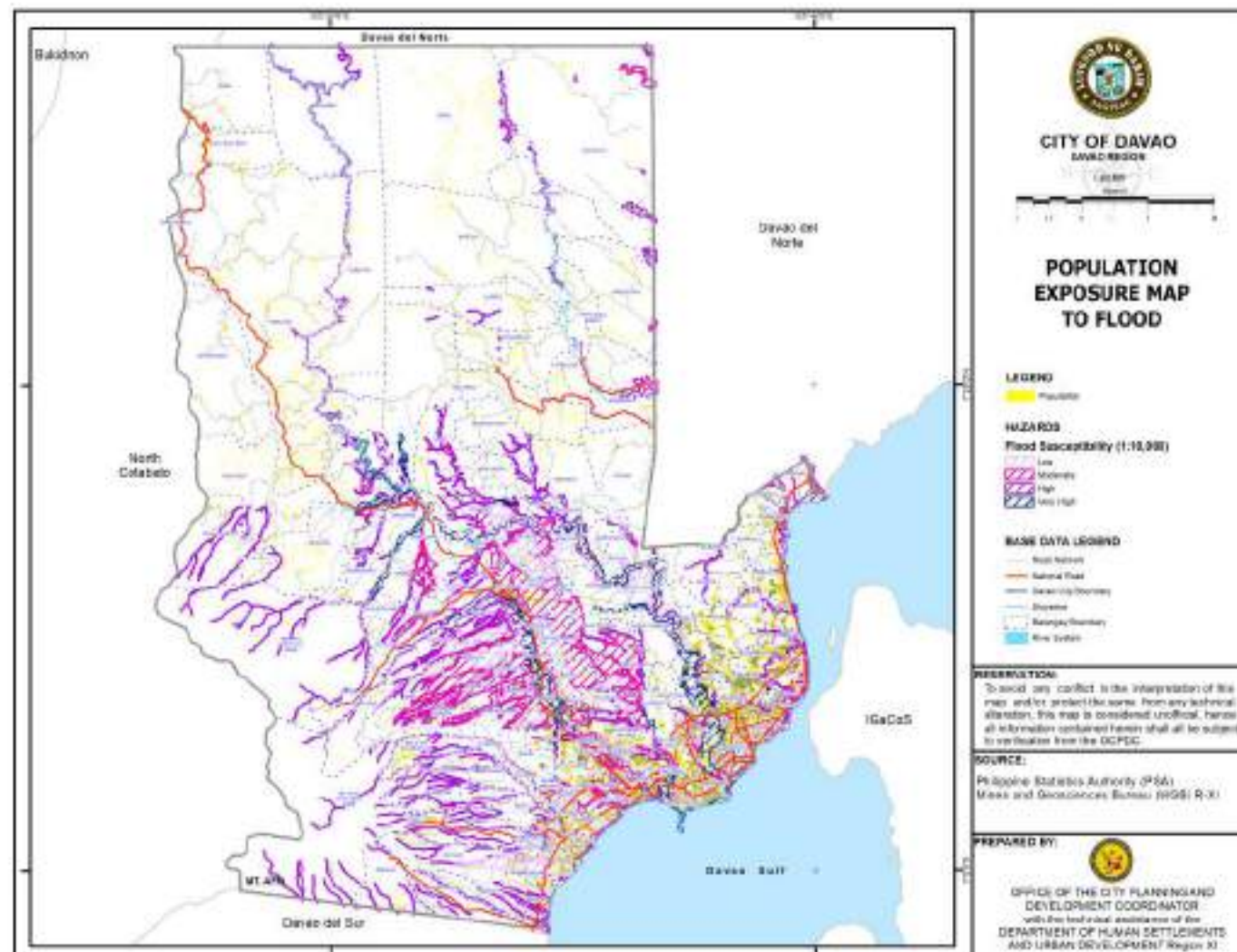
SUMMARY OF FINDINGS OF EXPOSURE DATABASE, CCVA AND DRA

Population Exposure Database

Flood

- Flood can potentially affect 1,625,154 persons, who occupy parcels of residential areas that total to 8,600.07 hectares, in 178 barangays in Davao City.
- Barangay Bucana, which is the most populous barangay with 83,964 persons, has the largest presence of informal settlers that total to 7,405.
- Talomo Proper also has the highest number of households living in dwelling units with walls made from light to salvageable materials that total to 22,776.
- Of the total population in Davao City, 40.3% are dependent population or those who are either young (ages 0-14 years old) or old (65 years old and above). On the other hand, the percentage of households living below the poverty threshold is 12%*.
- In terms of adaptive capacity, there are approximately 60% of the families in Davao City which have access to post disaster financing and benefits from government agencies like Government Service Insurance System (GSIS) and Social Security System (SSS). A total of 892,578 members and 1,055,525 dependents of Philippine Health Insurance Corp. (PhilHealth) were also identified.
- Families may also have difficulty to relocate or retrofit given current capacities within short to medium plans. They are only willing to pursue relocation/retrofitting if provided with external assistance from the local and national governments.

Map 1. 6. Population Exposure Map to Flood, Davao City



Landslide

- This hazard can potentially affect 1,632,911 persons, who occupy parcels of residential areas that total to 8,655.14 hectares, in all barangays in Davao City.
- Barangay Bucana, which is the most populous barangay with 83,964 persons, has the largest presence of informal settlers that total to 7,405. Talomo Proper has also the highest number of households living in dwelling units with walls made from light to salvageable materials that total to 22,776.

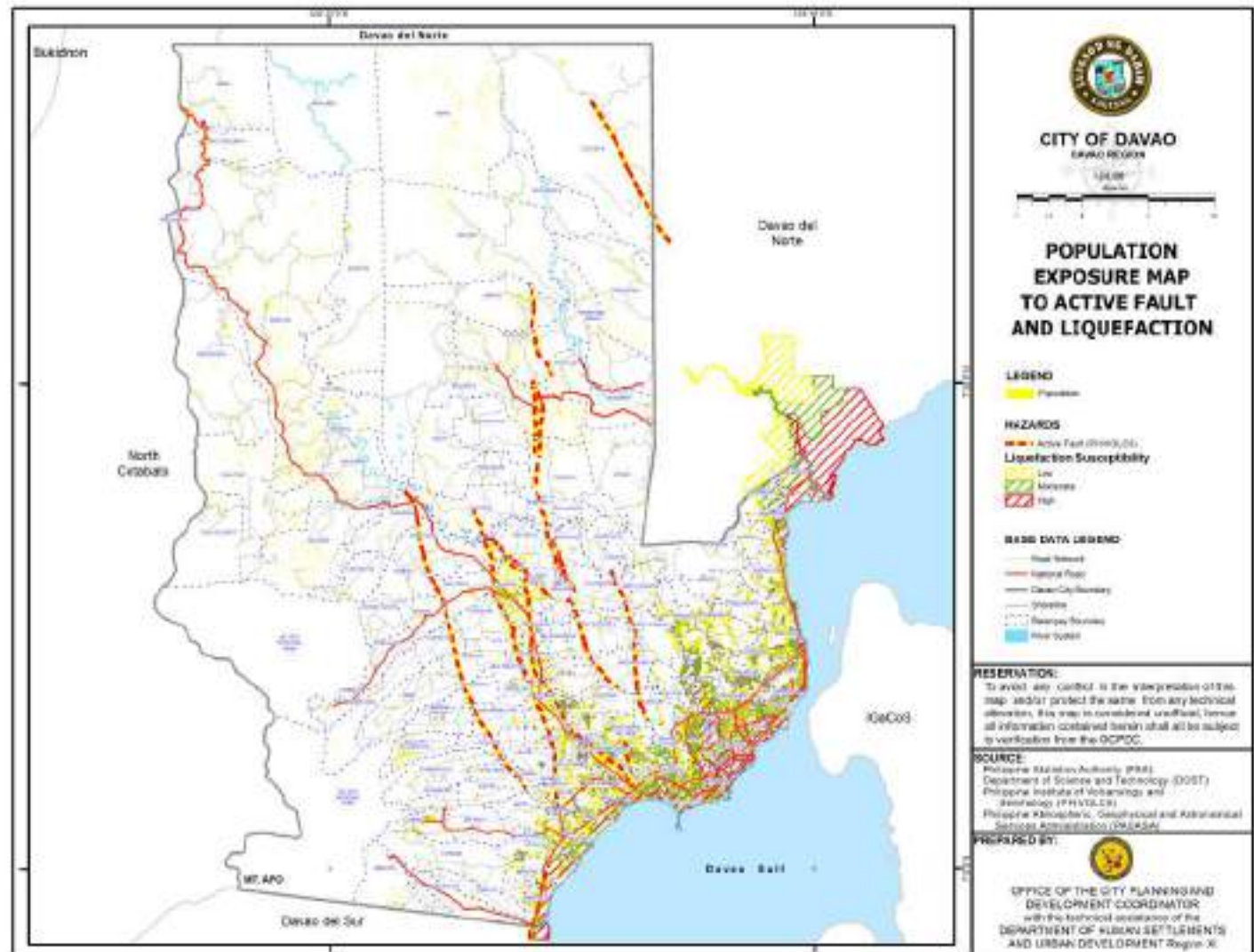
Fault Line

- The presence of fault line systems can potentially affect 429,238 persons, who occupy parcels of residential areas that total to 2,532 hectares, in 55 barangays in Davao City.
- Among the barangays with fault line systems, Talomo Proper has the largest number of informal settlers with 4,331 and the highest number of households living in dwelling units with walls made from light to salvageable materials that total to 22,776.

Liquefaction

- This hazard can potentially affect 1,250,363 persons, who occupy parcels of residential areas that total to 6,646.45 hectares, in 103 barangays in Davao City.
- Barangay Bucana, which is the most populous barangay with 83,964 persons, has the largest presence of informal settlers that total to 7,405.
- Talomo Proper has also the highest number of households living in dwelling units with walls made from light to salvageable materials that total to 22,776.

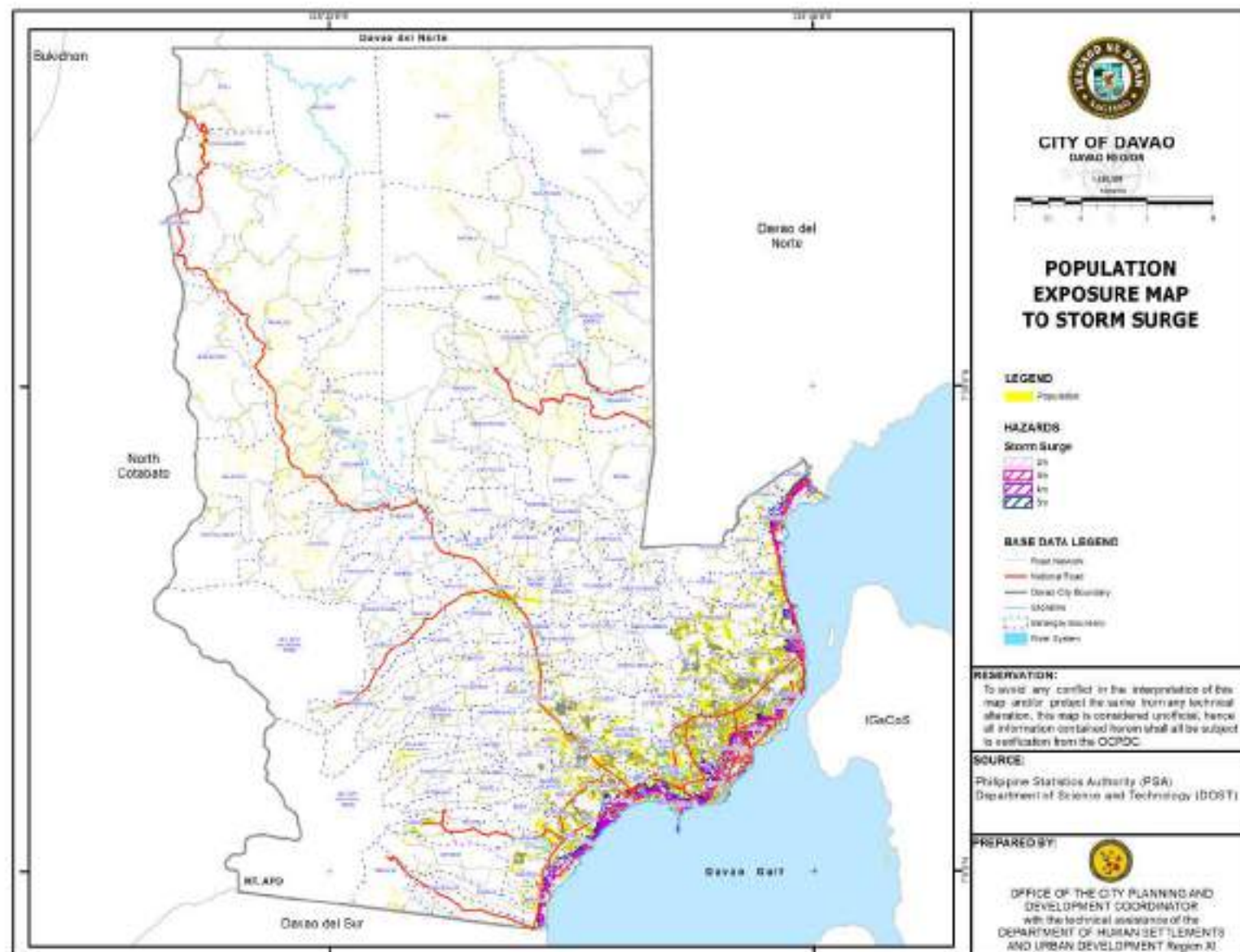
Map 1. 7. Population Exposure Map to Active Fault and Liquefaction, Davao City



Storm Surge

- This hazard can potentially affect 892,427 persons, who occupy parcels of residential areas that total to 4,254.91 hectares, in 74 barangays in Davao City.
- Barangay Bucana, which is the most populous barangay with 83,964 persons, has the largest presence of informal settlers that total to 7,405.
- Talomo Proper has also the highest number of households living in dwelling units with walls made from light to salvageable materials that total to 22,776. At least 40.3% are considered as dependent population or those who are either young or old.

Map 1. 8. Population Exposure Map to Storm Surge , Davao City



Adaptive Capacity for Population

Flood

- The areas with the lowest adaptive capacity scores in curbing the effect of floods include Barangays 1-A, 2-A, 5-A, 8-A, 15-B, and 19-B in Poblacion District, A. Angliongto, Buhangin Proper, Cabantian, Callawa, Communal, and Indangan in Buhangin District, Bunawan Proper, Panacan, and Ilang in Bunawan District, Bucana, Matina Aplaya, Matina Crossing, Matina Pangi, and Talomo Proper in Talomo District, and Los Amigos in Tugbok District.
- These areas have 151,919 of exposed population to floods.

Landslide

- The areas with the lowest adaptive capacity scores in addressing the effect of landslides are Barangays 19-B in Poblacion District, Carmen, Gumalang, Tambobong, and Tawan-Tawan in Baguio District, A. Angliongto, Acacia, Buhangin Proper, Cabantian, Callawa, Communal, Indangan, Mandug, Sasa, Tigatto, and Waan in Buhangin District, Bunawan Proper, Gatungan, Ilang, Mahayag, Mudiang, Panacan, San Isidro, and Tibungco in Bunawan District, Biao Joaquin, Calinan Proper, Dalagdag, Dominga, Inayangan, Lacson, Lamanan, Lampianao, Megkawayan, Pangyan, Saloy, Sirib, Talomo River, and Tamayong in Calinan District, Baganihan, Bantol, Buda, Dalag Lumot, Datu Salumay, Gumitan, Magsaysay, Malamba, Marilog Proper, Salaysay, Suawan, and Tamugan in Marilog District, Colosas, Fatima, Lumiad, Mabuhay, Malabog, Mapula, Pandaitan, Panalum, Paquibato Proper, Paradise Embac, Salapawan, Sumimao, and Tapak in Paquibato District, Catalunan Grande, Langub, Ma-a, Magtuod, Matina Crossing, Matina Pangi, and Talomo Proper in Talomo District, Alambre, Atan-Awe, Baracatan, Bato,

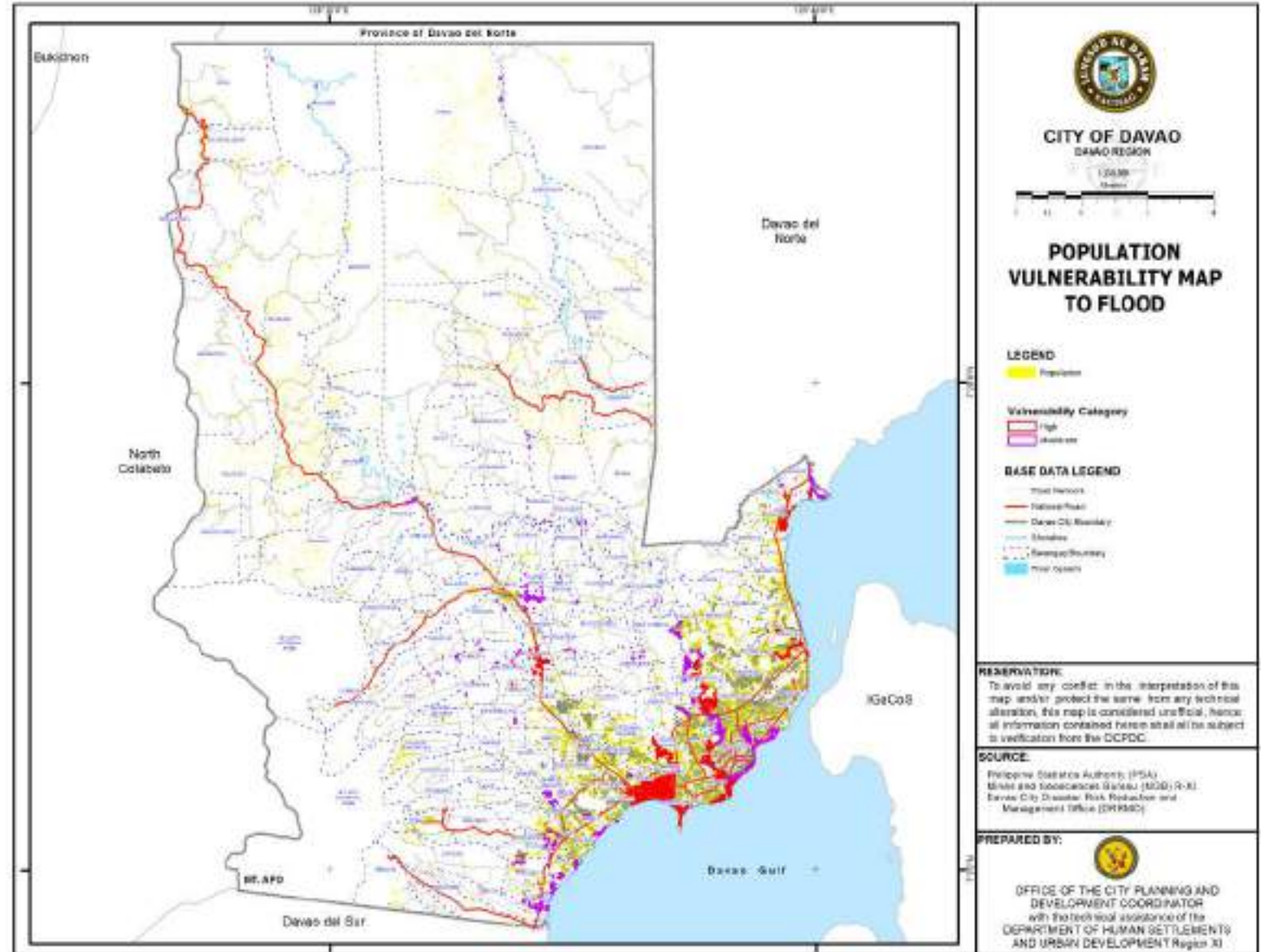
Liquefaction

- The areas with the lowest adaptive capacity scores in curbing the effect of liquefaction are Barangays 21-C, 22-C, 23-C, 31-D, and 37-D in Poblacion District, Centro, Gov. Vicente Duterte, and Lapu-Lapu in Agdao District, Lasang, Bunawan Proper, and Panacan in Bunawan District, Bago Aplaya, Bago Gallera, Bucana, Catalunan Grande, Dumoy, Matina Aplaya, and Talomo Proper in Talomo District, and Binugao, Lizada, Sirawan, and Toril in Toril District.
- These areas have 311,888 of exposed population to liquefaction.

Population Vulnerability Index

Flood– A total of 13 barangays are highly vulnerable to flooding. Results show that the residential areas in Barangays 1-A, 2-A, 5-A, and 8-A in Poblacion District, Tigatto in Buhangin District, Bunawan Proper and Panacan in Bunawan District, Bucana, Matina Aplaya, Matina Crossing, Matina Pangi, and Talomo Proper in Talomo District, and Los Amigos in Tugbok District are highly vulnerable to floods.

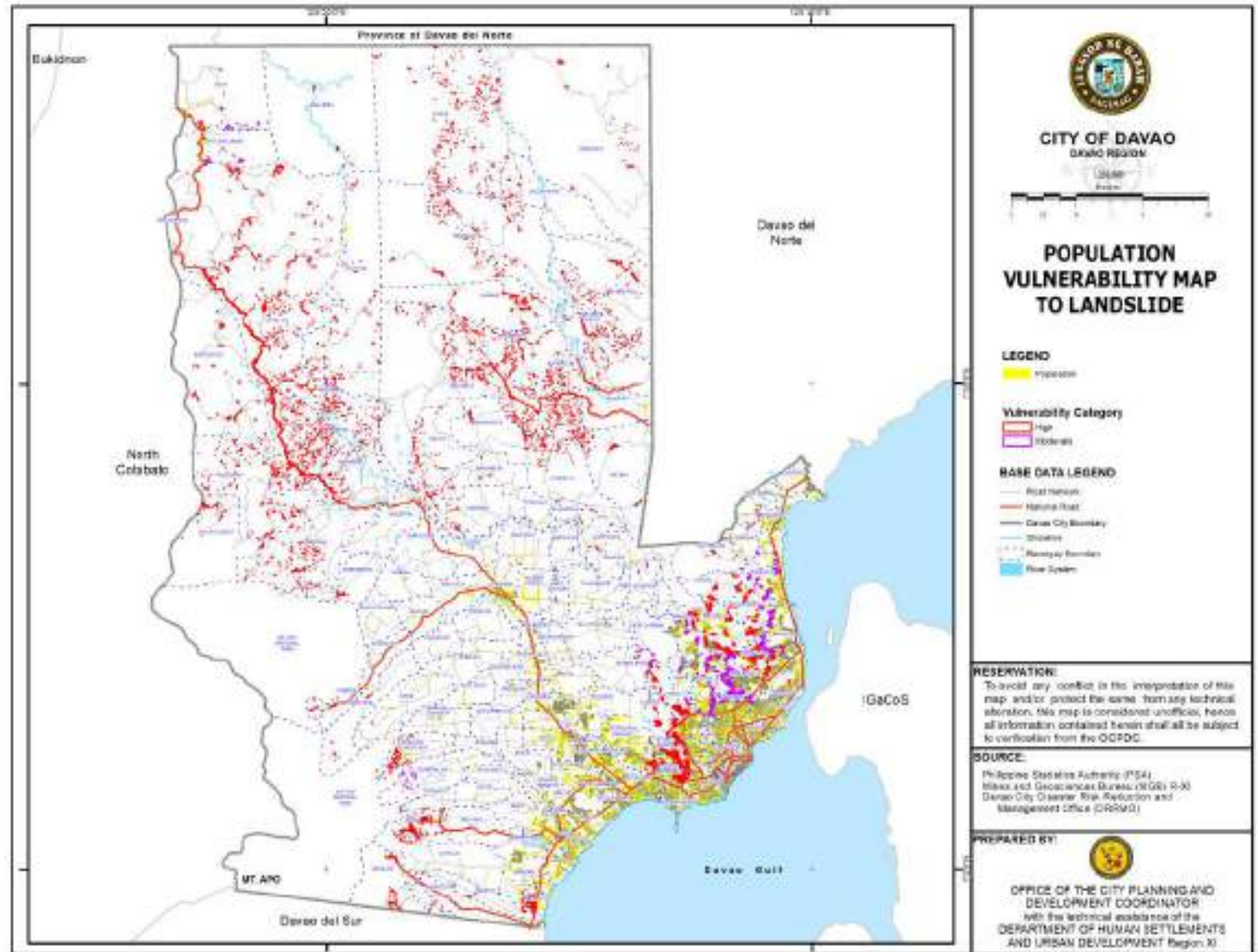
Map 1. 9. Population Vulnerability Map to Flood, Davao City



Population Vulnerability Index

Landslide— A total of 51 barangays vulnerable to landslide. Results show that the residential areas in Barangays Carmen and Tambobong in Baguio District, Acacia, Communal, and Indangan in Buhangin District, Gatungan and Mudiang in Bunawan District, Dalagdag, Inayangan, Lamanan, Lampianao, Megkawayan, Saloy, and Tama-yong in Calinan District, Bantol, Dalag Lumot, Gumitan, Magsaysay, Malamba, Marilog Proper, Salaysay, and Suawan in Marilog District, Colosas, Fatima, Lumiad, Ma-labog, Mapula, Pandaitan, Pañalum, Paquibato Proper, Paradise Embac, Salapawan, Sumimao, and Tapak in Paquibato District, Langub, Ma-a, Magtuod, Matina Crossing, and Matina Pangi in Talom District, Atan-Awe, Baracatan, Bayabas, Binugao, Camansi, Catigan, Daliaon Plantation, Eden, Sibulan, Tagurano, and Tibuloy in Toril District, and Matina Biao in Tugbok District are highly vulnerable to landslides

Map 1. 10. Population Vulnerability Map to Landslide, Davao City

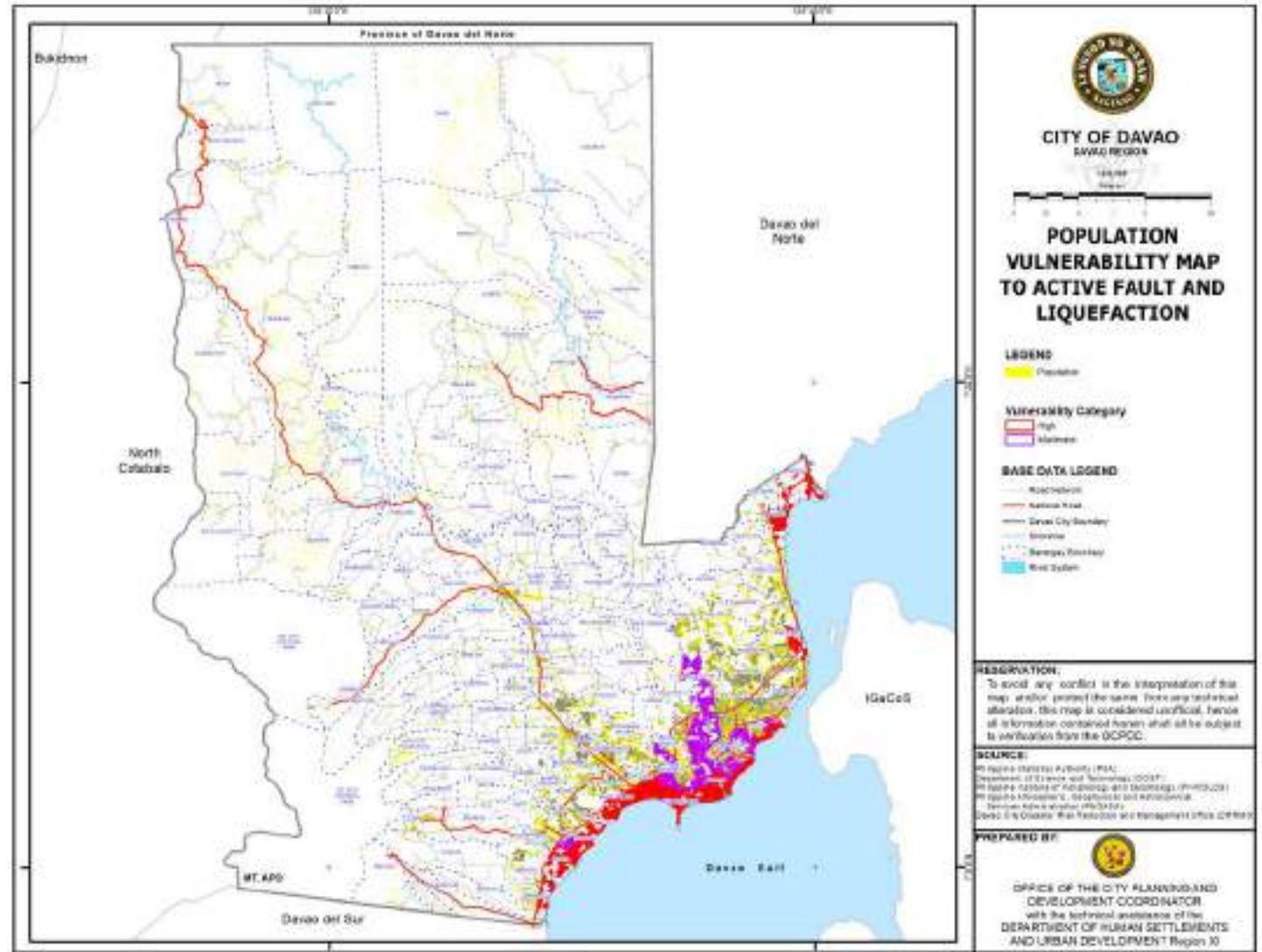


Population Vulnerability Index

Liquefaction – Twenty (20) barangays are highly vulnerable to liquefaction. These areas are expected to experience massive effects whenever there are immense incidences of liquefaction. The exposed population in these areas, which total to 304,927, have also low adaptive capacities.

Results show that the residential areas in Barangays 21-C, 22-C, 23-C, 31-D, and 37-D in Poblacion District, Centro, Gov. Vicente Duterte, and Lapu-Lapu in Agdao District, Lasang, Bunawan Proper, and Panacan in Bunawan District, Bago Aplaya, Bucana, Dumoy, Matina Aplaya, and Talomo Proper in Talomo District, Binugao, Daliao, Lizada, and Sirawan in Toril District are highly vulnerable to liquefaction (Table CP – 23A to Table CP – 23C). These areas are expected to experience massive effects whenever there are immense incidences of liquefaction.

Map 1. 11. Population Vulnerability Map to Active Fault and Liquefaction, Davao City

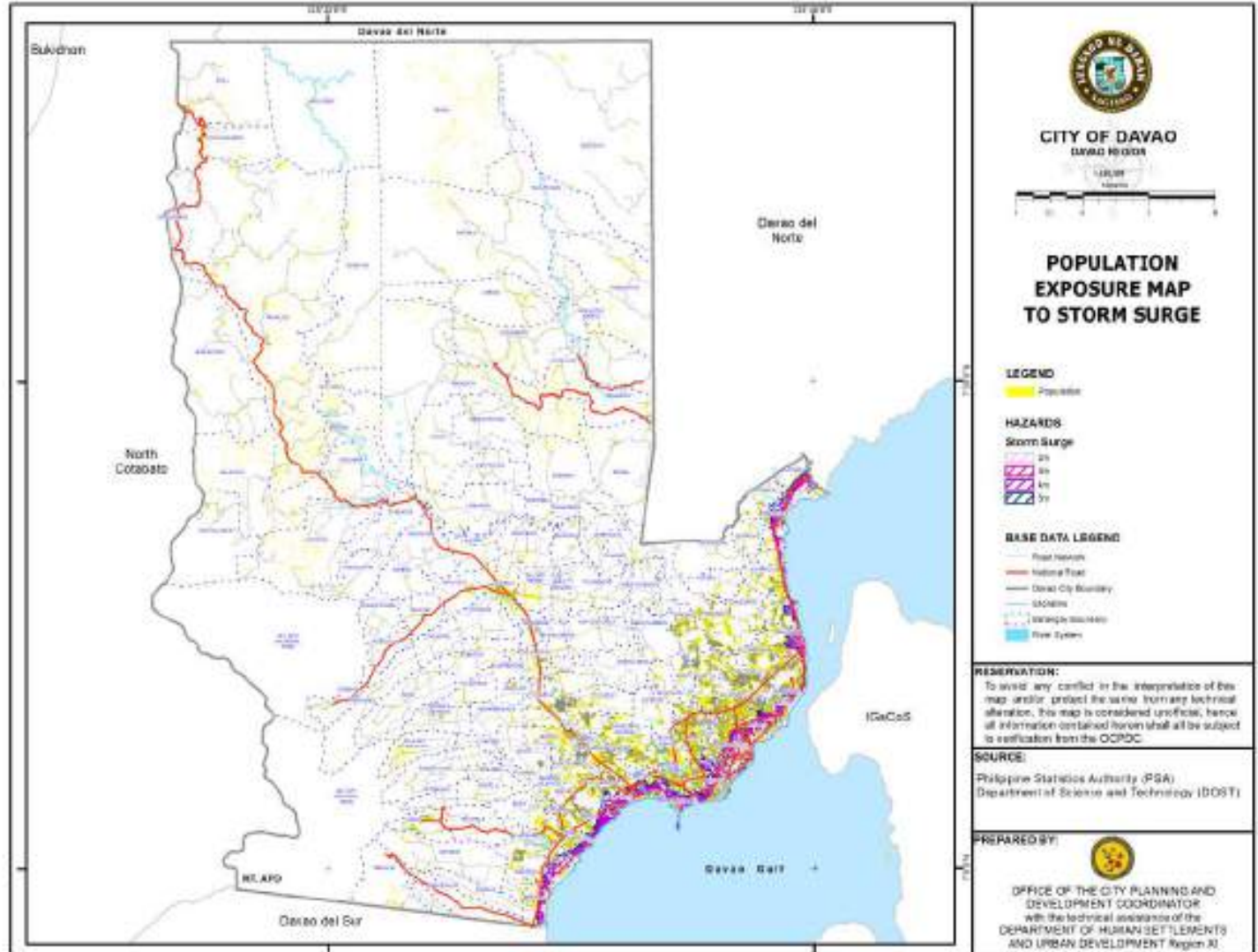


Population Vulnerability Index

Storm Surge - Residential areas of 54 barangays are highly vulnerable to storm surge. The exposed population in these areas, which total to 346,210, also have low adaptive capacities

These barangays include Barangays 1-A, 2-A, 4-A, 5-A, 10-A, 11-B, 12-B, 13-B, 14-B, 15-B, 16-B, 17-B, 18-B, 20-B, 21-C, 22-C, 23-C, 24-C, 25-C, 26-C, 27-C, 28-C, 29-C, 30-D, 31-D, 32-D, 33-D, 34-D, 35-D, 36-D, 37-D, 38-D, 39-D, and 40-D in Poblacion District, Agdao Proper, Centro, Gov. Paciano Bangoy, Gov. Vicente Duterte, Tomas Monteverde, Lapu-Lapu, Leon Garcia Sr., Rafael Castillo, San Antonio, Ubalde, Waan, and Wilfredo Aquino in Agdao District, Lasang and Bunawan Proper in Bunawan District, Bago Aplaya, Bucana, Matina Aplaya, and Talomo Proper in Talomo District, and Daliao and Lizada in Toril District are highly vulnerable to storm surge (Table CP – 24A to Table CP – 24C). These areas are expected to experience massive effects whenever there are immense incidences of storm surge.

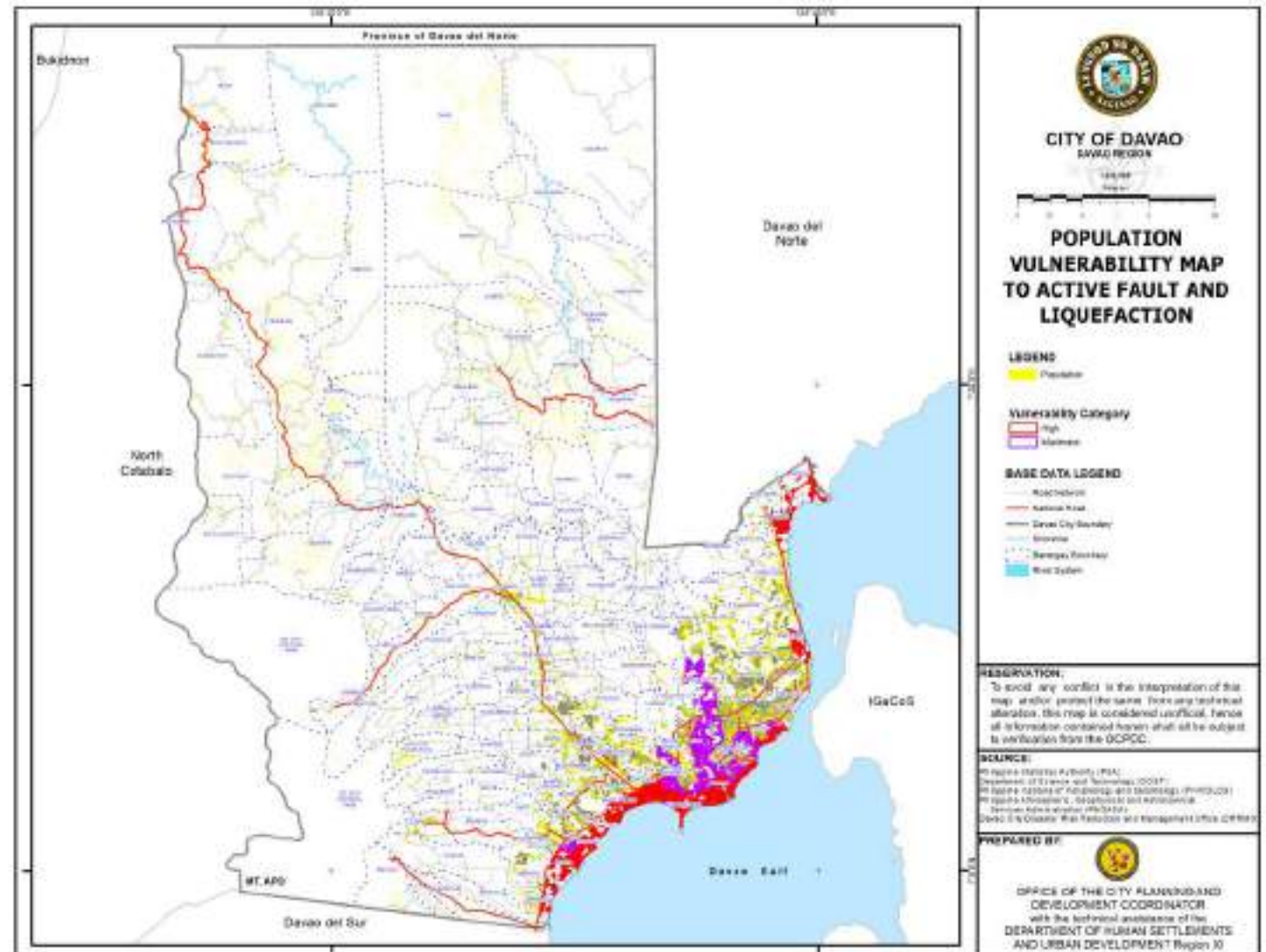
Map 1. 12. Population Vulnerability Map to Storm Surge, Davao City



Population Vulnerability Index

Fault Line - Results show that the residential areas in Barangays Catalunan Pequeno in Talomo District, and Los Amigos, Mintal, and Tugbok Proper in Tugbok District are highly vulnerable whenever there are movements in fault line systems

Map 1. 13. Population Vulnerability Map to Active Fault and Liquefaction, Davao City

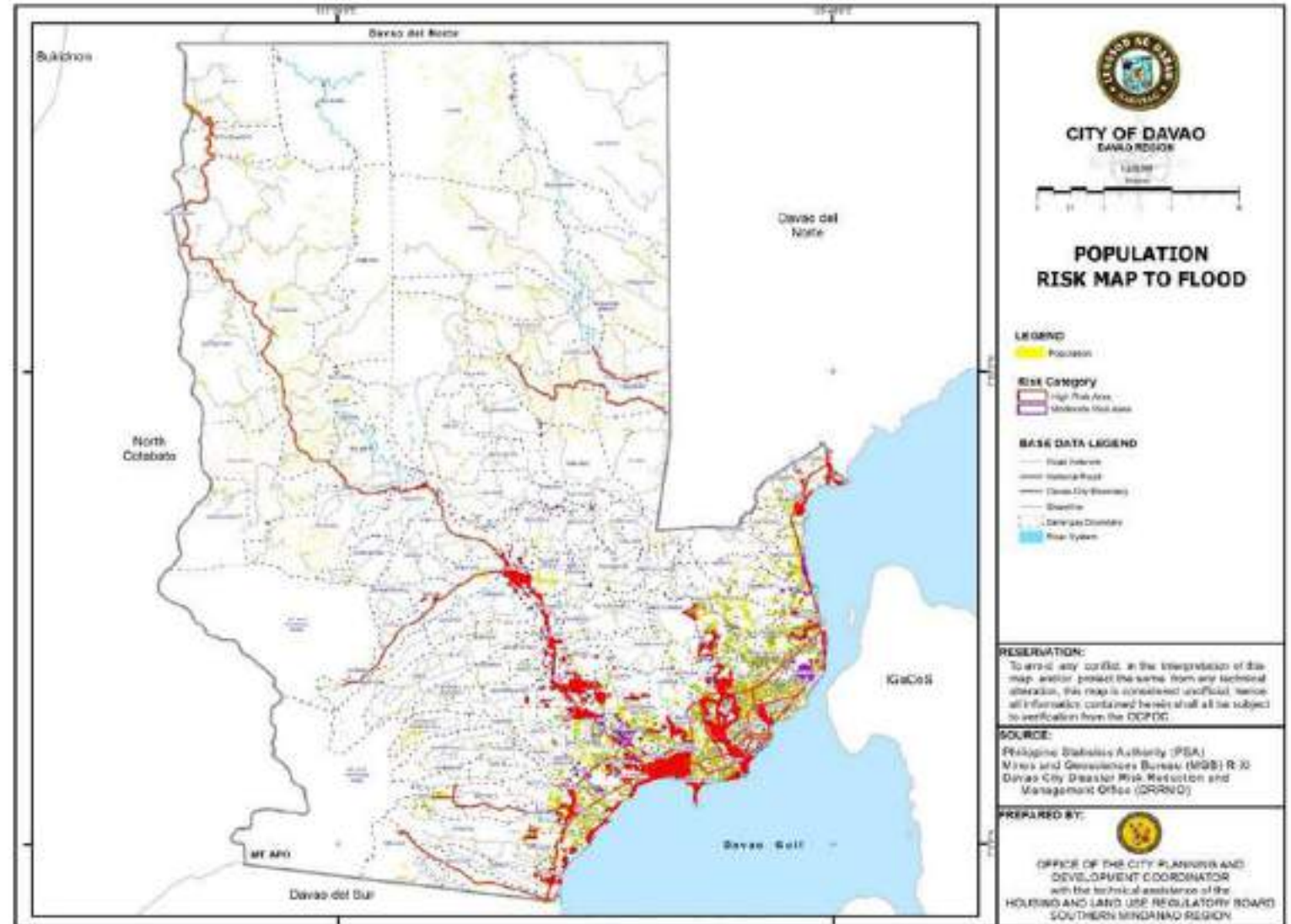


Disaster Risk Assessment for Population Findings

Map 1. 14 Population Risk Map to Flood, Davao City

Flood – Twenty-two barangays are at risk of flood.

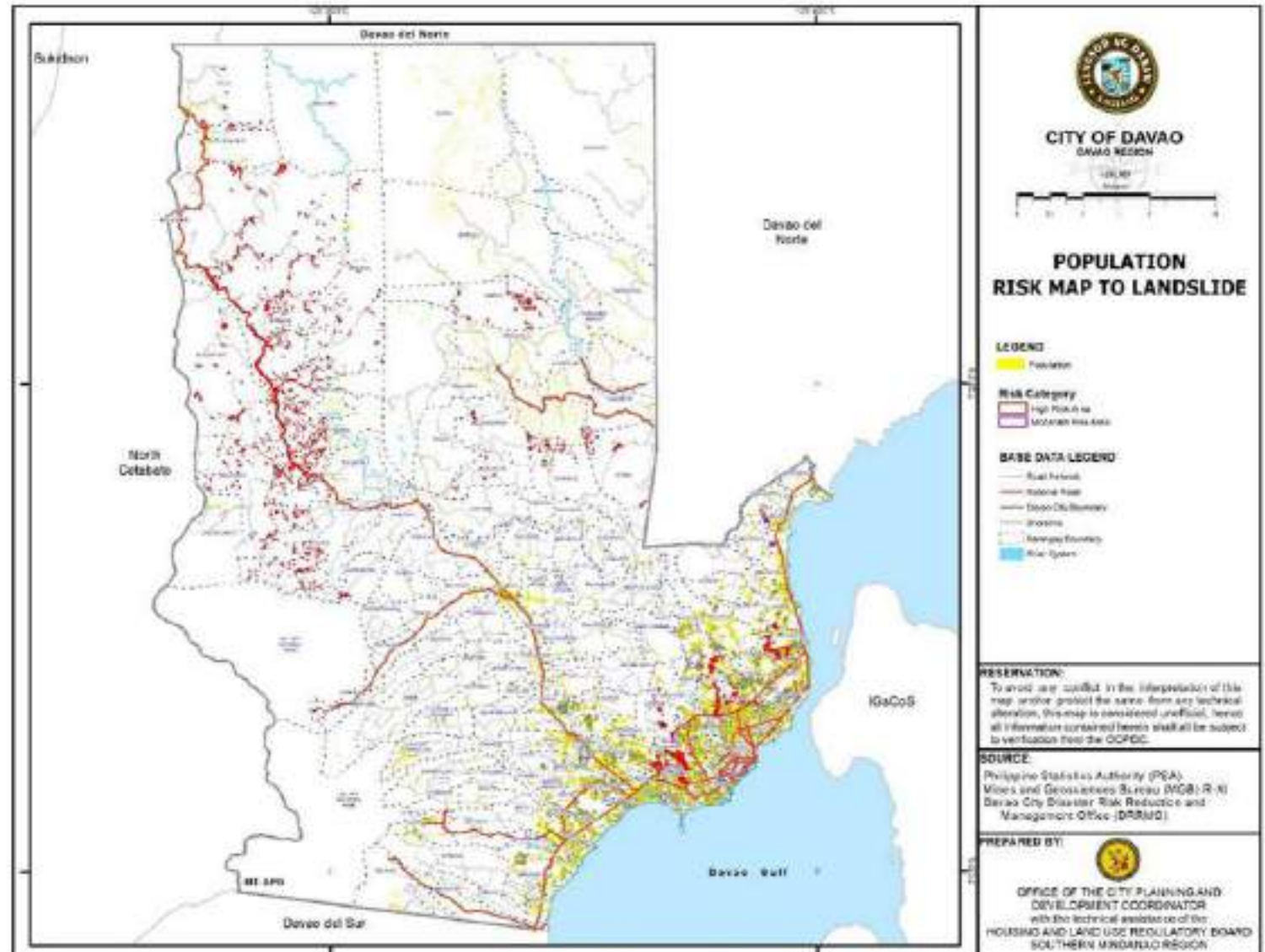
Results of the risk estimation show that Barangays 1-A, 5-A, 6-A, 7-A, 8-A, 9-A, 10-A, 11-B, 19-B, 20-B, Gov. Paciano Bangoy, Calinan Proper, Bago Aplaya, Bucana, Ma-a, Matina Aplaya, Matina Crossing, Matina Pangi, Talomo Proper, Lubogan, Toril Proper, and Tugbok Proper have the highest risk scores ranging from 12 to 24, which depict that these are high risk areas to floods.



Map 1. 15 Population Risk Map to Landslide, Davao City

Landslide- Three (3) barangays: Ma-a, Matina Crossing, and Matina Pangí are at high risk of landslide.

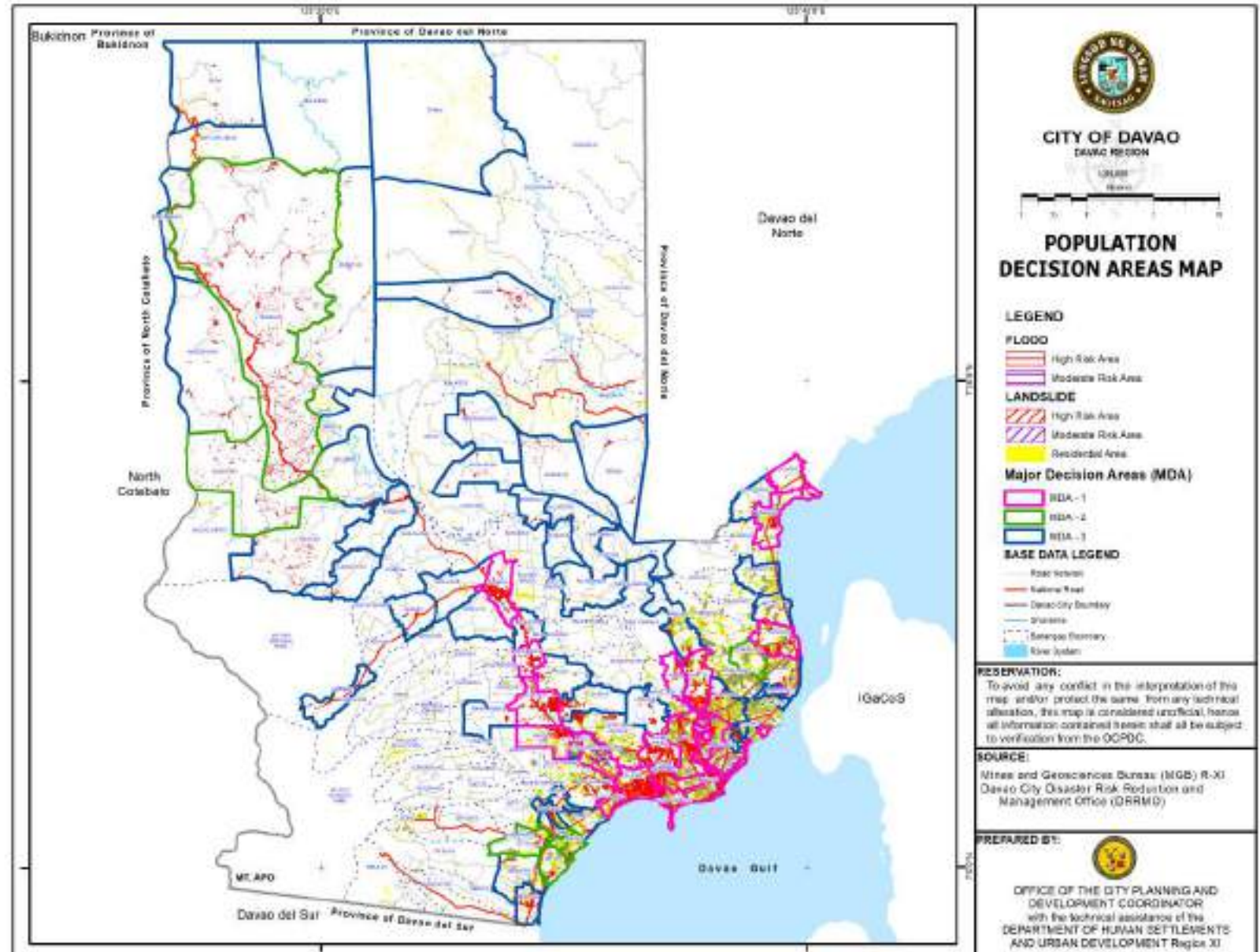
Results of the risk estimation bare that Barangays Ma-a, Matina Crossing, and Matina Pangí have been identified as high risk areas. Vulnerable sectors including informal settlers are present in these barangays, thereby, making these highly at risk whenever there are occurrences of landslides.



Population Major Decision Areas (MDA)

The prioritization varies per level. Those under Major Decision Areas-I shall be the top areas of concern where there are a large number of population. The areas in MDA II shall be the next areas of concern. The last, though shall be also given with priority, are those in MDA III.

Map 1. 16 Population Decision Areas Map, Davao City

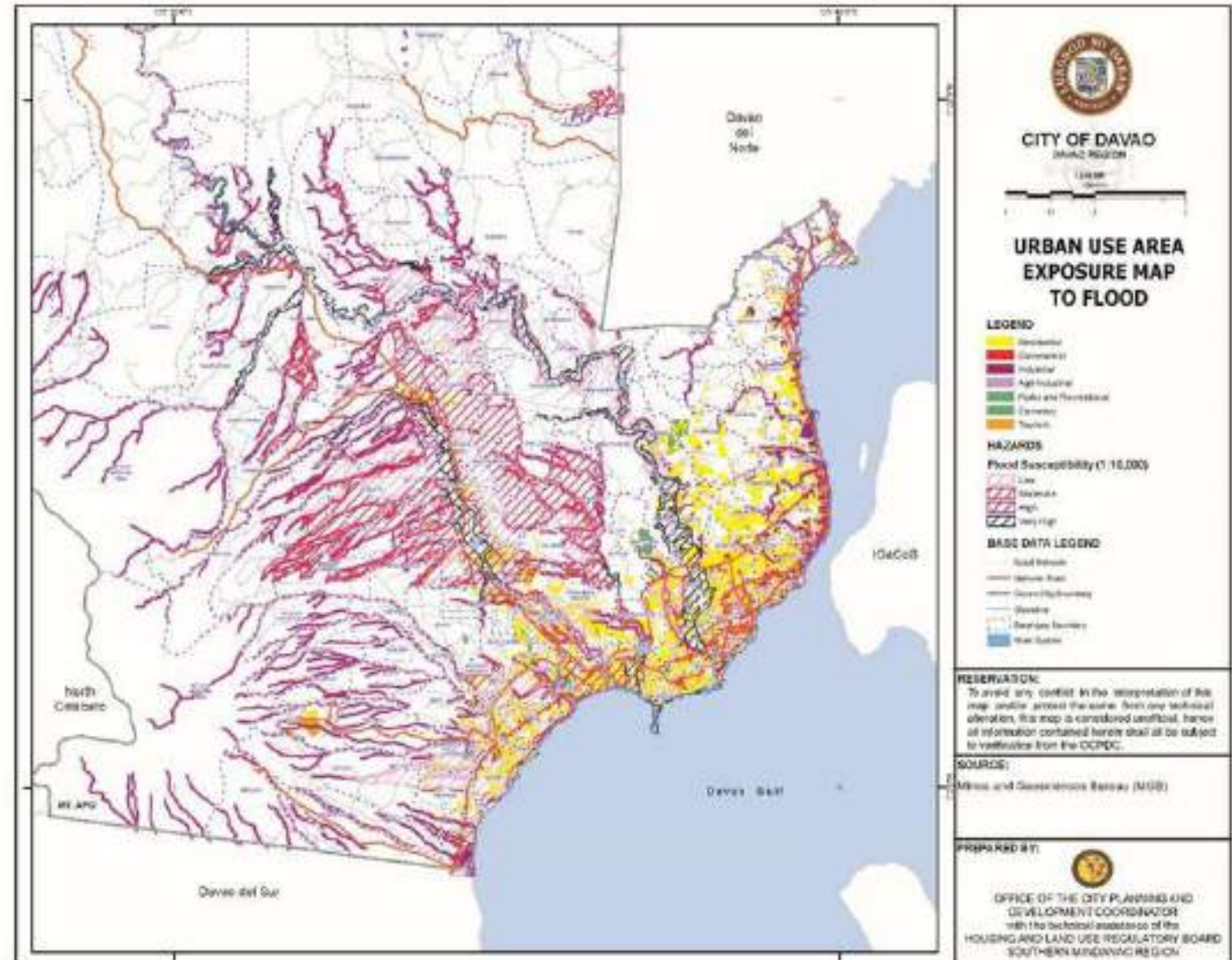


Urban Use Exposure

Flood

- A total of 122 barangays has a land area of 7,852.1 hectares for residential areas, 51 barangays with a land area of 818.13 hectares for commercial use, 45 barangays with 894.22 hectares utilized for industrial use, 37 barangays covering 535.65 hectares used for agri-industrial purposes, 19 barangays with 168.78 hectares for tourism use, eight (8) barangays with 59.99 hectares used as cemetery, and parks and recreation. From these data, a total of 161.40 hectares from 46 barangays are all exposed to flood.
- Through consideration of sensitivity ratings rated using the proportion of buildings in dilapidated/condemned condition as a measure, 39 residential areas have very high sensitivity rating and 38 residential areas have high sensitivity rating.
- All 122 residential areas do not have the capacity and willingness to retrofit or relocate or conform with new regulations though there are identified alternative sites. The rest of the land uses are all capable and are willing to retrofit, relocate and conform to new regulations, though for most there are no available alternative sites yet.

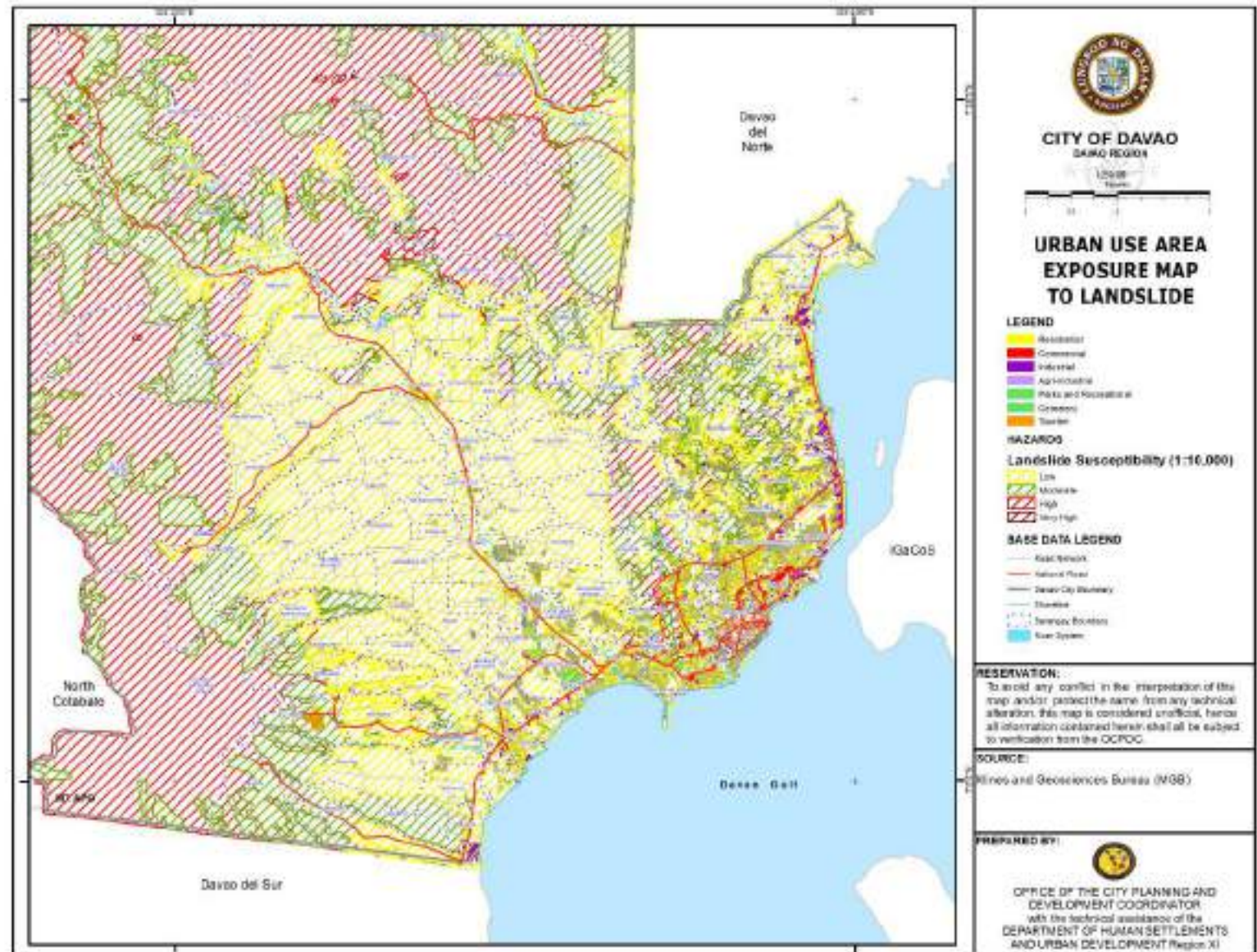
Map 1. 17 Urban Use Area Exposure Map to Flood, Davao City



Landslide

- A total of 90 barangays with residential areas totalling 5,276.99 hectares, 14 barangays with a land area of 297.32 hectares utilized for commercial purposes, 20 barangays with 635.05 hectares for industrial use, 18 barangays with combined land area of 315.02 hectares used for agri-industrial activities, 16 barangays with 200.75 hectares for tourism, five (5) barangays with 130.23 hectares of land for cemetery, and 12 barangays with 122.19 hectares used as parks and recreation areas are all exposed to landslide.
- Through consideration of sensitivity rating, rated using the proportion of buildings in dilapidated/condemned condition as a measure, 44 barangays mainly with residential have high sensitivity rating.
- Most if not all residential areas are not capable and are not willing to retrofit and relocate or conform with new regulations even if there are available alternative sites; while most parks and recreation, commercial, industrial, agri-industrial, tourism are willing to retrofit and relocate. The downside though is there are still no available alternative sites.

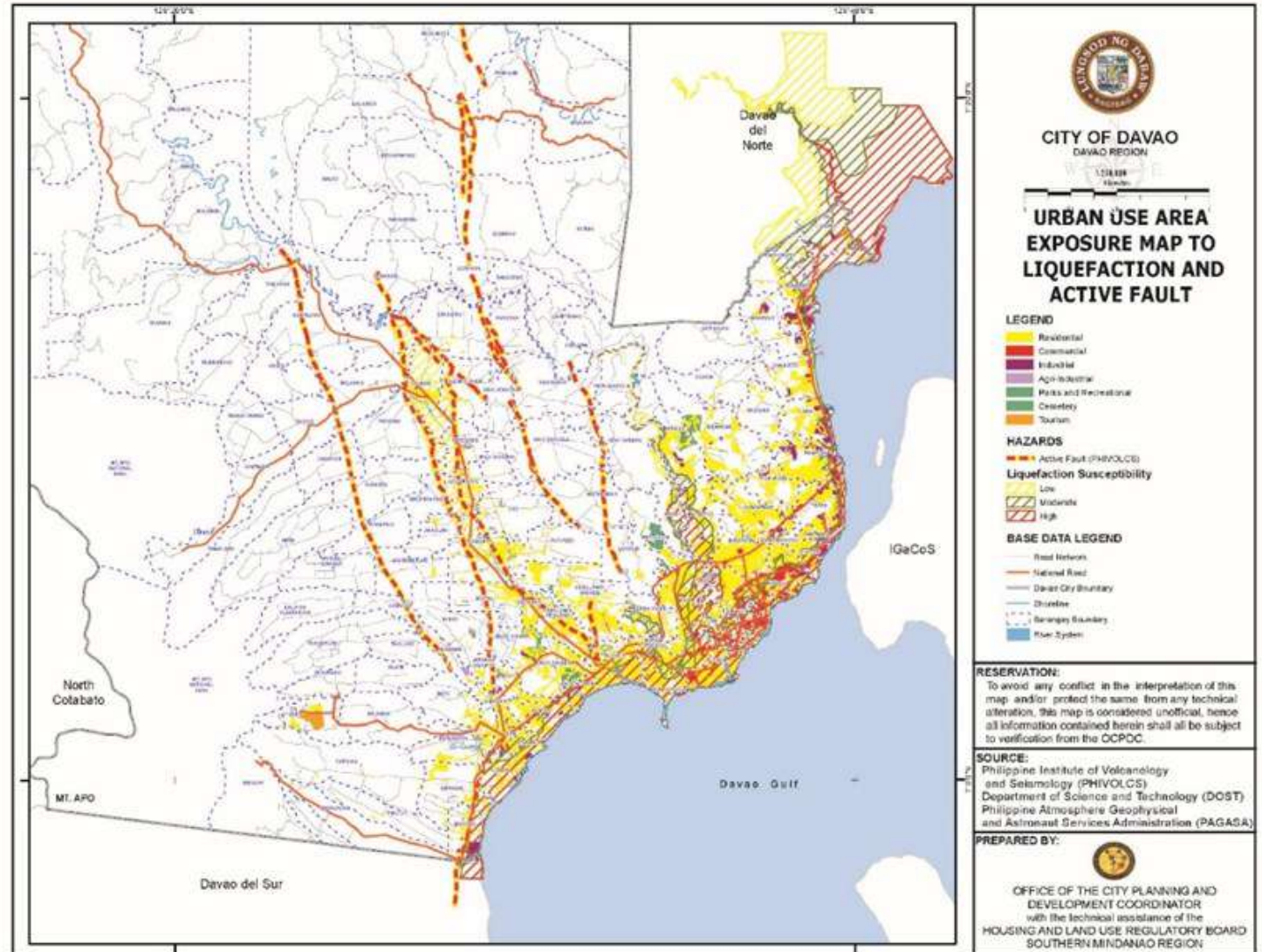
Map 1. 18 Urban Use Area Exposure Map to Landslide, Davao City



Liquefaction

- Residential areas of 84 barangays with a total land area of 5,554.45 hectares, commercial areas of 66 barangays with 990.73 hectares, industrial areas of 49 barangays with land area totalling 792.15 hectares, agri-industrial areas of 7 barangays with 123.15 hectares, tourism areas of 13 barangays with a land area of 34.92, three (3) barangays with a land area of 45.63 hectares used as cemetery, and parks and recreation areas of 27 barangays with a land area of 36.07 hectares are all exposed to liquefaction.
- Through consideration of sensitivity rating, rated using the proportion of buildings in dilapidated/condemned condition, it was found that residential areas in 19 barangays have very high sensitivity rating, while 26 residential areas also have high sensitivity rating.
- In terms of adaptive capacity, residential areas exposed have no capacity and are not willing to retrofit or relocate or conform with new regulations though there are identified relocation sites. Exposed commercial, agri-industrial, tourism, and parks and recreation areas have the capacity to retrofit and relocate but areas for relocation are yet to be identified.

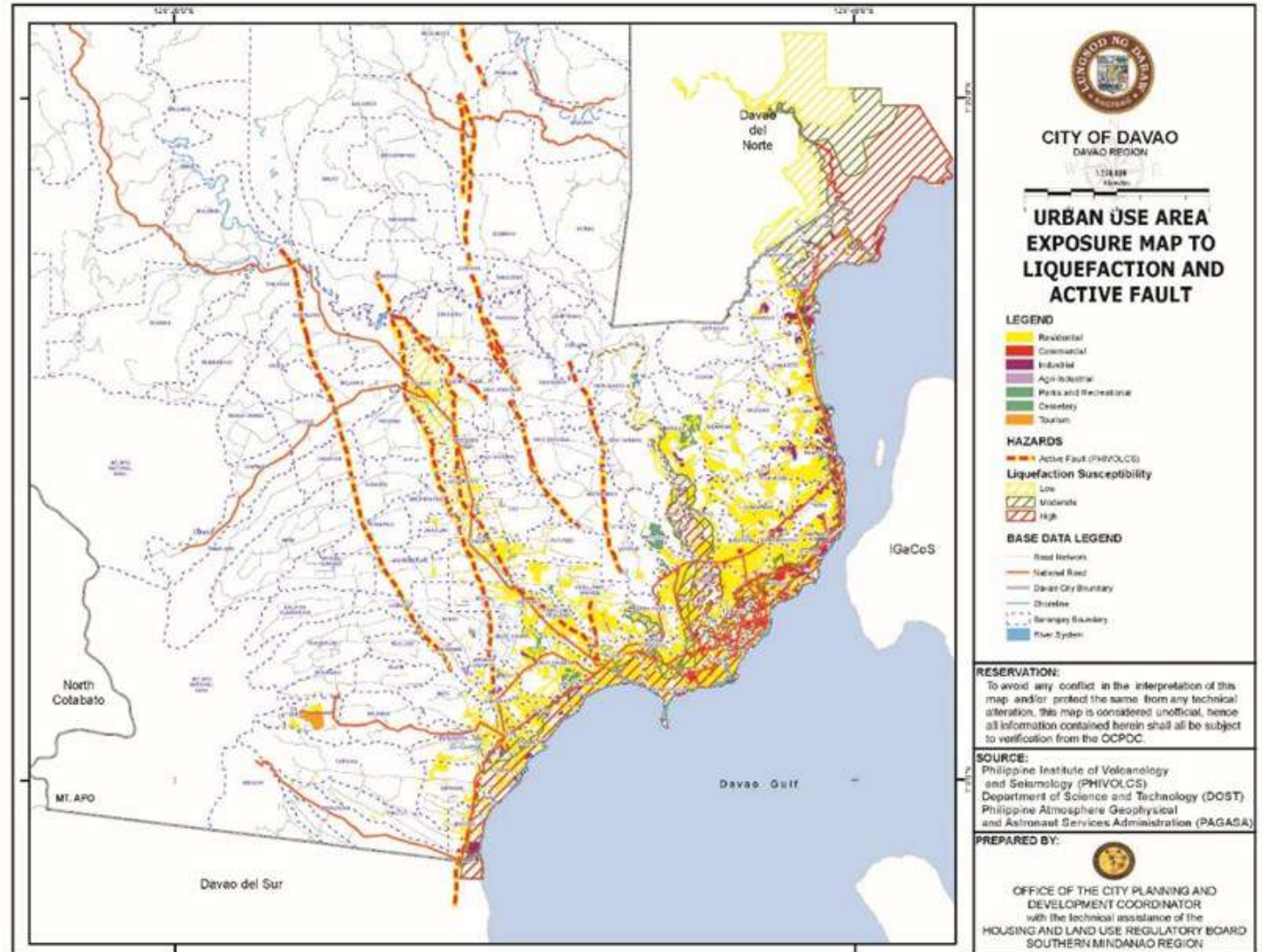
Map 1. 19 Urban Use Area Exposure Map to Liquefaction and Active Fault, Davao City



Fault Line

- Data in the table below reveals the following barangays exposed to fault line: 25 barangays with a total of 1,827.78 hectares designated for residential use; four (4) barangays with 25.11 hectares allocated for commercial use, two (2) barangays with a 69.72 hectares for industrial, nine (9) barangays with 230.74 hectares for agri-industrial, two (2) barangays with 1.95 hectares for tourism, three (3) barangays with 2.90 hectares, and a barangay with 3.97 hectares utilized as cemetery.
- Through consideration of sensitivity rating, rated using the proportion of buildings in dilapidated/condemned condition, it was found that a total of 16 barangays with residential areas have high sensitivity rating.
- In terms of adaptive capacity, residential areas exposed have no capacity and are not willing to retrofit or relocate or conform with new regulations though there are identified relocation sites. Exposed commercial, agri-industrial, tourism, and parks and recreation areas have the capacity to retrofit and can relocate but areas for relocation have yet to be identified.

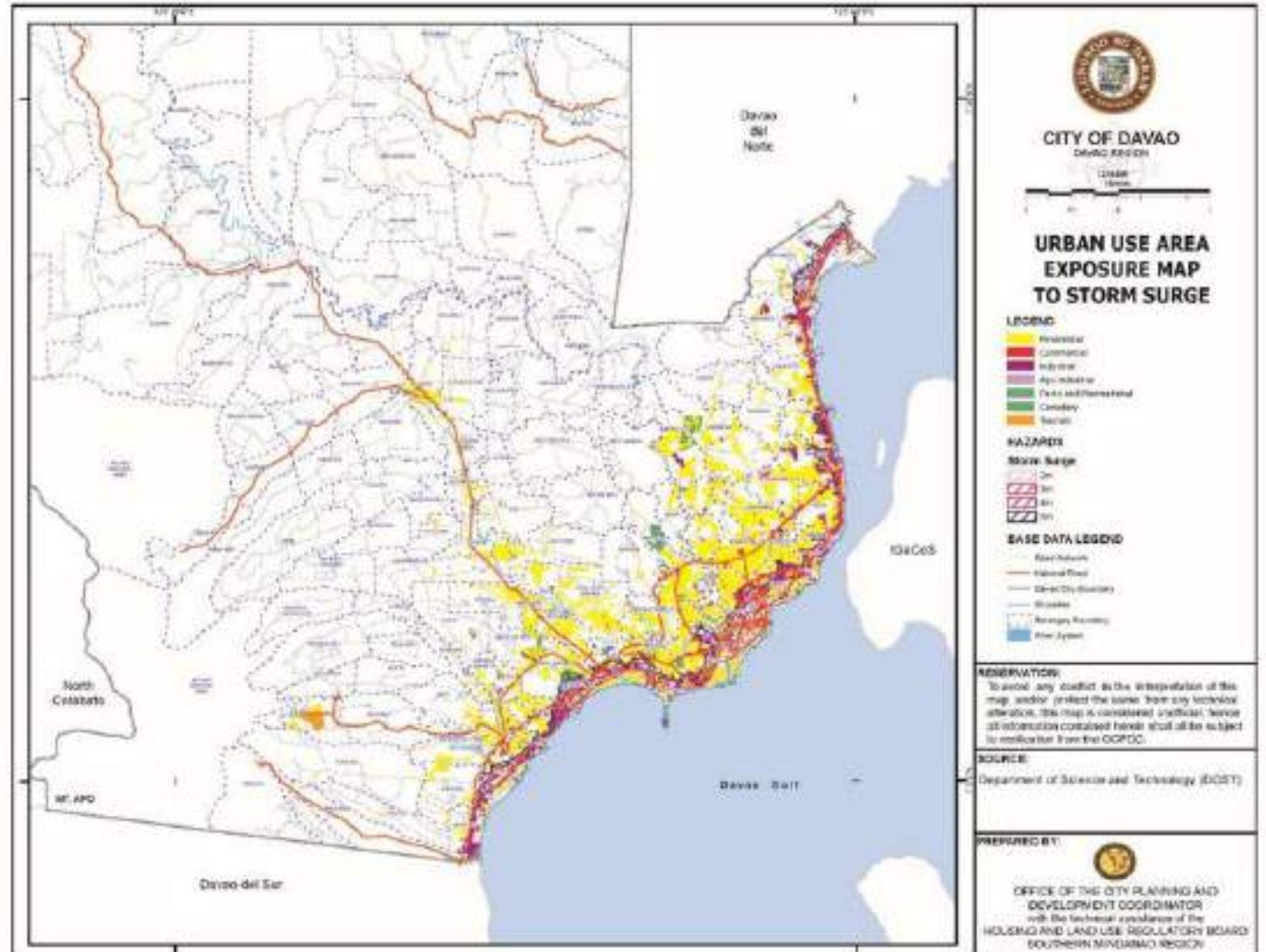
Map 1. 20 Urban Use Area Exposure Map to Liquefaction and Active Fault, Davao City



Storm Surge

- A total of 3,666.32 hectares of residential areas from 72 barangays, 1,126.60 hectares of commercial areas from 65 barangays, 880.83 hectares of industrial use from 39 barangays, a 1.86 hectares of land from a barangay utilized for agri-industrial use, 17.77 hectares from 10 barangays designated for tourism use, and 122.28 hectares from 41 barangays used as parks and recreation are all exposed to storm surge.
- Taking into account sensitivity rating, rated through assessment of proportion of buildings in dilapidated/condemned condition as a measure, there are a total of 17 residential areas with very high sensitivity, 22 residential areas with high sensitivity.
- In terms of adaptive capacity, residential areas exposed have no capacity and are not willing to retrofit or relocate or conform with new regulations though there are identified relocation sites. Exposed commercial, agri-industrial, tourism, and parks and recreation areas have the capacity to retrofit and relocate but areas for relocation have yet to be identified.

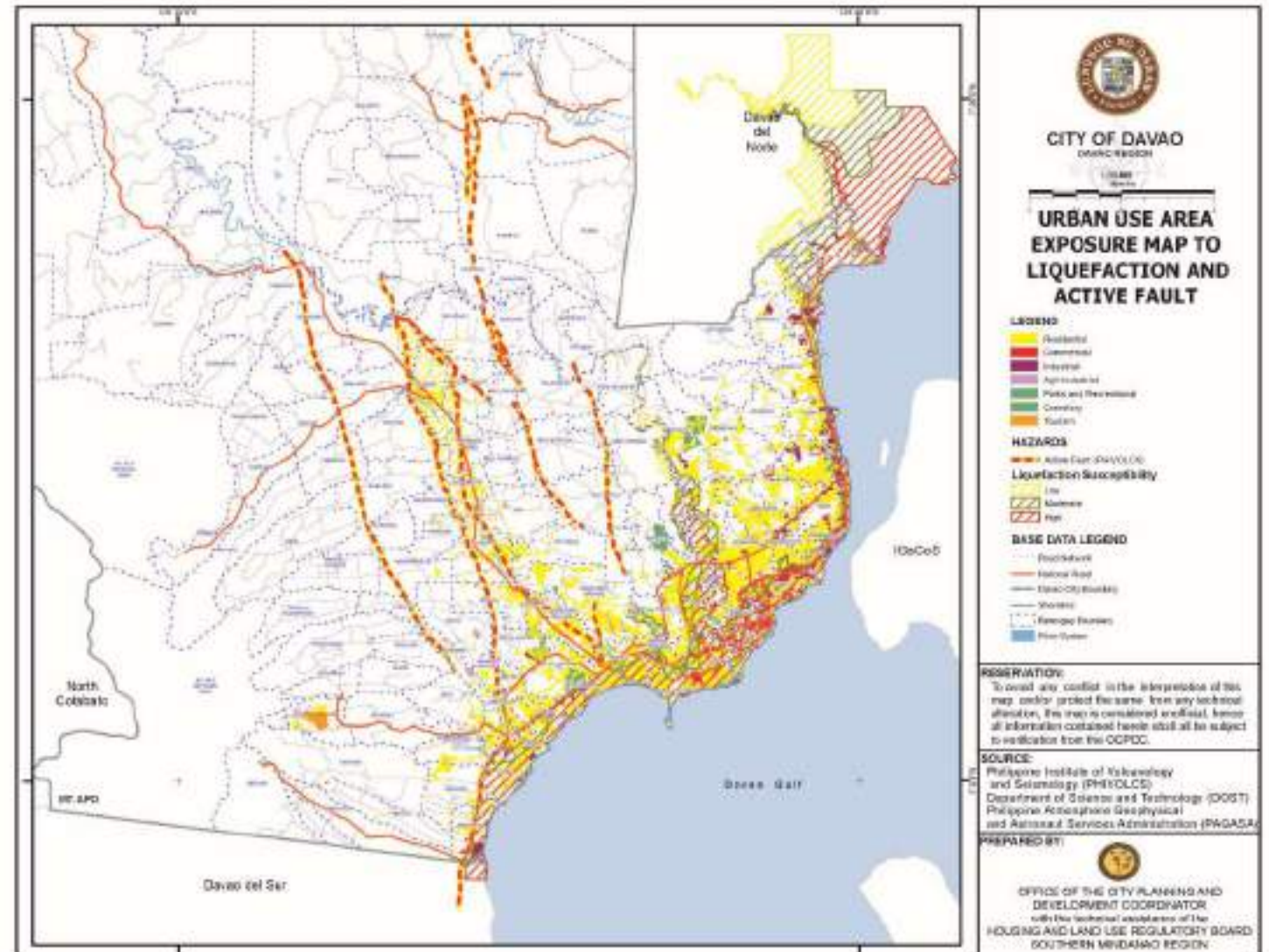
Map 1. 21 Urban Use Area Exposure Map to Storm Surge, Davao City



Urban Use Areas Exposure to Liquefaction

- Residential areas of 84 barangays with a total land area of 5,554.45 hectares, commercial areas of 66 barangays with 990.73 hectares, industrial areas of 49 barangays with land area totaling 792.15 hectares, agri-industrial areas of 7 barangays with 123.15 hectares, tourism areas of 13 barangays with a land area of 34.92, three (3) barangays with a land area of 45.63 hectares used as cemetery, and parks and recreation areas of 27 barangays with a land area of 36.07 hectares are exposed to liquefaction.
- Taking into account sensitivity, the proportion of buildings in dilapidated/condemned condition were considered, 19 barangays have very high sensitivity rating and 26 have sensitivity high rating with residential as main use.
- In terms of adaptive capacity, residential areas exposed have no capacity and are not willing to retrofit or relocate or conform with new regulations though there are identified relocation sites. Exposed commercial, agri-industrial, tourism, and parks and recreation areas have the capacity to retrofit and relocate but areas for relocation are yet to be identified.

Map 1. 22 Urban Use Area Exposure Map to Liquefaction and Active Fault, Davao City



Urban Use Areas Degree of Impact

Flood

A percentage 77.63 of the total exposed barangays has the highest degree of impact among the urban use areas exposed to flood. These identified barangays have a total area of 4,750.60 hectares wherein a 25.16% of the total area is highly susceptible to hazard which corresponds to an exposed value of Php 12,234,500,000. The top three (3) barangays with a high degree of impact for flood are residential areas in Talomo, Ma-a, and Tugbok with 226.76 hectares, 136.31 hectares, and 107.98 hectares land area respectively. Exposed values are pegged at P2,267,600,000, P1,363,100,000, and P 1,079,800,000.

Landslide

Out of the 90 barangays with residential use susceptible to landslide, 69 barangays have the highest degree of impact score. These identified barangays have a total area of 3,882.25 hectares which 28.44% of it is exposed to landslide. Exposed value is pegged at Php 114,041,000,000. Residential sections in Ma-a, Matina Pangi, and Cabantian with exposed land areas of 101.76, 64.73, and 83.13 respectively are the top three barangays registered with high impact to landslide. The exposed value of the residential area in Ma-a is P10,176,000,000; Matina Pangi is P9,709,500,000; and Cabantian at P8,313,000,000.

Liquefaction

Residential, commercial, and industrial urban uses have high degree of impact for liquefaction. As per evaluation, 70 out of 75 barangays with residential use have the highest score of 3 for the degree of impact. The percentage of exposure from the total area of residential use in the identified barangays is at 48.5%. Moreover, commercial uses in 70 barangays have also high degree of impact covering 82% of the 927.01 hectares total area of the identified barangays. Lastly, for the industrial uses with high degree of impact for liquefaction is present in 40 barangays. Such areas which could take on a lot of damage cover 57.7% of the 902.73 hectares total land area of barangays susceptible to liquefaction. Exposed values of each identified areas (residential, commercial, and industrial) are Php 242,333,145,766.65, Php 113,995,599,455.82, and Php 78,196,203,399.46, respectively.

Urban Use Areas Degree of Impact

Storm Surge

The top three urban use areas with a high degree of impact residential, commercial and industrial area. As per evaluation, only one barangay with residential use susceptible to liquefaction did not have high degree of impact. Same holds true in commercial area wherein 64 out of 65 exposed barangays have high degree of impact. In industrial area, 36 out of 39 barangays susceptible to storm surge have high degree of impact. As for the residential area, the total area of the 71 barangays measures up to 3,616.34 hectares wherein 36.71% is expected to take greater damage from storm surge with a corresponding exposed value of Php 134,806,687,845.64. On the other hand, damage in exposed commercial areas may reach up to P80, 491,650,929.35 as areas with high degree of impact take up 61% of the 879.25 hectares total commercial area of barangays identified. Lastly, the industrial areas with high degree of impact take up 41.6% of the total area industrial area of barangays affected with expected damage cost of Php 49,070,553,869.38.

Fault Line

As per data evaluation, 4 (four) out of the 25 barangays located in the residential area which are susceptible to active fault have a degree of impact score of 3, which is the highest score among the urban use areas. The four barangays have a total land area of 438.05 hectares in which 0.67% of it is highly exposed to the hazard. Exposed value is set at Php 294,951,425.

Urban Use Adaptive Capacity

<p>Flood</p> <ul style="list-style-type: none"> • Of the 328 barangays exposed to flood, 231 are registered to have a low adaptive capacity to mitigate the effects of flooding. • Capacities vary on the three (3) variables indicated below in terms of: <ol style="list-style-type: none"> a. Capacity and willing to retrofit or relocate or conform to new regulations. b. Insurance coverage c. Available alternative sites. • Most of the 231 barangays have available government resources at their disposal and are empowered to implement zoning regulations. • Among the top three (3) barangays whose residential areas have low adaptive capacity are 1-A, 2-A, 5-A. For areas, are Barangay 1-A, 2-A and 8-A. • Also identified as areas with low adaptive capacity are as follows: <ol style="list-style-type: none"> a. Areas allocated for industrial in barangays 8-A, Agdao Proper, and Paciano Bangoy; b. Parks and recreation in 23-C, 27-C, and Panacan; c. Agri-industrial areas in Baguio, Mandug, and Lasang; d. Areas utilized as cemetery in Barangays 8-A, Calinan, and Riverside; e. and Tourism areas in Panacan and Dumoy. 	<p>Landslide</p> <ul style="list-style-type: none"> • At least 175 barangays are exposed to landslide, with 137 exhibiting a low adaptive capacity to handle the impact. In terms of residential areas, top three areas are barangays 19-B, Carmen, and Tambobong, while for agri-industrial use areas, these are in barangays Gumalang, Malagos, and Gatungan. • Also identified are the top areas with low adaptive capacity are as follows: <ol style="list-style-type: none"> a. Areas allocated for tourism use in Communal, Megkawayan, and Baganihan; b. industrial use in Buhangin, Cabantian, and Communal; c. parks and recreation in Indangan, Mandug, Langub, d. and cemetery in Buhangin and Ma-a <p>Liquefaction</p> <ul style="list-style-type: none"> • Over-all, there are 280 barangays which are exposed to liquefaction. • Of the total, 83 barangays with land utilized as residential have exhibited a low adaptive capacity to meet the effects of liquefaction, with an adaptive capacity score equivalent to three (3). <p>Storm Surge</p> <ul style="list-style-type: none"> • There are 227 barangays exposed to storm surge and 72 of these have low adaptive capacity. The exposed areas are all residential in use.
<p>Fault line</p> <ul style="list-style-type: none"> • Overall, there are 25 barangays located in fault line areas which registered a low adaptive capacity and an adaptive capacity average equivalent to three (3) in dealing with the impact of an earthquake. • Enumerated below are the top barangays per land use category: For residential use these are Malagos, Calinan, and Pangyan; for agri-industrial use are Biao Joaquin, Cawayan, and Talomo River; for commercial use areas are Calinan, Riverside, and Los Amigos; for parks and recreation are in Mintal and Tagakpan, and for cemetery use in Tugbok. 	

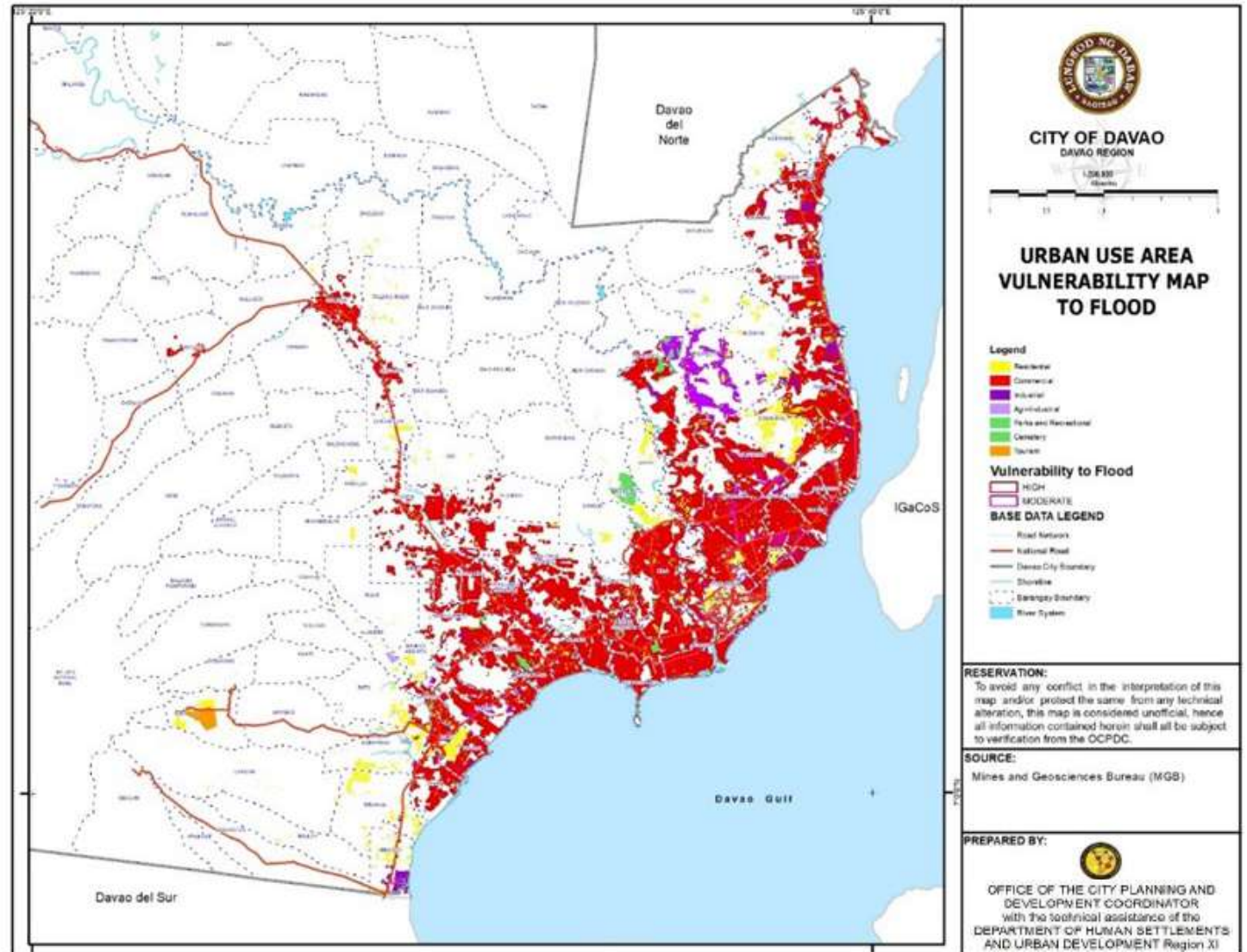
Very High—>50%; High >30-50%; Moderate > 15-30%; Low >5-15%; Very Low >2-5%; Residual >0-2%

Degrees of Impact are categorized into three: high, moderate and low. High degree impact has a designated impact score of 3, and Moderate has a designated impact score of 2, both in terms of estimated number of fatalities, injuries and value of property damage. For high degree of impact, the overall impact will be disastrous given the extent of exposure and current sensitivity of the system, while moderate degree of impact are expected given the exposure and current sensitivities of the system. For the low degree of impact, which has a designated impact score of 1, estimated direct and indirect impacts are low to negligible which can be felt within a short term of period. There is minimal impact to development processes and no significant cost needed to return to pre-impact levels.

Urban Use Vulnerability Index

Flood- There are 231 barangays with high vulnerability impact to flood which are mainly residential in use while at least 69 barangays have moderate impact and are mainly used as park and recreation, and another 28 barangays, with low impact utilized for residential use.

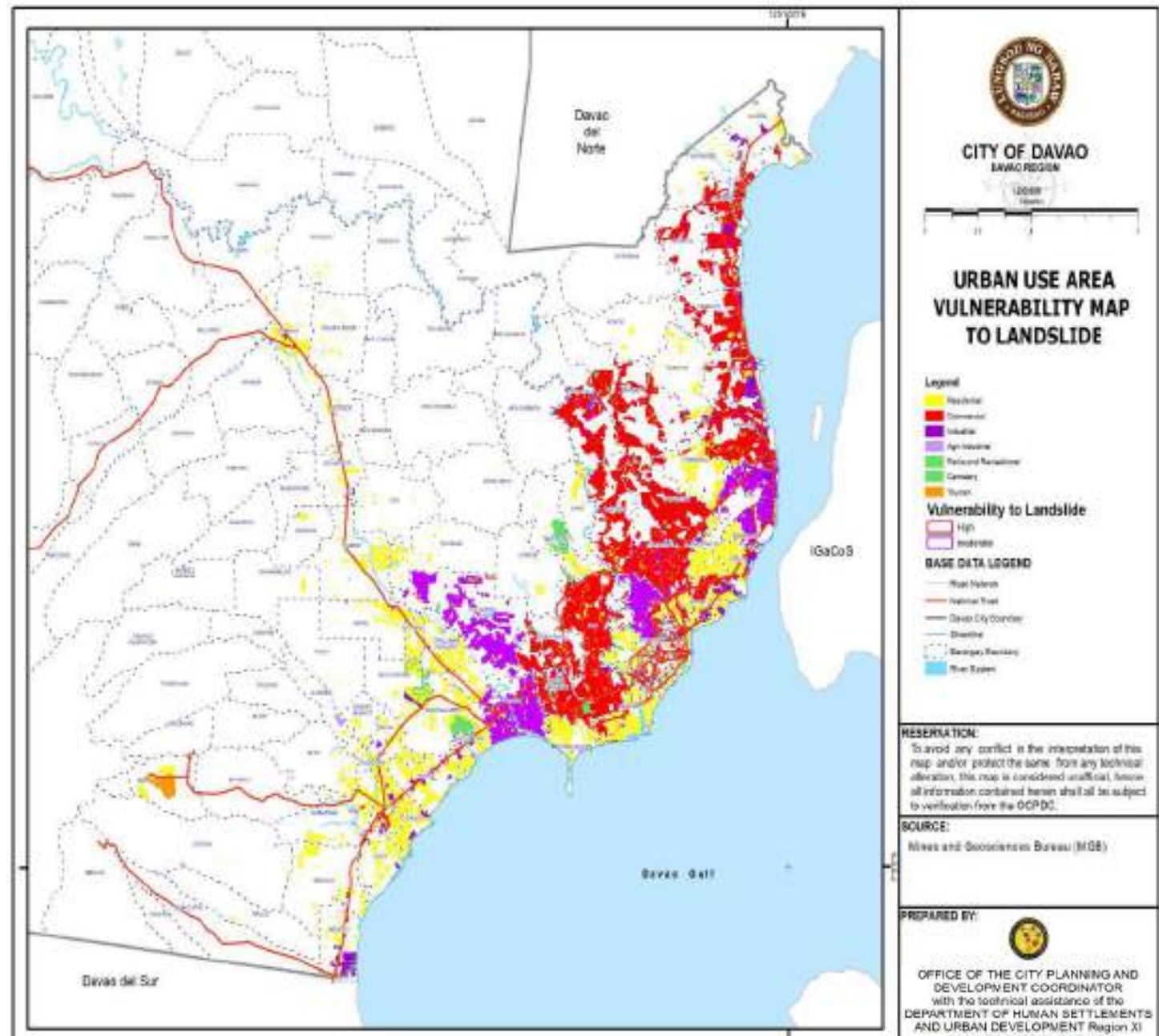
Map 1. 23 Urban Use Area Vulnerability Map to Flood, Davao City



Urban Use Vulnerability Index

Landslide— There are 123 barangays with high vulnerability to landslide impact, 38 barangays with moderate impact, and 14 barangays with low impact. Dominant use for all these are residential.

Map 1. 24 Urban Use Area Vulnerability Map to Landslide, Davao City

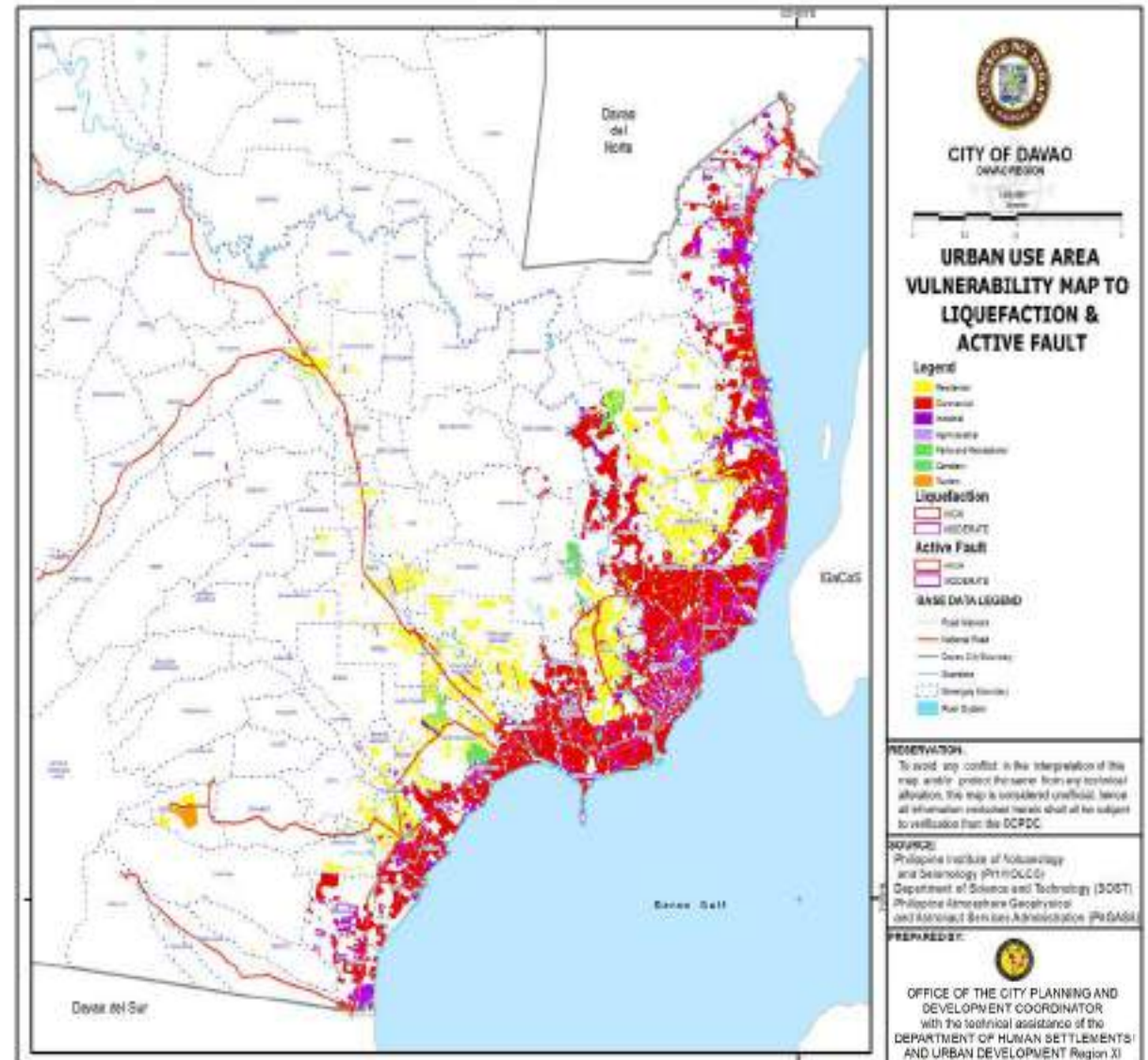


Urban Use Vulnerability Index

Liquefaction- According to the presented result from the urban use assessment for vulnerability, only the residential area in 79 barangays have high vulnerability to liquefaction. Based on the table, these barangays have “low rating” on structure employing hazard resistant/adaptation design and a “very high” rating on no access/area coverage to infrastructure related hazard mitigation. While this is the reality among the structures, findings also disclose that 40 barangays have “high” to “very high” rating on the proportion of buildings with walls with light to salvageable materials and this number also equals to number of barangays with “high” to “very high” proportion of buildings in dilapidated/condemned condition. What makes this barangays an area of concern to liquefaction is that the same barangays have low adaptive capacity, having no capacity and willingness to retrofit or relocate or conform to new regulations and no insurance coverage. Hence, the presence of liquefaction hazard can further be addressed by implementation of zoning regulations, identification of alternate sites and utilization of government resources.

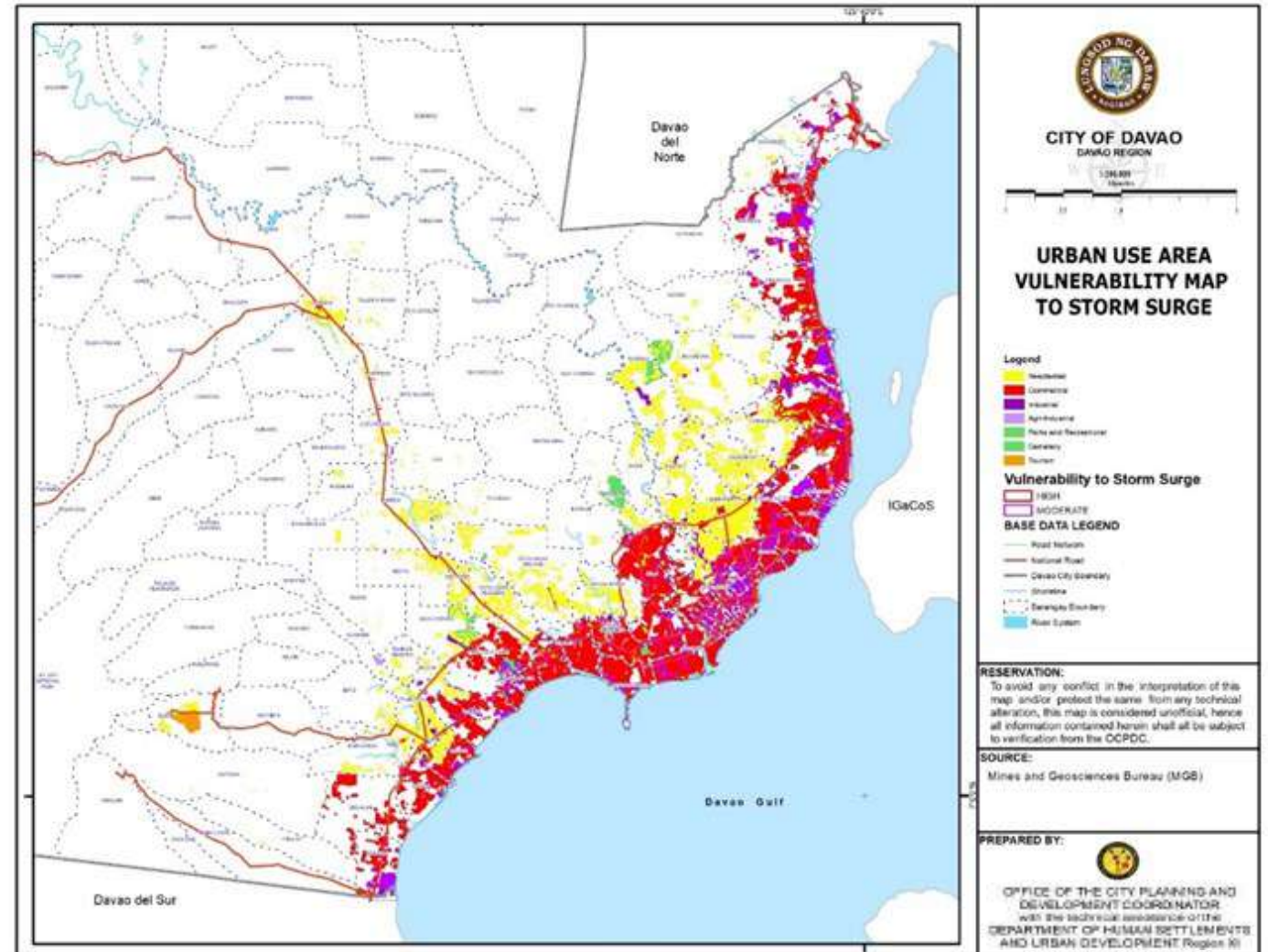
Fault Line- Of the total of 46 barangays susceptible to fault line, four (4) are highly vulnerable. Residential areas are likely to be affected. This is because of the high degree of impact because of “moderate to very high rating” of residential areas in the proportion of buildings with walls with light to salvageable materials and in proportion of buildings in dilapidated/condemned condition. These areas also have “moderate” rating on the “structure employing hazard resistant/adaptation design” and in “no access/area coverage to infrastructure related hazard mitigation measures employing hazard resistant/adaptation’. As to the adaptive capacity, these areas have low adaptive capacity attributed to no insurance coverage and no capacity and willingness to retrofit or conform to new regulations. The imminent danger of strong quakes is posed to incur damage of Php 294,951,425, such could still be prevented by strong implementation of zoning regulations identification of alternative sites and utilization of government resources.

Map 1. 25 Urban Use Area Vulnerability Map to Liquefaction and Active Fault, Davao City



Map 1. 26 Urban Use Area Vulnerability Map to Liquefaction and Active Fault, Davao City

Storm Surge - At least 79 barangays have a high vulnerability impact to storm surge and are mainly residential areas. There are also 153 barangays used as commercial areas which are moderately vulnerable to storm surge.



URBAN USE RISK ESTIMATION FOR FLOOD

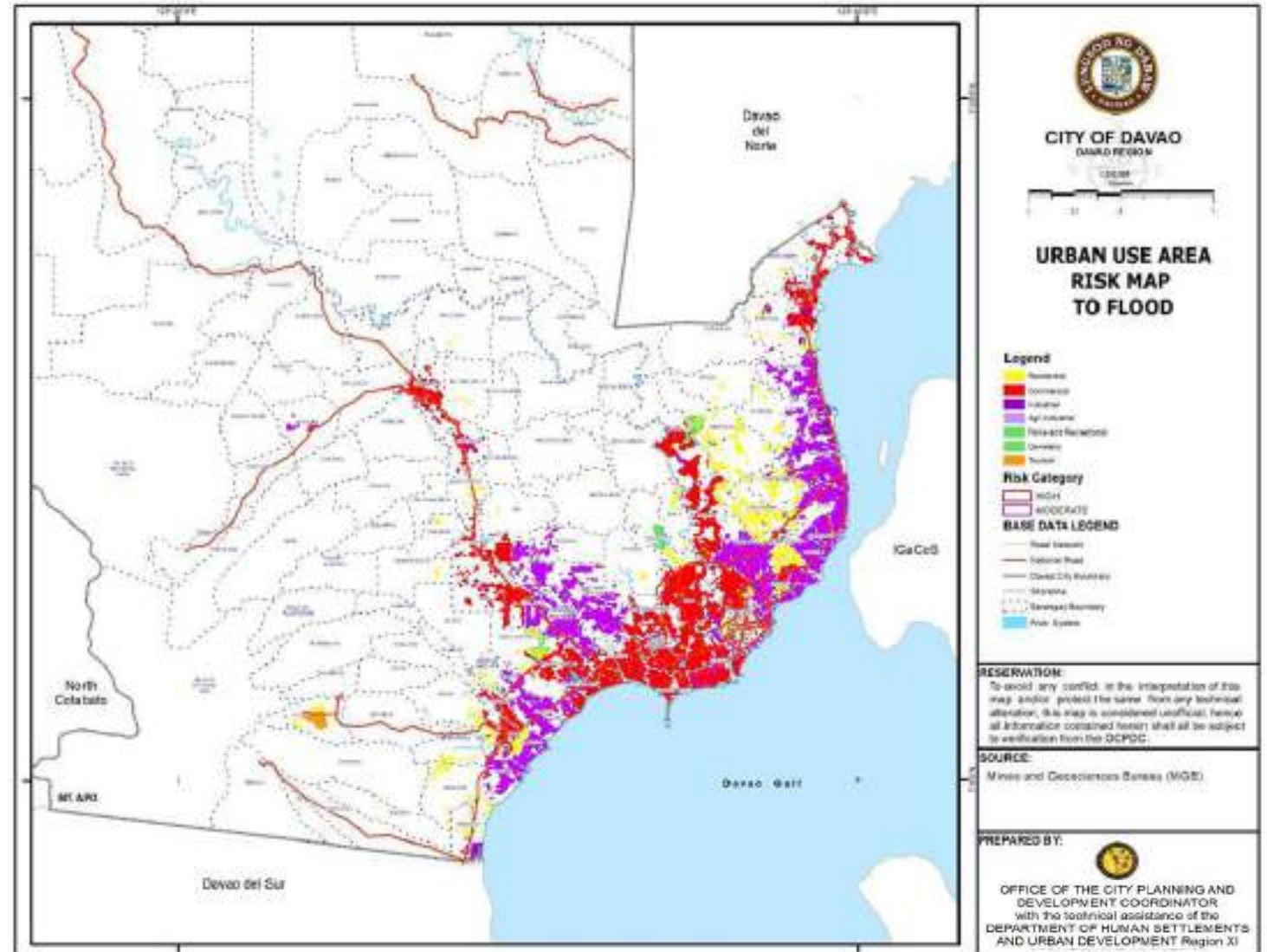
Likelihood of Occurrence- In disaster risk assessment, only hazards with history of occurrence in the city are considered. This assessment was accomplished by analysing the frequency of disasters throughout the years based on the data of the City Social Welfare and Development Office. This frequency of disasters is reflected through the likelihood of occurrence rating, which is measured through the following scores: 6 – frequent, which happens every 1 to 3 years; 5 – moderate, occurs every 3 to 10 years; 4 – occasional, happens every 10 to 30 years; 3 – improbable, every 30-100 years; 2 – rare event, every 100-200 years; and 1- very rare event which happens every 200 years. It can be noted that for the purpose of this study only hazards such as flood and landslide which have history of occurrence in the city is assessed. The other hazards such as storm surge, active fault and liquefaction were not included. A total of 53 barangays which registered the score of six (6), most of which are residential in use followed by industrial, and third as commercial.

At least 36 barangays scored five (5), 52 are rated four (4), and three (3) barangays are rated at 3.

Severity of Consequence Score- Severity of consequence is measured as follows: very high (VH), 4, means >40% non-residential structures are severely damaged or 20% of residential structures are severely damaged; high (H), 3, is when >20 to 40% non-residential based structures area severely damaged or 10 to 20% residential structures are severely damaged; moderate (M), 2, is when 10 to 20% of non-residential structures are severely damaged or 5 to 10% of dwelling units are severely damaged; and low (L), 1, is when production based structures are < 10% or < 5% of dwelling units are severely damaged. For flood, out of the 76 barangays affected by flood in the residential area, 57 barangays are assessed to have the highest severity of consequence when flood-induced damages incur in the area. These identified barangays have a total area of 3,940.11 hectares with a portion of 29.7% as an area wherein has most severe damage to residential structures.

Map 1. 27 Urban Use Area Risk Map to Flood, Davao City

Areas at Risk to Flood- There is a total of 24 barangays which are highly recommended to have hazard mitigation measures in terms of flood. Out of these barangays Ma-a has the highest number of hectares at risk to flood. It has 193 ha of urban spaces are at high risk to flood, 71% is residential area, 14% is commercial, 9% industrial, 3% parks and recreation, and 3% tourism. Aside from Ma-a, Calinan should also be highly considered because 129.64 ha is at high flood risk, 83% is residential area, 15% commercial, 2% industrial, 1% parks and recreation. Barangays Matina-Aplaya, Bucana, 8-A, 19-B, Bunawan, Los Amigos and Bago Gallera are also among the areas with high number of hectares at risk to flood with 87.13 has, 86.72 has, 56.07 has, 45.47 has, 66.74 has, 43.59 has, and .49.64 has of high flood risk areas, respectively.



LANDSLIDE

Likelihood of Occurrence- In considering exposure to hazard, likelihood of occurrence is taken into consideration. This is measured through the following scores: 6 – frequent, which happens every 1 to 3 years; 5 – moderate, occurs every 3 to 10 years; 4 – occasional, happens every 10 to 30 years; 3 – improbable, every 30-100 years; 2 – rare event, every 100-200 years; and 1- very rare event which happens every 200 years.

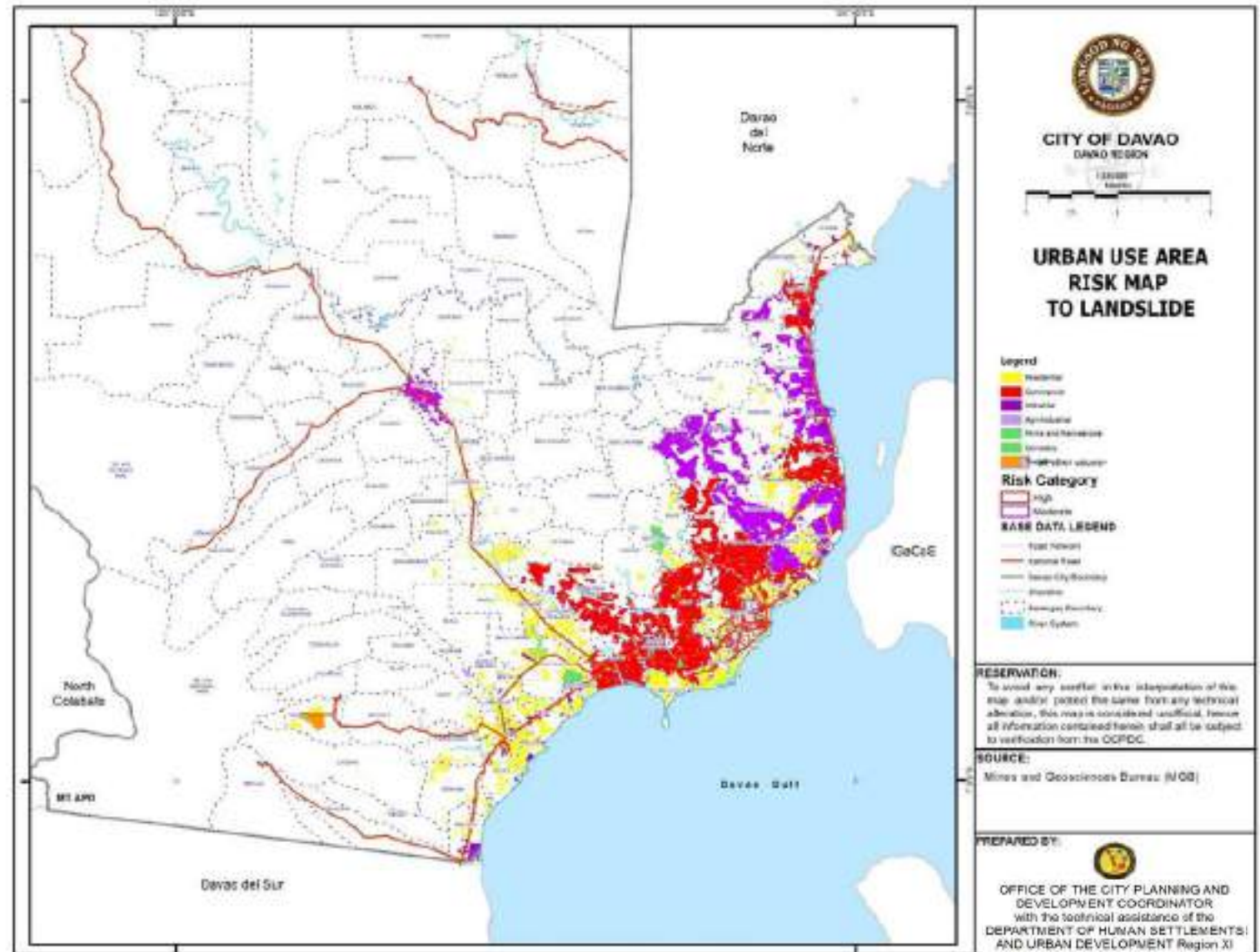
Barangays Tapak, Matina Crossing, and Matina Pangsi are the top three in terms of having the highest likelihood of occurrence of landslide with a score of six (6). For barangay Tapak the exposed area is used as residential while those of barangay Matina Crossing are for industrial, residential, and commercial use; and for barangay Matina Pangsi, the areas are utilized for commercial, parks and recreation, tourism, residential, and industrial use.

Severity of Consequence Score- The severity of consequence is measured as follows: very high (VH), 4, means >40% non-residential structures are severely damaged or 20% of residential structures are severely damaged; high (H), 3, is when >20 to 40% non-residential based structures area severely damaged or 10 to 20% residential structures are severely damaged; moderate (M), 2, is when 10 to 20% of non-residential structures are severely damaged or 5 to 10% of dwelling units are severely damaged; and low (L), 1, is when production based structures are < 10% or < 5% of dwelling units are severely damaged.

The 79 affected barangays in the residential area were found to have an average of 24.2% expected damaged residential structure brought about by landslide which is categorized as a high severity of consequence based from the severity of consequence score matrix (NDCC Memorandum Order No. 4, Series of 1998).

Map 1. 28 Urban Use Area Risk Map to Landslide, Davao City

Areas at Risk to Landslide- Based on the above figure, the 90 exposed barangays to landslide have a high severity of consequence with a moderate likelihood of occurrence to landslide and a low adaptive capacity, thus, concludes that the residential area exposed to landslide is a high risk area. Reflected in the table below are areas with moderate to high landslide risk. Out of these barangays ten (10) are



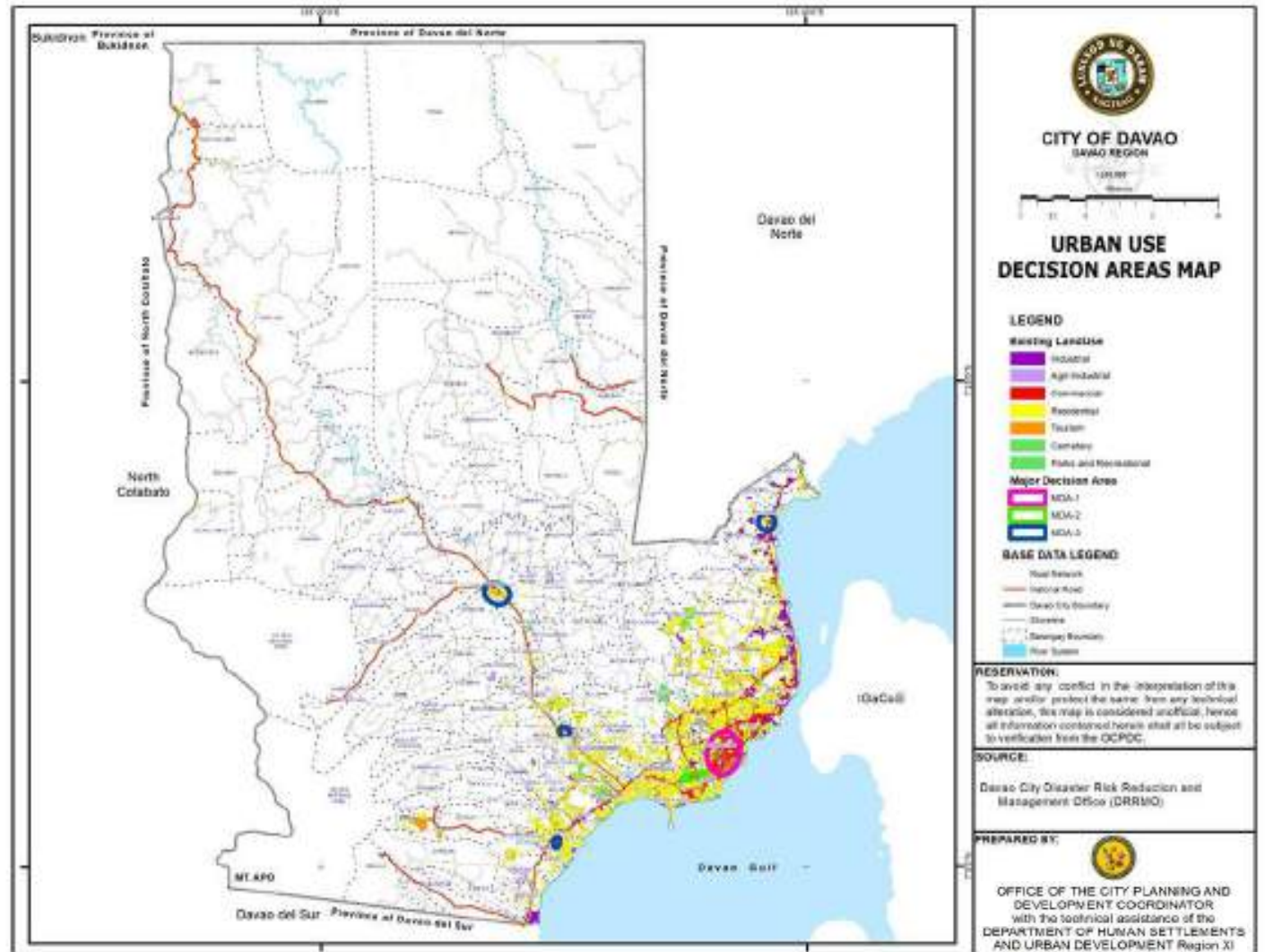
Integrated Major Decision Areas

The Integrated Major Decision Areas, categorized into Major Decision Area-1 (MDA-1), Major Decision Area-2 (MDA-2), and Major Decision Area-3 (MDA-3), summarizes the priority areas for intervention of the local government in terms of policies and projects in the next ten (10) years as a result of the Climate Disaster and Risk Assessment made, based on the five (5) exposed elements: Population, Critical Point Facilities, Lifeline Utilities, Natural Resource-Based Production Area and Urban Use.

After the assessment, Suawan, Matina Crossing, Talomo, Marilog, Tigatto, Ma-a, Matina Pangi, Panacan, Tamugan, Calinan, 19-B, Mintal, Tugbok, Bunawan, Bucana, Matina Aplaya were identified as Integrated Major Decision Areas-1. MDA-1 are the top priority areas for immediate attention, and implementation of risk mitigation projects and programs.

On the other hand, Buhangin, Leon Garcia Sr., 8-A, Los Amigos, Malabog and Salaysay are identified as Integrated Major Decision Areas-2. These barangays are the second highest priority, while barangays 1-A, 2-A, 5-A, 21-C, 22-C, 23-C, 31-D, Centro, Waan, Lasang, Bago Aplaya, Catalunan Pequeño are identified as Integrated Major Decision Areas-3, the third highest in priority for risk and disaster mitigation projects.

Map 1. 29 Urban Use Decision Areas Map, Davao City



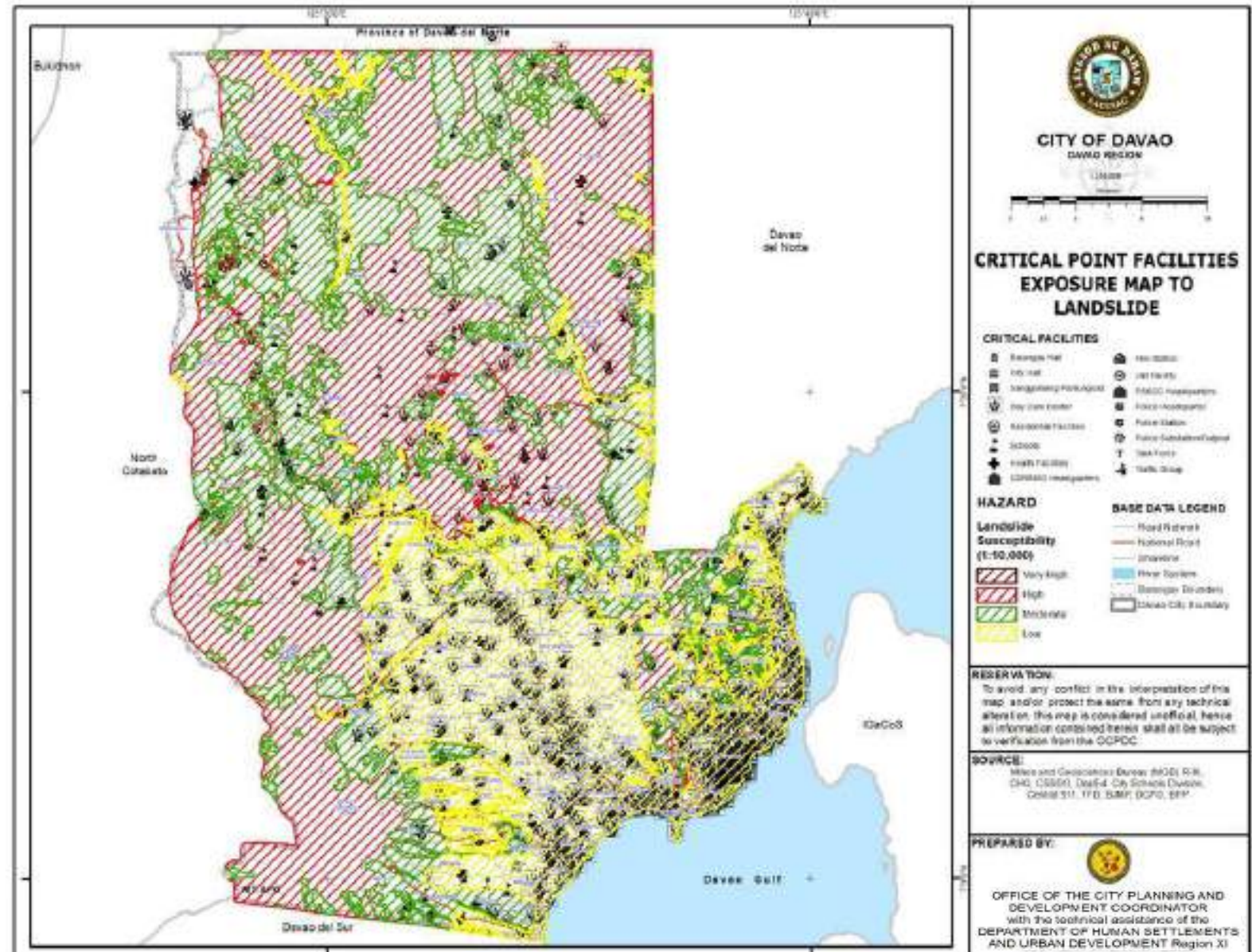
CRITICAL POINT FACILITIES EXPOSURE

Map 1. 31 Critical Point Facilities Exposure Map to Landslide, Davao City

LANDSLIDE

Critical point facilities exposed to landslide total to 358 wherein 214 are not employed with hazard resistant design while 64 are already retrofitted or employed designs that reinforced the design of the structure to increase its adaptive capacity in the occurrence of landslides.

Most of the facilities or 160 are found to be in good condition, 135 facilities need repair, 39 in fair condition, and 20 are in poor condition, thus susceptible to landslides in the areas where the structures are located.



CRITICAL POINT FACILITIES EXPOSURE

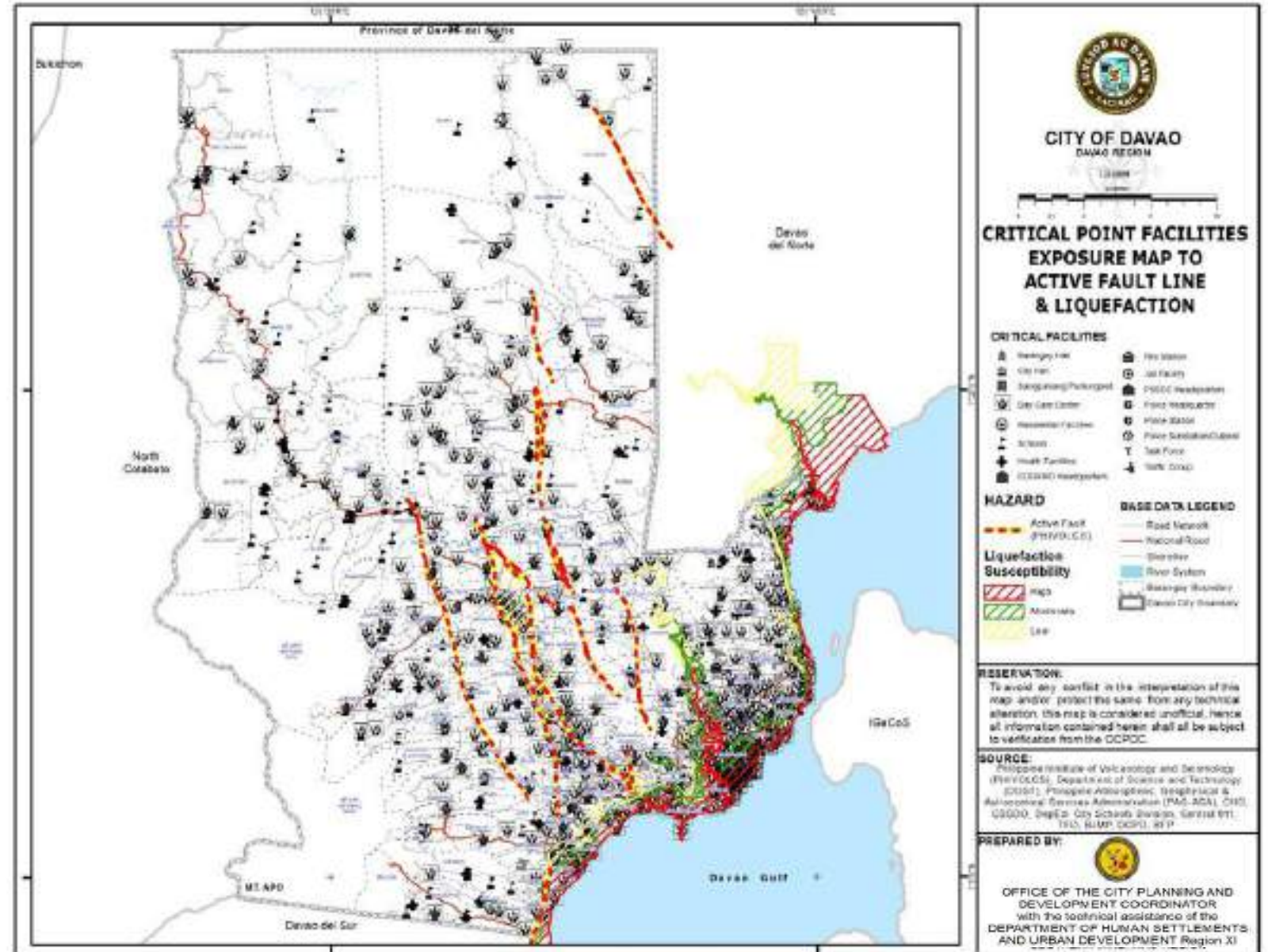
Map 1. 32 Critical Point Facilities Exposure Map to Active Fault and Liquefaction, Davao City

LIQUEFACTION

Total number of critical point facilities susceptible to liquefaction reached 405. Of the total number, three (3) are in critical condition namely: a day care center in Barangay 15-B, Poblacion, another day care center in Matina Aplaya, and a 2-storey fire station in Paciano Bangoy.

A large number of 227 facilities are found to be in good condition while 80 structures need repair, the rest or 67 are in fair condition, and 28 are in poor condition.

There are 293 structures that are not designed employing hazard resistant means, while 112 facilities have been retrofitted or have adopted other alternatives to improve its condition and degree of susceptibility.



CRITICAL POINT FACILITIES EXPOSURE

Map 1. 33 Critical Point Facilities Exposure Map to Storm Surge, Davao City

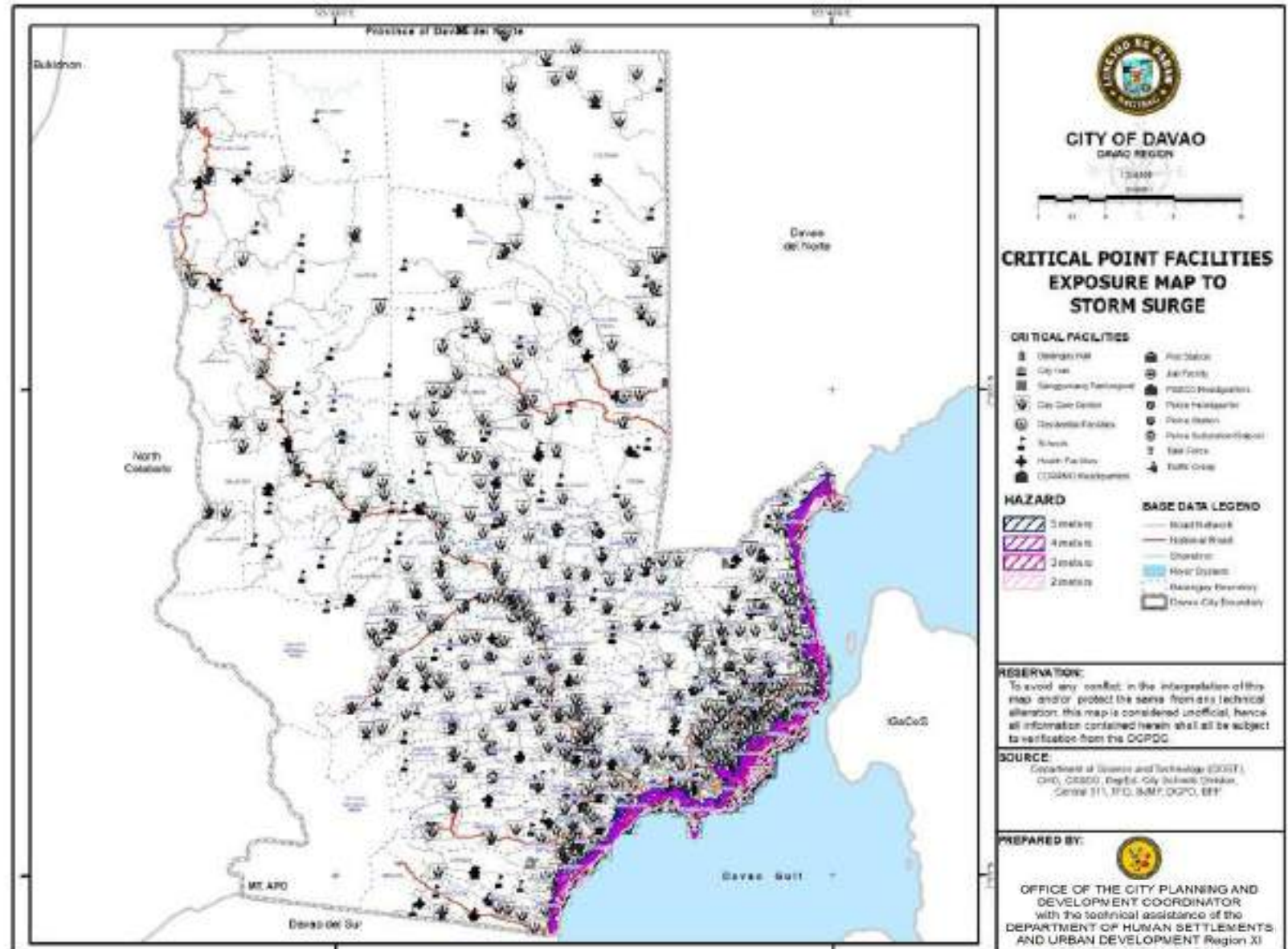
STORM SURGE

There are 310 critical point facilities determined to be exposed to the occurrence of storm surge.

Four (4) facilities are in critical condition, namely: two (2) daycare centers at Barangay 15-B, Poblacion, and Matina Aplaya; and two-storey fire station at Paciano Bangoy and Matina Crossing.

There are 153 facilities determined to be in good condition, while 68 are considered to be in fair condition, 25 in poor condition, and 57 need to be repaired.

There are also 214 structures that are to be reinforced with hazard resistant design while the remaining 96 have already been employed with hazard resistant design.



Adaptive Capacity of Critical Point Facilities

Flood

There are 285 structures that are exposed to flood and of the total number, 143 bear the adaptive capacity of 1 which is considered to have a high adaptive capacity while 139 were given the score of 2 or moderate while three structures received the rating of 3 or low. These critical point facilities with low adaptive capacity are all single storey day care centers located at Barangays 19-B, Lapu-Lapu, and Calinan. These three structures should avail resources from the government for mitigating the impacts of flooding when the same occurs in the area.

Landslide

The number of critical point facilities susceptible to landslide total to 358 where 57 have high adaptive capacity, 267 facilities were determined to have moderate adaptive capacity, and while 33 structures have low adaptive capacity. Of the 33 structures, 32 are day care centers and 1 barangay hall. These structures with low adaptive capacity do not have insurance coverage and no resources to mitigate the effects of landslide. Most of the 33 structures have high degree of impact, which implies fatalities in the event landslides will take place.

Storm Surge

Of the 310 critical point facilities identified to be susceptible to landslide, 184 were given the adaptive capacity of 1, 107 facilities were determined to have moderate of adaptive capacity to take in change in the climate, while there are 19 with low capacity to adopt to impacts of climate change. The 19 structures are barangay halls (3), day care centers (6), elementary schools (8), and secondary schools (2). These structures are not covered by property damage insurance, thus, should consider adopting mitigating measures since these structures were also have a high degree of impact in the occurrence of storm surge in the areas where these are located.

Liquefaction

There are 405 critical point facilities susceptible to liquefaction, 216 have high adaptive capacity, 175 moderate, and 14 were given the score of low. The 14 structures are barangay halls (3), barangay health stations (5), day care centers (3), elementary schools (2), and a secondary school. These structures are not covered by insurance. As to the improvement of the structure so as to increase its adaptive capacity, funds for retrofitting can be sourced from the disaster risk reduction and management fund of the city government.

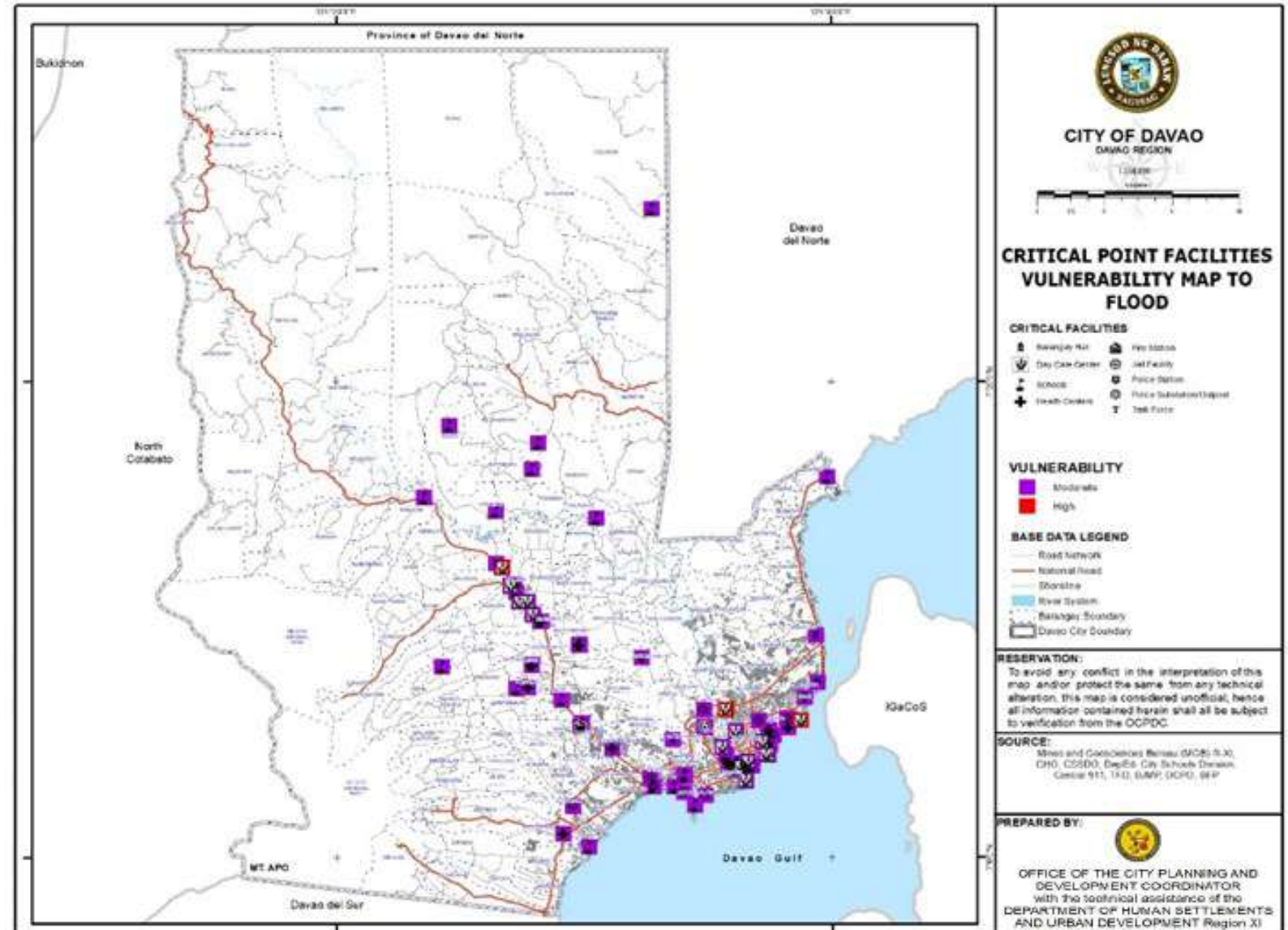
Critical Pont Facilities Vulnerability Index

Map 1. 34 Critical Point Facilities Vulnerability Map to Flood, Davao City

Flood

There are only three facilities under the “high” category which can be interpreted as structures where expected impact of the flooding hazard is high and said structures have low capacity to take in said impacts. The structures are day care centers in Barangay Lapu-Lapu, Calinan, and 19-B.

There are 19 critical point facilities that are considered to belong under the “High” vulnerability category within storm surge impact areas which are barangay halls (3), day care centers (6), elementary schools (8), and secondary schools (2).

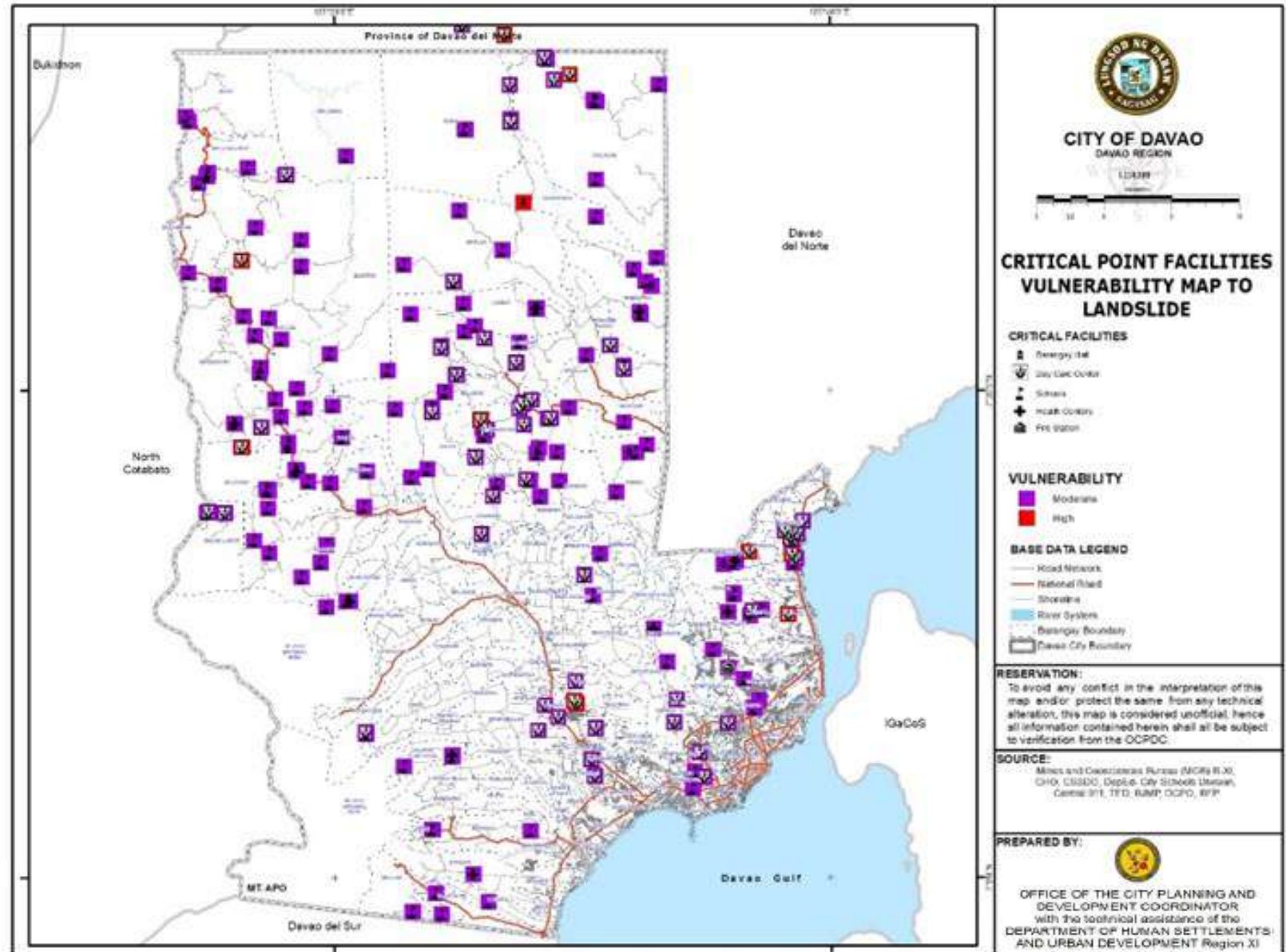


Critical Pont Facilities Vulnerability Index

Landslide

Under the “High” category are 21 critical point facilities wherein 20 are single-storey day care centers and one is a barangay hall.

Map 1. 35 Critical Point Facilities Vulnerability Map to Flood, Davao City



The table below is a summary of the government structures that are exposed to risks including the level of risks and type of facilities:

Facility Type	FLOOD			LANDSLIDE		
	No. of Facilities	Risk Category		No. of Facilities	Risk Category	
		Moderate	High		Moderate	High
Barangay Hall	3	1	2	2	1	1
Barangay Health Station	13	10	3	13	10	3
Day Care Center	62	61	1	76	62	14
Elementary School	13	6	7	111	56	55
Police Outpost	5	0	5			
Police Sub-Station	7	0	7			
Secondary School	6	3	3	22	11	11
SIR Fire Station	1	1	0			

Of the total number of police sub-stations, two have very high risk exposure to flood belonging to Barangay Tomas Monteverde and Ubalde. Both structures are within urban areas and within Agdao District.

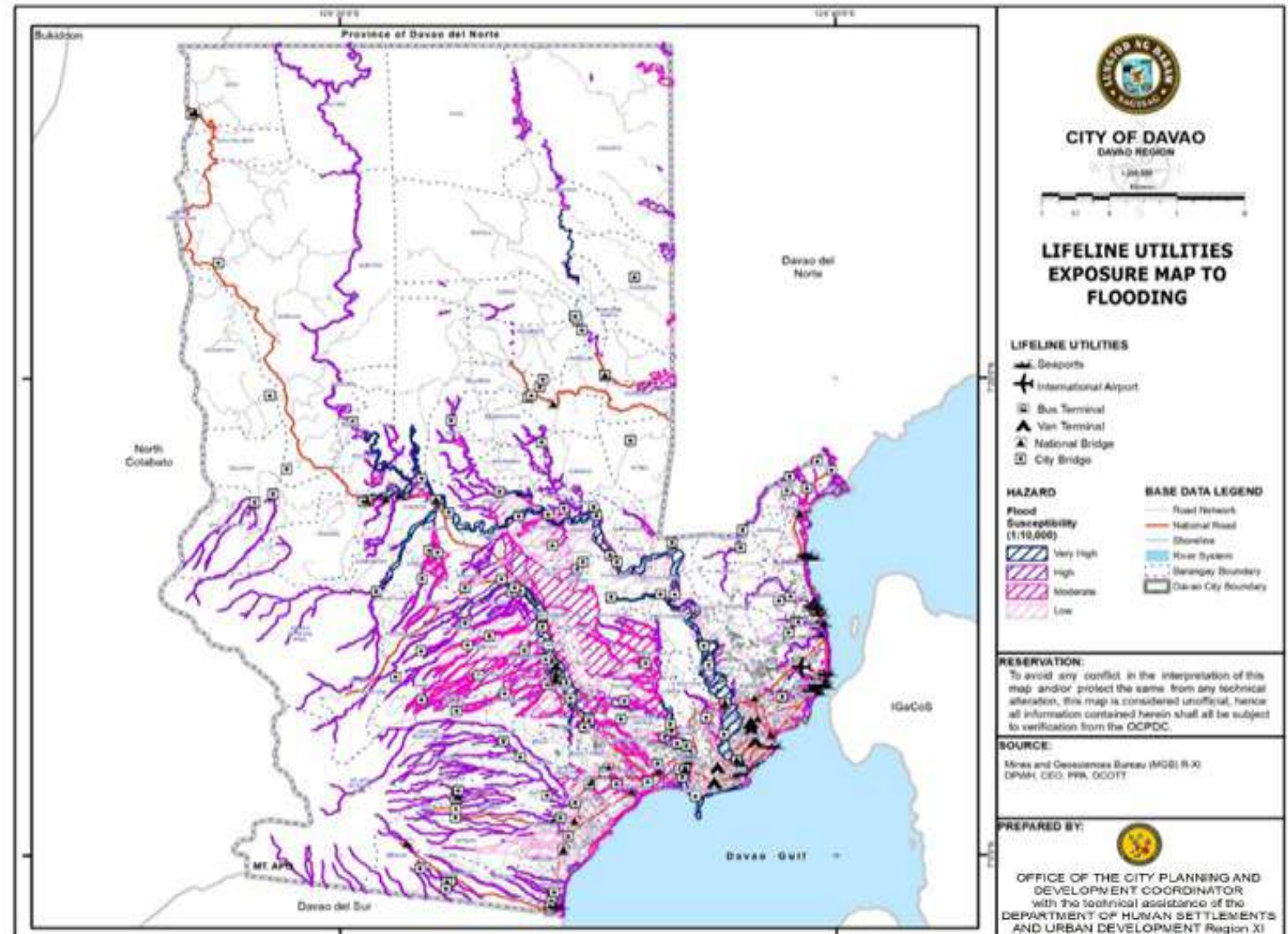
Lifeline Utilities Exposure to Hazards

Roads - A total of 15 portions are highly susceptible to flood. The Davao Bukidnon Road has the longest road network exposed at 15.67 meters. It is followed by Fatima- Malabog Road with 8.8631 meters exposed and Carlos P. Garcia Highway with 4.9353 meters.

Bridges - A total of 26 bridges are located in a high flood susceptibility area, this could be attributed to the location of the bridges in major rivers. The top three (3) bridges which assessed to be highly susceptible to flood are Bolton Bridge 2 with 185.30 meters exposed length, Bolton Bridge 1 with 185.30 meters exposed length, and Davao River Bridge with 141.11 meters exposed length.

Power Substations -A total of three (3) substations are located in high flood susceptibility area. These are: Calinan Substation, Tugbok Substation and Matina Substation. These newly upgraded substations were made of concrete and steel. These are designed to withstand typhoon, earthquake, fire, flood, oil spill, and sabotage and terrorism. As for its adaptive capacity, the substations have risk insurance.

Map 1. 39 Lifeline Utilities Exposure Map to Flooding, Davao City



Lifeline Utilities Exposure to Hazards

Water

Level I- A total of three (3) spring sources in Tibungco, two (2) spring sources in Panacan and Binugao, and one (1) well from Lizada are highly susceptible to flood.

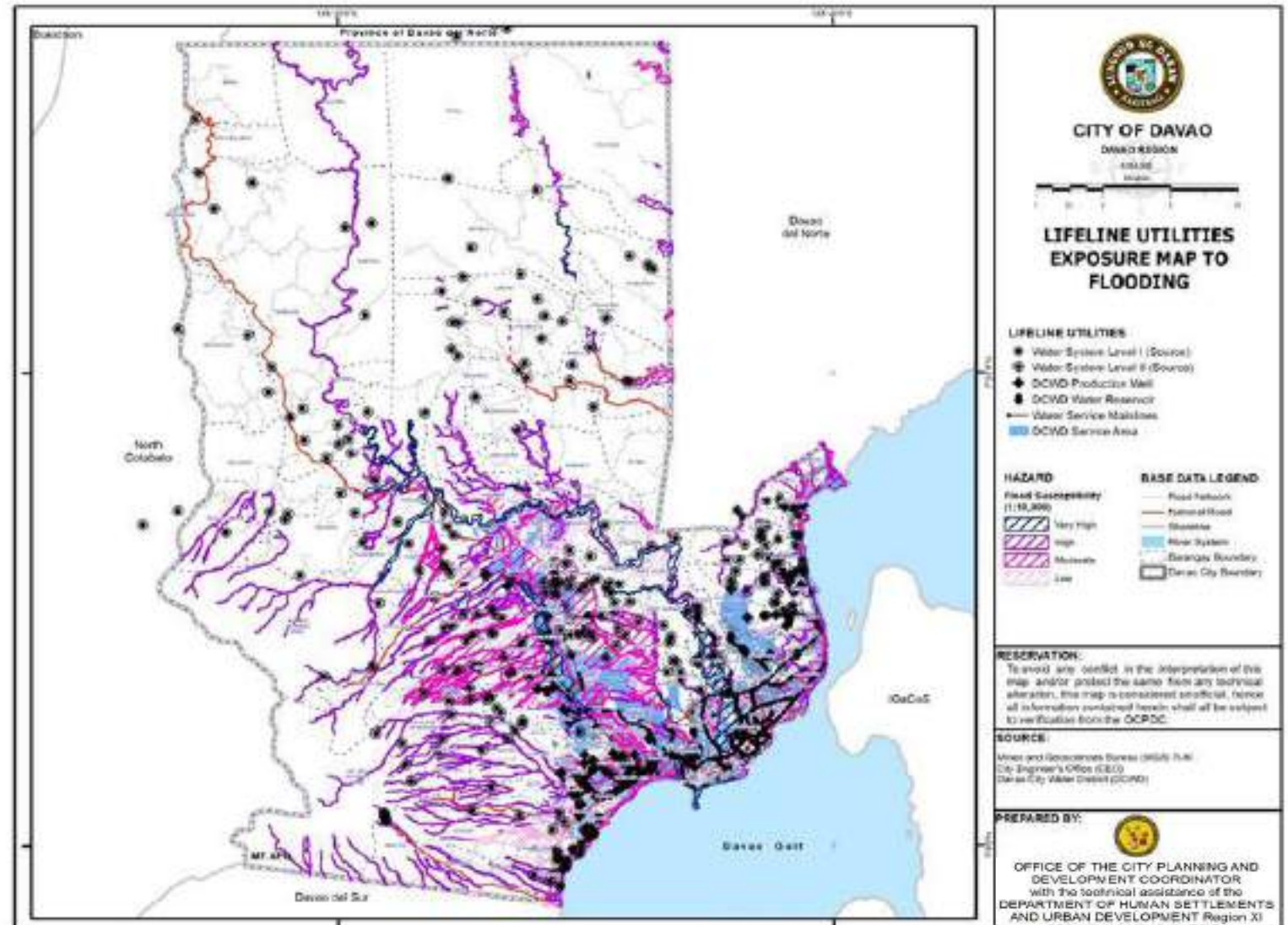
Level II Water System-A total of eleven (11) spring sources and six (6) deep wells found in Binugao, Sirawan, Sibulan, Mt. Apo National Park, Tungkalan, Daliaon Plantation, Subasta, Waan, Cawayan, Baguio, Malagos, Salaysay are highly susceptible to flood.

Level III- Out of 205,952.31 meters of main line pipes, 6,624.29 meters are susceptible to high flood. The longest pipeline is in Ma-a with 1,153.29 meters, followed by 629.46 meters located in Barangay Talomo, and then by 644.79 meters located in Barangay Ma-a.

DCWD Production Wells

DCWD has a total of 66 wells susceptible to flood, out of these, six (6) vertical turbine wells are highly susceptible to flood. These wells are found in Kilometer 7, Talomo Sump Bangkal, Barangay Talomo; Davao-Cotabato Road, near Bago Bridge Brgy. Bago Aplaya; Catotal Subdivision near Block 22, Brgy. Bago Aplaya; Mangahan Bridge, Alambre, Toril; Tugbok Quarry, Along Davao Bukidnon Road, Brgy. Tugbok; and Los Amigos.

Map 1. 40 Lifeline Utilities Exposure Map to Flooding, Davao City



Lifeline Utilities Exposure to Hazards

Cell sites

Davao City has a total of 129 cell sites susceptible to flood. Out of the total number, four (4) cell sites are highly vulnerable to flood. These are located in Mc Arthur Highway, Brgy. 74-A, Matina Crossing; Magno Property, No. 64 V. Mapa St.; Brgy. 11-B, #88 Maya St.; Brgy. 76-A, Ecoland, Brgy. Bucana. These cell sites occupy an average of 300 square meters each, with replacement cost ranging from ₱12-P15 million. These cell sites are also made of steel and concrete. Hazard resistant design is also employed for each cell site. Moreover, all of the cell sites have no insurance coverage and available government resources.

Adaptive Capacity of Lifeline Utilities for Flood

Roads-The 2nd Avenue, a minor road supplementary to major thoroughfares without any insurance fund for rehabilitation has the lowest adaptive capacity. Carlos P Garcia Highway Davao, Bukidnon Road, and Davao-Agusan Highway have moderate adaptive capacity. Moderate adaptive capacity means that addressing the impacts will require significant cost but it is still within the capacity of the system to adapt to potential impacts. It can accommodate within its resources, the cost for adapting and mitigating impacts.

Bridges- Davao River Bridge, Pangsi Bridge, Suawan Bridge, Tamugan Bridge, Angalan Bridge III, Angalan Bridge IV, Angalan Bridge VI, Bato Bridge, Bolton Bridge 2, Generoso Bridge I, Libby Bridge, Lipadas Bridge I, Lipadas Bridge II, Pagan Grande, Pagan Pequeño, Piedad Bridge, and Talomo Bridge I have moderate adaptive capacity. All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.

Power Substations- Based on the assessment all power substations have high adaptive capacity, meaning the system is able to accommodate changes in climate, there are adaptation measures to address the impacts.

Level I Water System- Deep wells located in Talomo River, Ula, and Riverside have high adaptive capacity, while spring sources found in Bunawan, Tibungco, Panacan, Daliao, Lizada, Sirawan and Binugao have moderate adaptive capacity.

Level II Water System- Deep wells found in Sirawan, Marapangi, Daliaon Plantation, Waan and Tigatto have moderate adaptive capacity.

Level III Water System- All mainline pipes have high adaptive capacity. According to DCWD, their office has the team to check and monitor the pipes.

DCWD Production Wells -DCWD wells have high adaptive capacity. The wells are made with flood resilient materials. Monitoring stations built along with each well are also made of concrete and were built higher to withstand flood.

Cell Sites -Built with steel and concrete materials, all cell sites have high adaptive capacity for flooding. These cell sites are placed on top of hills or buildings which makes it less susceptible to flood occurrence.

Lifeline Utilities Adaptive Capacity to Landslide

Roads- Portions of Inawayan-Baracatan Road, Mabuhay-Pañalum-Paquibato Road, and Eden-Tagurano Road have low adaptive capacity. The length exposed for each road network are 5.2520 meters, 1.894 meters, and 0.3792 meters, respectively.

Bridges- Baracatan Bridge, Crossing Malabog Bridge, and Tagurano Bridge have moderate adaptive capacity. This means that addressing the impacts will require significant cost but it is still within the capacity of the system to adapt to potential impacts. It can accommodate within its resources the cost for adapting and mitigating impacts.

Power Substations- Tibungco Substation which occupies 2,326 square meters costing up to P118 million has high adaptive capacity as it has all industrial risk insurance and comprehensive general liability.

Level I Water Supply- Seven spring sources found in Bunawan, Cabantian and Daliao have low adaptive capacity due to the fact that spring sources do not have hazard resistance to landslide.

Level II Water Supply- Spring sources and wells found in Acacia, Bantol, Callawa, Gatungan, Gumalang, Gumitan, Lampianoao, Lumiad, Magsaysay, Magtuod, Manabog, Malamba, Mapula, Marilog, Megkawayan, Mt. Apo National Park, Muding, New Carmen Pañalum, Pandaitan, Paquibato, Paradise Embac, Salapawan, Salysay, Saloy, Sibulan, Sirawan, Suawan, Talandang, Tambobong, Tapak, Tibungco and Tungkalan, have low adaptive capacity for landslide.

Level III Water Supply- A total of 52 mainline pipes moderately and highly susceptible to landslide are located in barangays 19-B, Buhangin, Cabantian, Catalunan Grande, Langub, Ma-a, Magtuod, Matina Crossing, Matina Pang, Panacan, and Talomo have high adaptive capacity.

DCWD Productions Wells- Four (4) wells found in Barangay Indangan, Panacan and Tibungco have high adaptive capacity.

Cell Sites- As for cell site towers, 22 cell site towers found in Talomo, Poblacion, Tibungco have high adaptive capacity.

Lifeline Utilities Adaptive Capacity to Liquefaction

Roads- Agdao Flyover, Bonifacio Rotonda, C. P Garcia Highway, Claro M. Recto, Dacudao Avenue, Davao Bukidnon Road, Davao Agusan Highway, Don Julian Rodriguez Avenue (Ma-a), Jose P. Laurel, Leon Garcia St., McArthur Highway, Quezon Boulevard, Quimpo Boulevard, Quirino Avenue, Rafael Castillo St., Ramon Magsaysay Avenue, Sta. Ana Avenue, and Davao Agusan Highway have moderate adaptive capacity.

Bridges-Agdao Flyover, Panacan Bridge, Pangi Bridge have moderate adaptive capacity.

Power Substations- 12 substations, all have high adaptive capacity, while these substations are not covered by any available government resources, internally, Davao Light and Power Co. has ensured that these stations be covered with industrial all risk Insurance and comprehensive general liability.

Level I Water System- A total of 90 spring sources moderately and highly susceptible to liquefaction are located in Binugao, Bunawan, Cabantian, Daliao, Gatungan, Ilang, Lizada, Lubogan, Mahayag, Mandug, Mudiang, Panacan, Riverside, San Isidro, Sirawan, Talandang, Talomo River, Tibungco, Ula, and Wangan

Level II Water System- Wells found in Binugao, Sirawan, and Waan all have high adaptive capacity. There is no insurance coverage for each but there is one month warranty if the water pump is installed by the supplier. Government resources are also available subject to proposal.

Level III Water System- A total of 433 mainlines located in Talomo, Buhangin, Agdao, Poblacion have a moderate adaptive capacity. These DCWD mainlines do not have insurance coverage but the DCWD has a reserve fund for the maintenance and repair.

DCWD Wells- All 14 wells moderately and highly susceptible to liquefaction have high adaptive capacity. While there wells do not have insurance coverage, the DCWD has a reserve fund for the rehabilitation and maintenance of the wells.

Cell sites- A total of 26 cellsites have moderate adaptive capacity, while 143 have high adaptive capacity. These cell sites are found in Toril, Talomo, Agdao, Bunawan districts.

Lifeline Utilities Adaptive Capacity to Active Fault

Roads -All roads highly and moderately susceptible to earthquake have moderate adaptive capacity. These roads have local fund for rehabilitation repair and improvement and quick response fund for its government resources.

Bridges-All bridges which are exposed to earthquake have moderate adaptive capacity.

Level II Water Supply System- A well in Manambulan has low adaptive capacity.

Level III Water Supply System- All mainline pipes have moderate adaptive capacity. It has DCWD fund for repair and rehabilitation.

Lifeline Utilities Adaptive Capacity to Storm Surge

Roads- C.P Garcia Highway, Dacudao Avenue, Davao-Agusan Highway, Florentino Torres St., J.P. Cabaguio, J.P Laurel, Libby Road, McArthur Highway, Old Airport, Pichon St., Quimpo Boulevard, Quimpo Avenue, and McArthur Highway have low adaptive capacity. These road networks have no insurance coverage and depends on Quick Response Fund.

Bridges-All bridges susceptible to storm surge have high adaptive capacity.

Power Substations- All substations have high adaptive capacity, with corresponding industrial all risk insurance and comprehensive general liability.

Level I Sources- All spring sources susceptible to storm surge have a low adaptive capacity.

Level II- All wells which are susceptible to storm surge have moderate adaptive capacity.

Level III- For main line pipes exposed to storm surge, 529.87 meters of pipeline found in Dumoy, 815.86 meters of pipes found in Bago Aplaya, 180.4 meters of pipes found in Ilang, and 292.51 mainline pipes found Talomo have moderate adaptive capacity.

DCWD Wells- All of the DCWD wells have high adaptive capacity. The mainline pipes do not have insurance coverage but has DCWD fund for repairs and for improvement.

Cell Sites- Two (2) cell sites in Toril, two (2) cell sites in Bunawan and one (1) cell site in Lasang have moderate adaptive capacity while the rest of the cell sites susceptible to storm surge have high adaptive capacity.

Lifeline Utilities Vulnerability to Flood

A total of 12 road networks measuring a total of 37 kms are identified to be highly vulnerable to flooding.

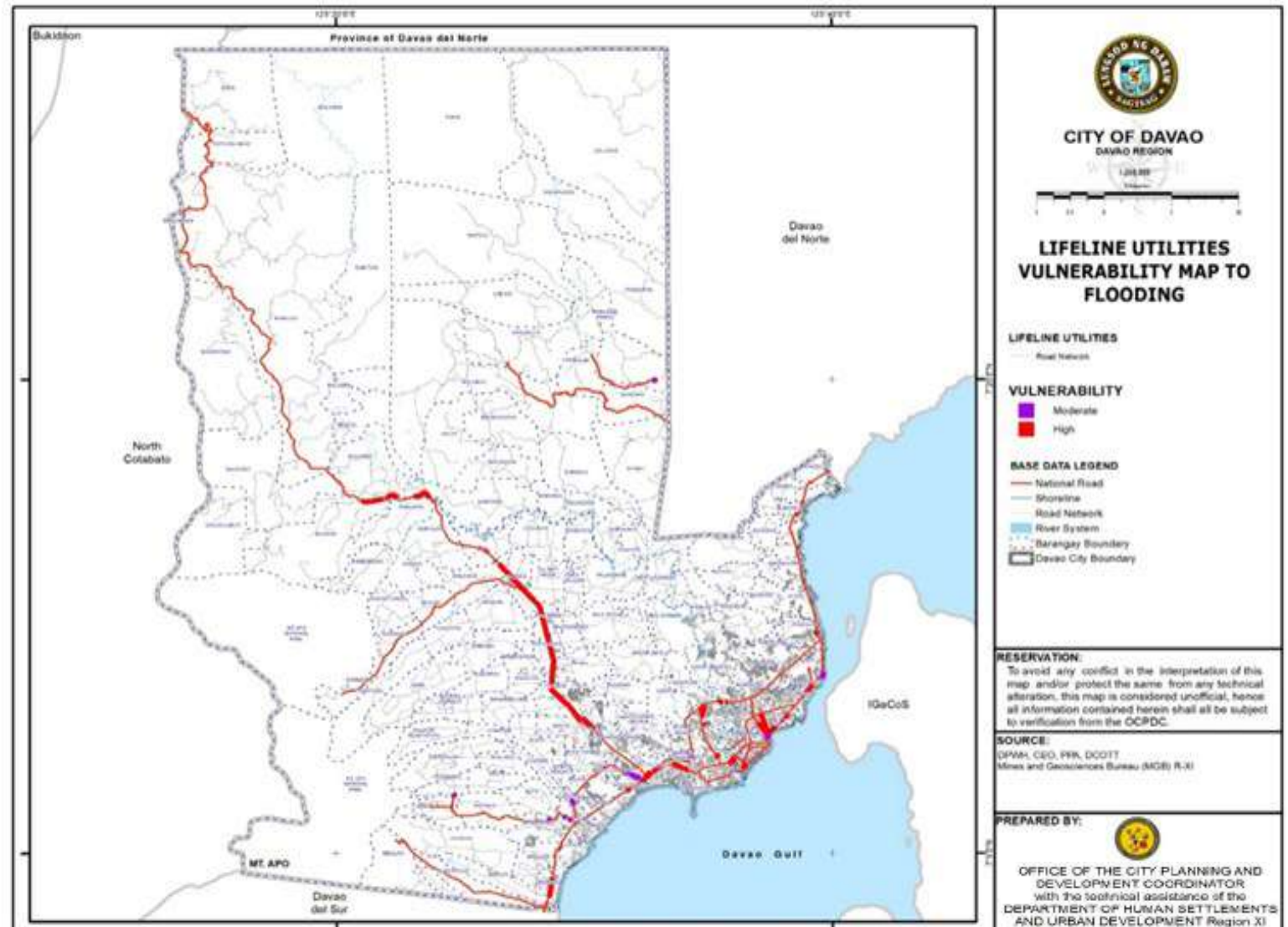
Davao River Bridge, Tamugan Bridge and Pangi Bridge are highly vulnerable to flood.

Level I Water System- Based on the assessment, 31 spring sources were identified to be moderately vulnerable to flood.

Level II Water System- A total of eight Level II Water System are moderately vulnerable to flood.

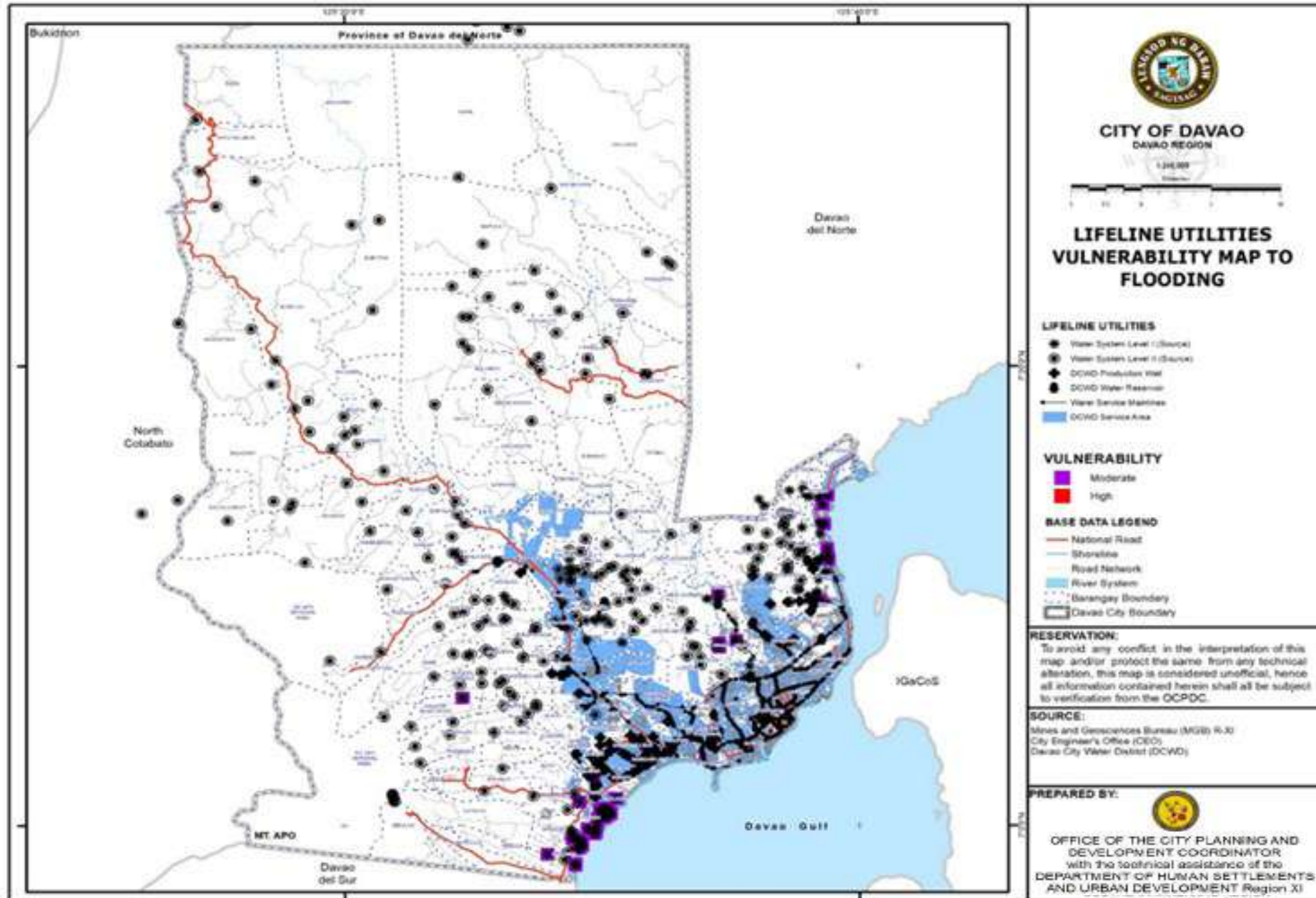
Level III Water Supply -A total of five mainlines in Bago Aplaya ranging from (400-600 mm) in diameter are moderately vulnerable to flood.

Map 1. 41 Lifeline Utilities Vulnerability Map Flooding, Davao City



Lifeline Utilities Vulnerability to Flood

Map 1. 42 Lifeline Utilities Vulnerability Map Flooding, Davao City



Lifeline Utilities Vulnerability to Landslide

A total road length of 60.8778641 kilometers is highly vulnerable to landslide. It is divided among four road networks. (Carlos P. Garcia Highway, Davao-Bukidnon Road, Fatima- Malabog Roads and Toril-Bayabs-Eden Road)

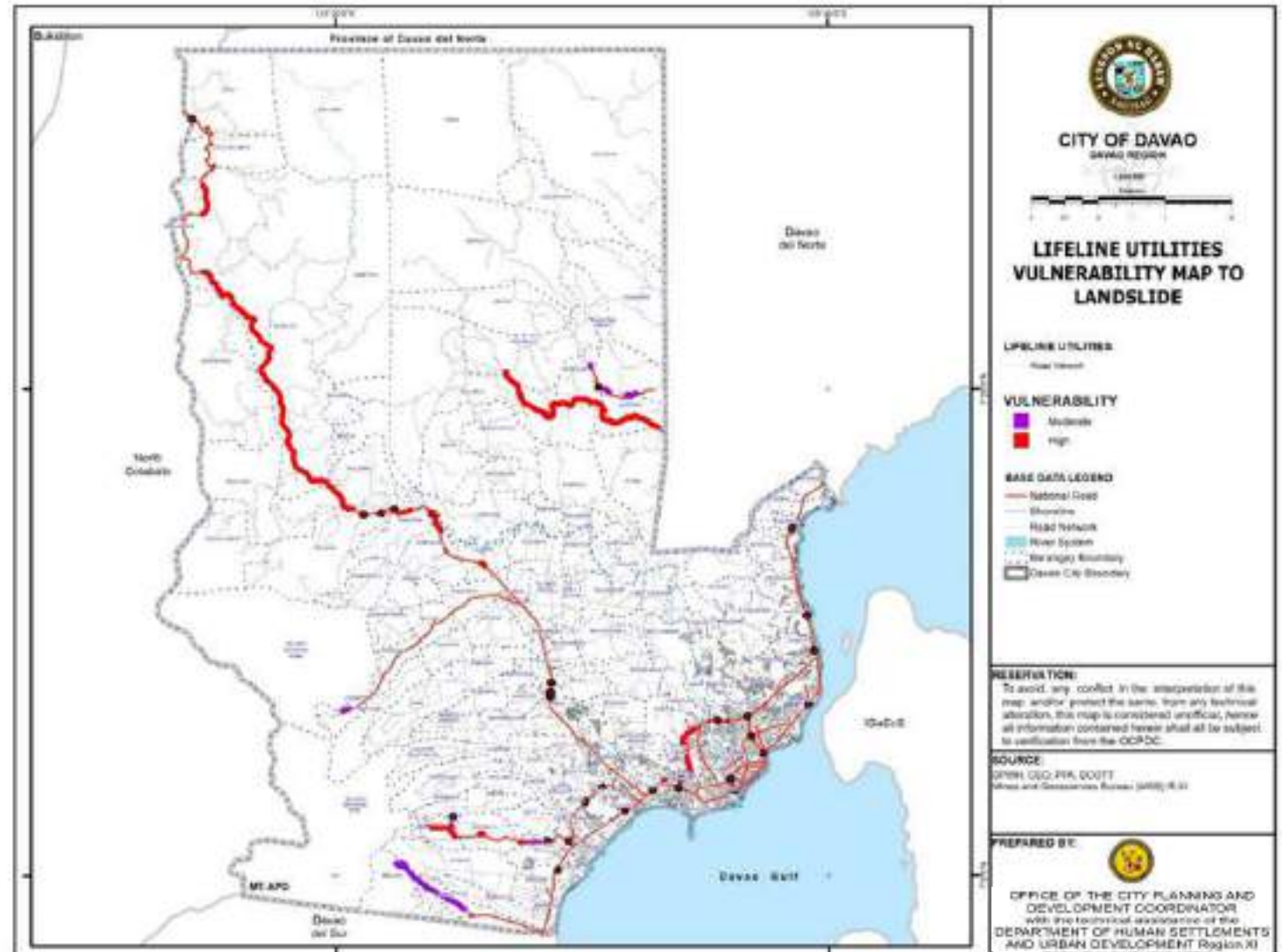
A total of three bridges are moderately vulnerable to landslide and these are Baracatan Bridge, Crossing Malabog Bridge and Tagurano Bridge

Tibungco Substation, the substation which is the only one susceptible to landslide has low vulnerability to landslide

A total of 74 spring sources found in Baguio District, Calinan District, Marilog District, Paquibato District, Toril and Tugbok District have high vulnerability to landslide.

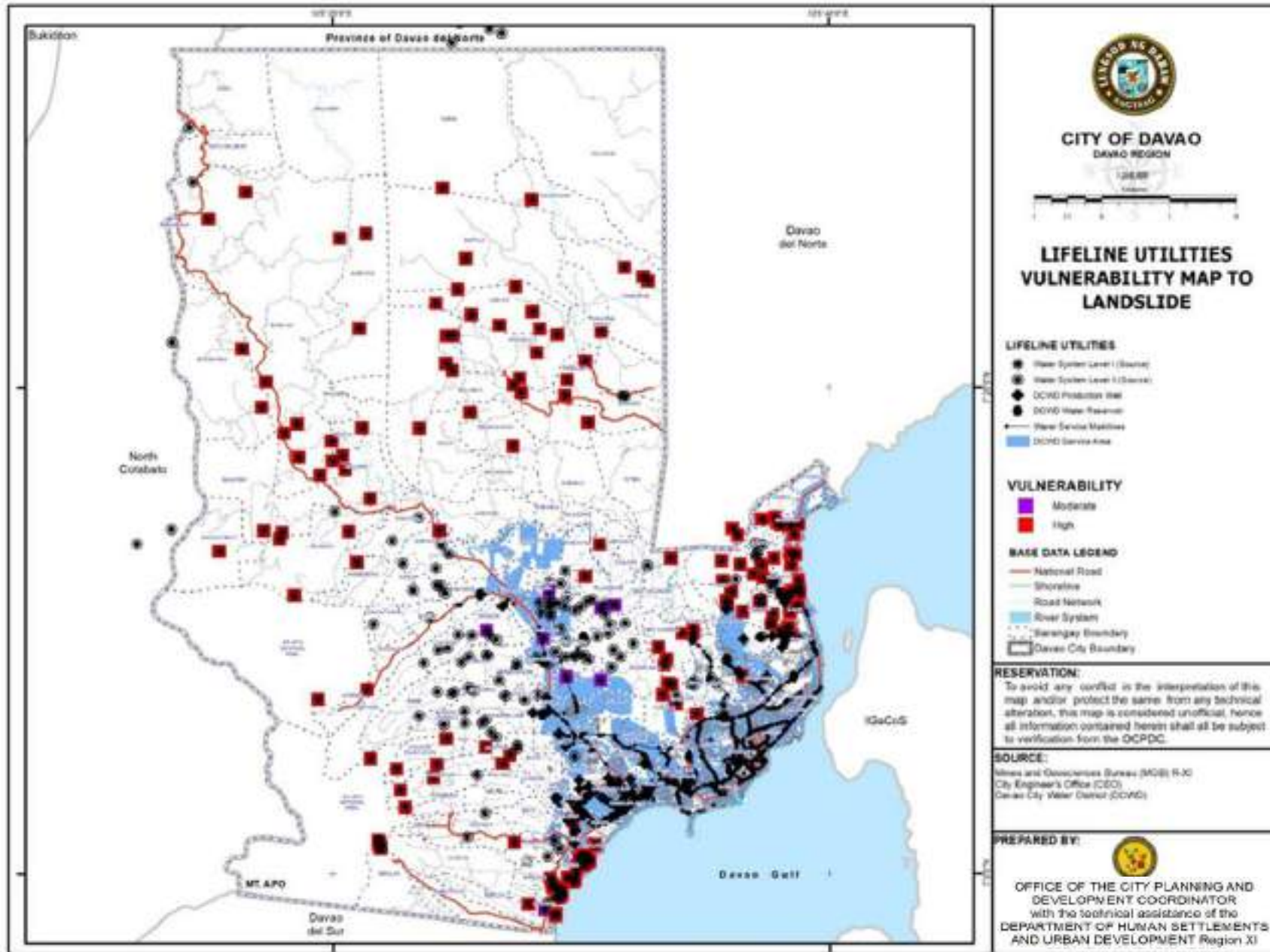
Level III Water sources, DCWD Wells, have low landslide vulnerability.

Map 1. 43 Lifeline Utilities Vulnerability Map to Landslide, Davao City



Lifeline Utilities Vulnerability to Landslide

Map 1. 44 Lifeline Utilities Vulnerability Map to Landslide, Davao City



Lifeline Utilities Vulnerability to Active Fault/Fault Line

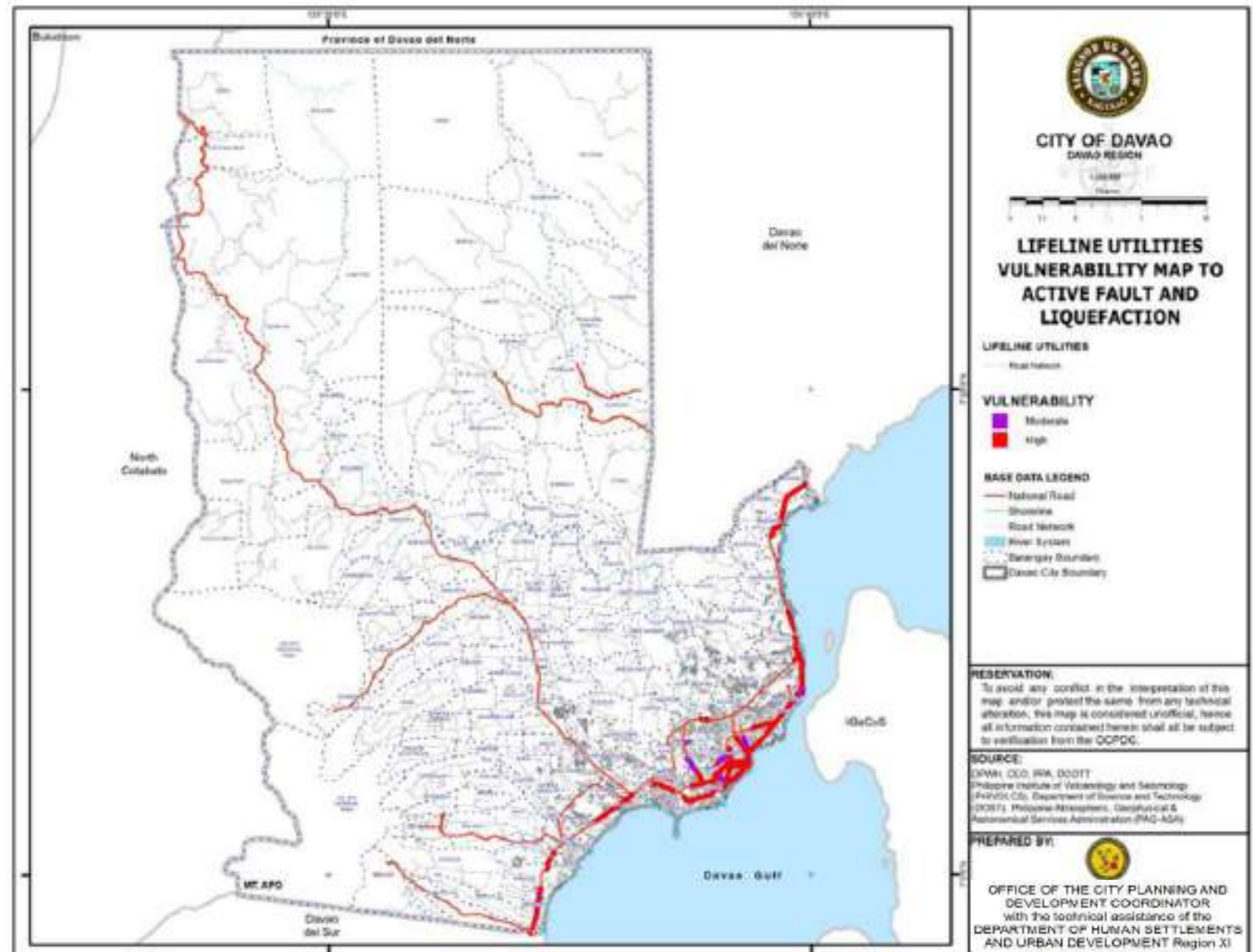
A total of 0.0760 kilometers of Davao Bukidnon Road is moderately vulnerable to earthquake.

Lipadas Bridge 1 and Lipadas Bridge 2 are moderately vulnerable to earthquake.

A 3-horsepower well found in Manambulan is highly vulnerable to earthquake.

For Level 3 Water System, 11 mainline pipes found in Wangan, Calinan, Tugbok, Mintal, Catalunan Grande, Talomo, and Los Amigos are moderately vulnerable to Fault Line

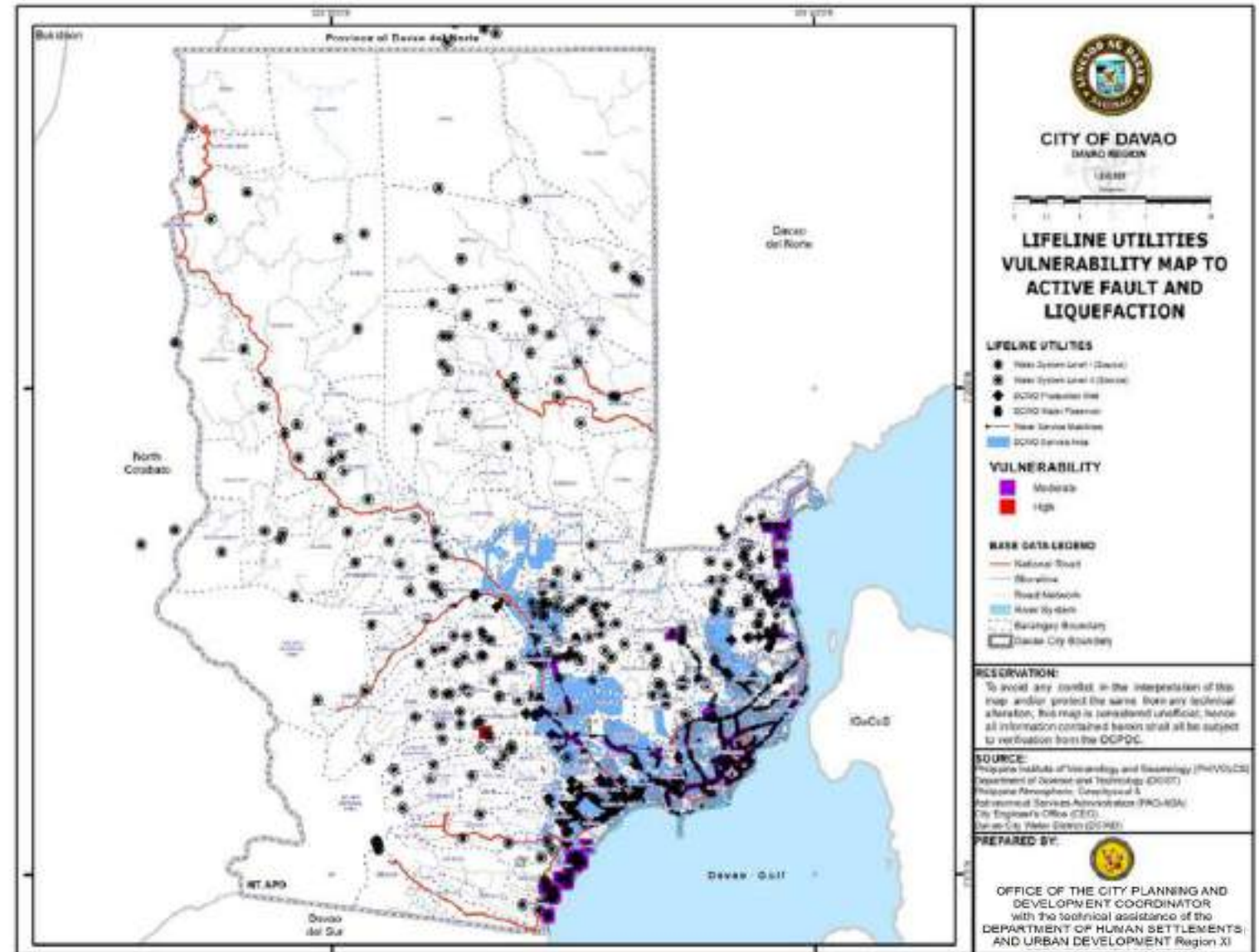
Map 1. 45 Lifeline Utilities Vulnerability Map to Active Fault and Liquefaction, Davao City



Lifeline Utilities Vulnerability to Liquefaction

- 16 road networks are highly vulnerable to liquefaction
- Agdao Flyover and Pangli Bridge are moderately vulnerable to liquefaction
- A total of 13 Substations have low vulnerability to liquefaction
- 52 spring sources in Binugao, Bunawan, Mahayag, Mandug, Panacan, Daliao, Bunawan, Lizada are moderately vulnerable to liquefaction.
- Wells in Srawan, Bunawan, and Waan all have low liquefaction susceptibility
- A total of 433 mainline pipes are moderately vulnerable to liquefaction.
- All four wells susceptible to landslide have low vulnerability.
- A total of 13 cellsites are moderately vulnerable to liquefaction.

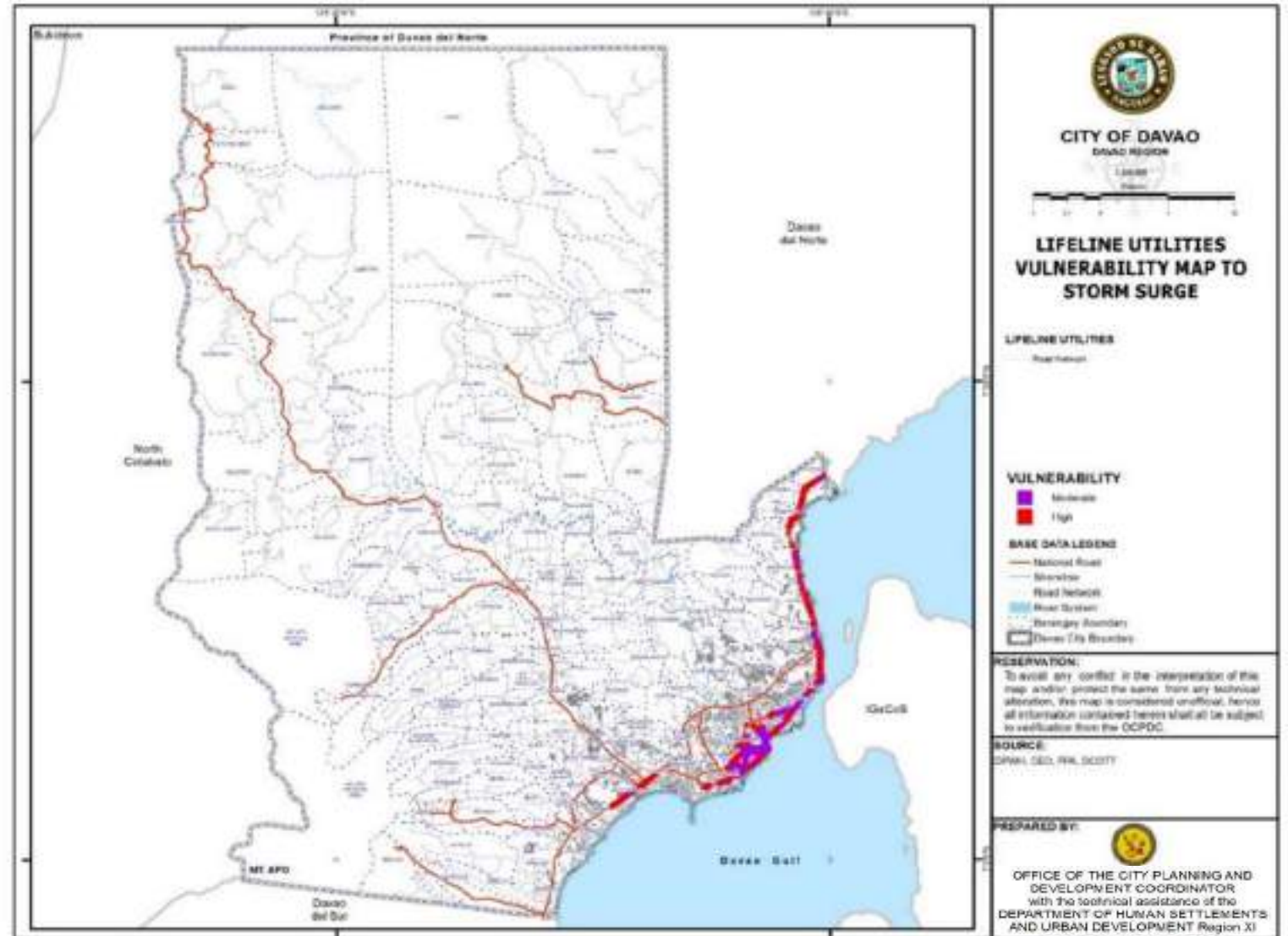
Map 1. 46 Lifeline Utilities Vulnerability Map to Active Fault and Liquefaction, Davao City



Lifeline Utilities Vulnerability to Storm Surge

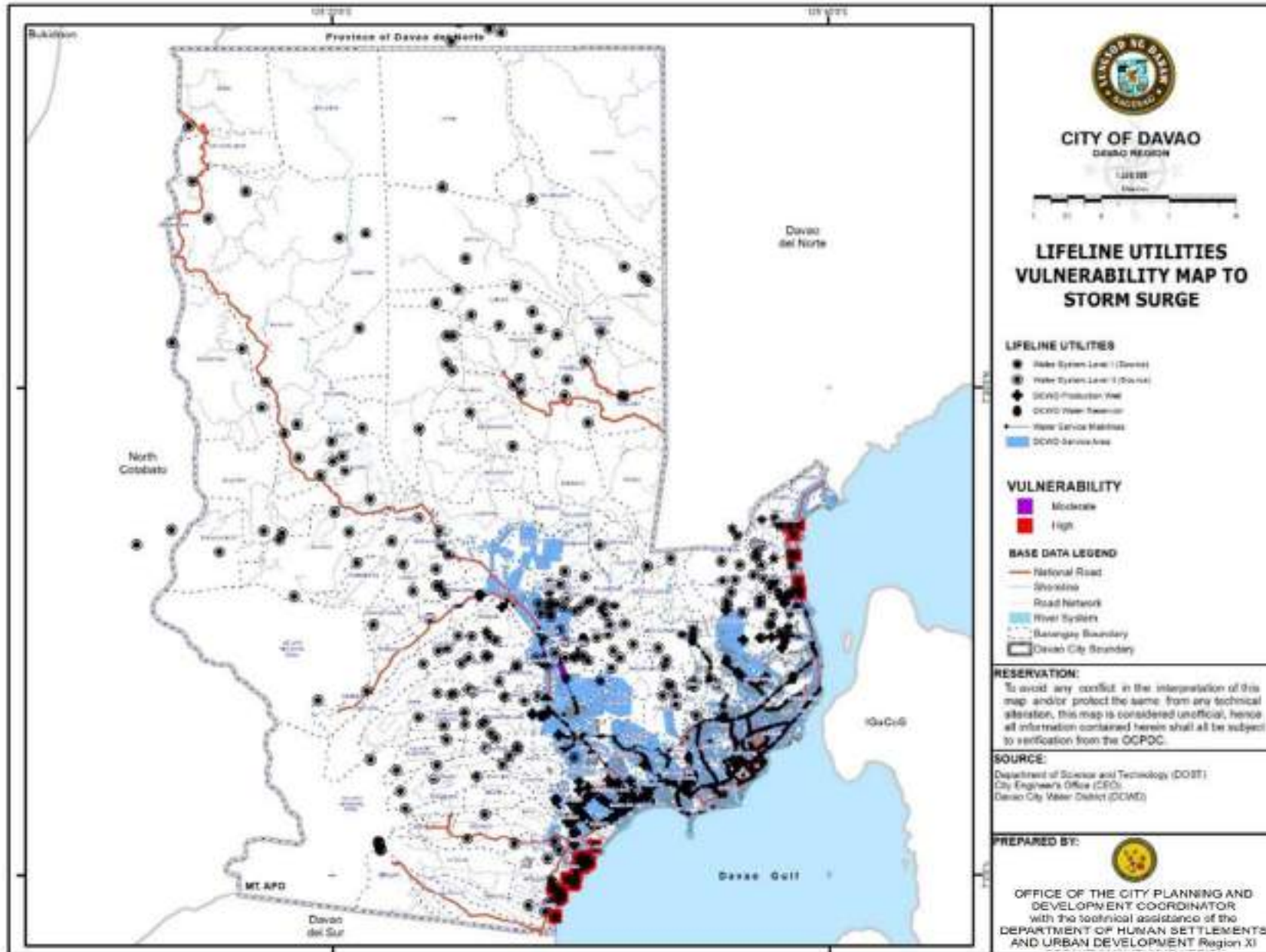
- Portions of C.P Garcia Highway, Dacudao Avenue, Davao-Agusan Highway, Florentino Torres St., J.P. Cabaguio, J.P Laurel, Libby Road, McArthur Highway, Old Airport, Pichon St., Quimpo Boulevard, Quimpo Avenue, and McArthur Highway are highly vulnerable to storm surge.
- Almost all bridges have low vulnerability due to high adaptive capacity for storm surge.
- All power substations have low vulnerability.
- All spring sources which are susceptible to storm surge have high vulnerability to storm surge.
- The two wells which are susceptible to 2-meter wave are moderately vulnerable this is due to the high degree of impact and low adaptive capacity.
- Pipelines in Dumoy, Bago Aplaya, Talomo, Ilang, and Matina Aplya are moderately vulnerable to storm surge with 5-meter wave.
- All DCWD wells have low vulnerability to storm surge.
- Two cell sites in Bunawan, one in Lasang and one in Toril have moderate vulnerability to storm surge with 4-meter wave.

Map 1. 47 Lifeline Utilities Vulnerability Map to Storm Surge, Davao City



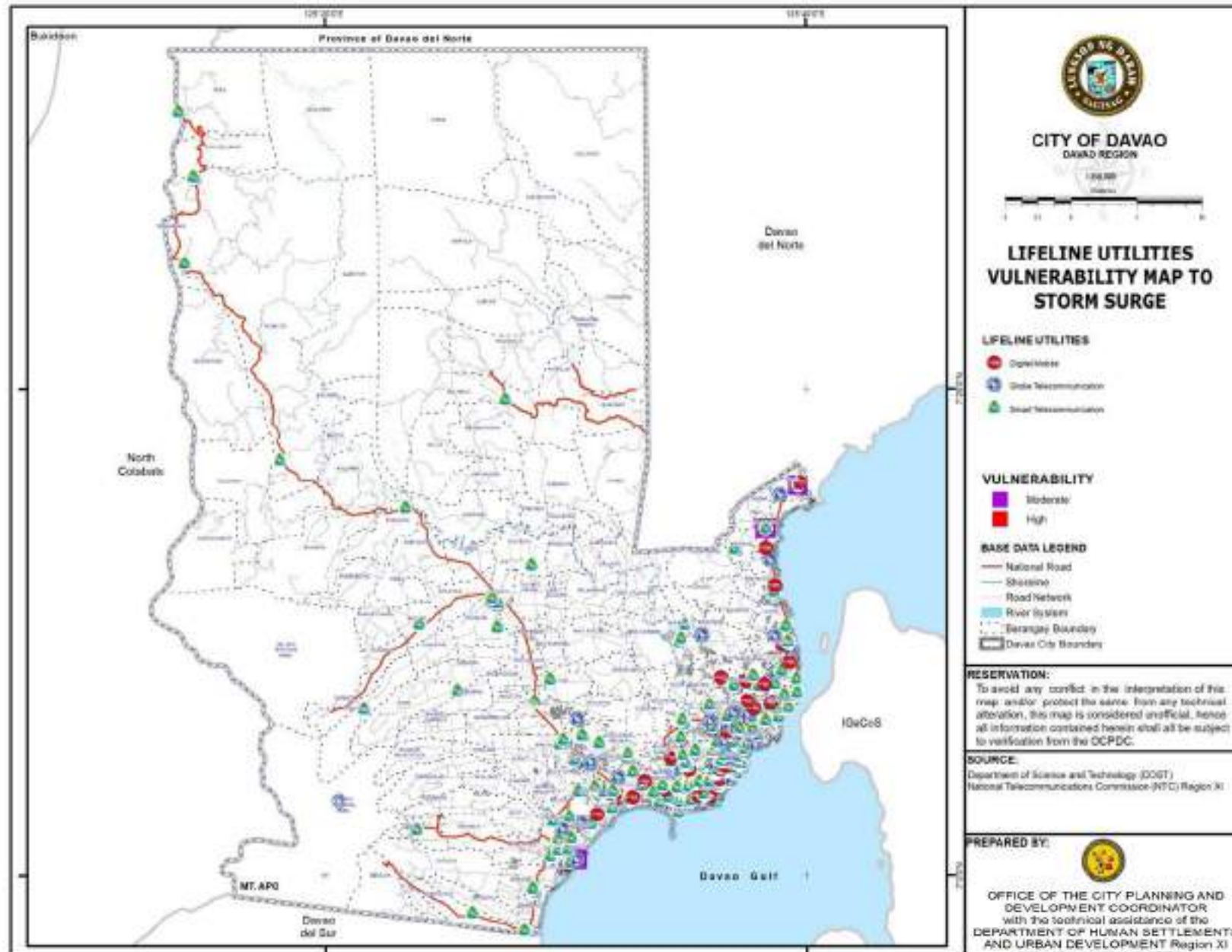
Lifeline Utilities Vulnerability to Storm Surge

Map 1. 48 Lifeline Utilities Vulnerability Map to Storm Surge, Davao City



Lifeline Utilities Vulnerability to Storm Surge

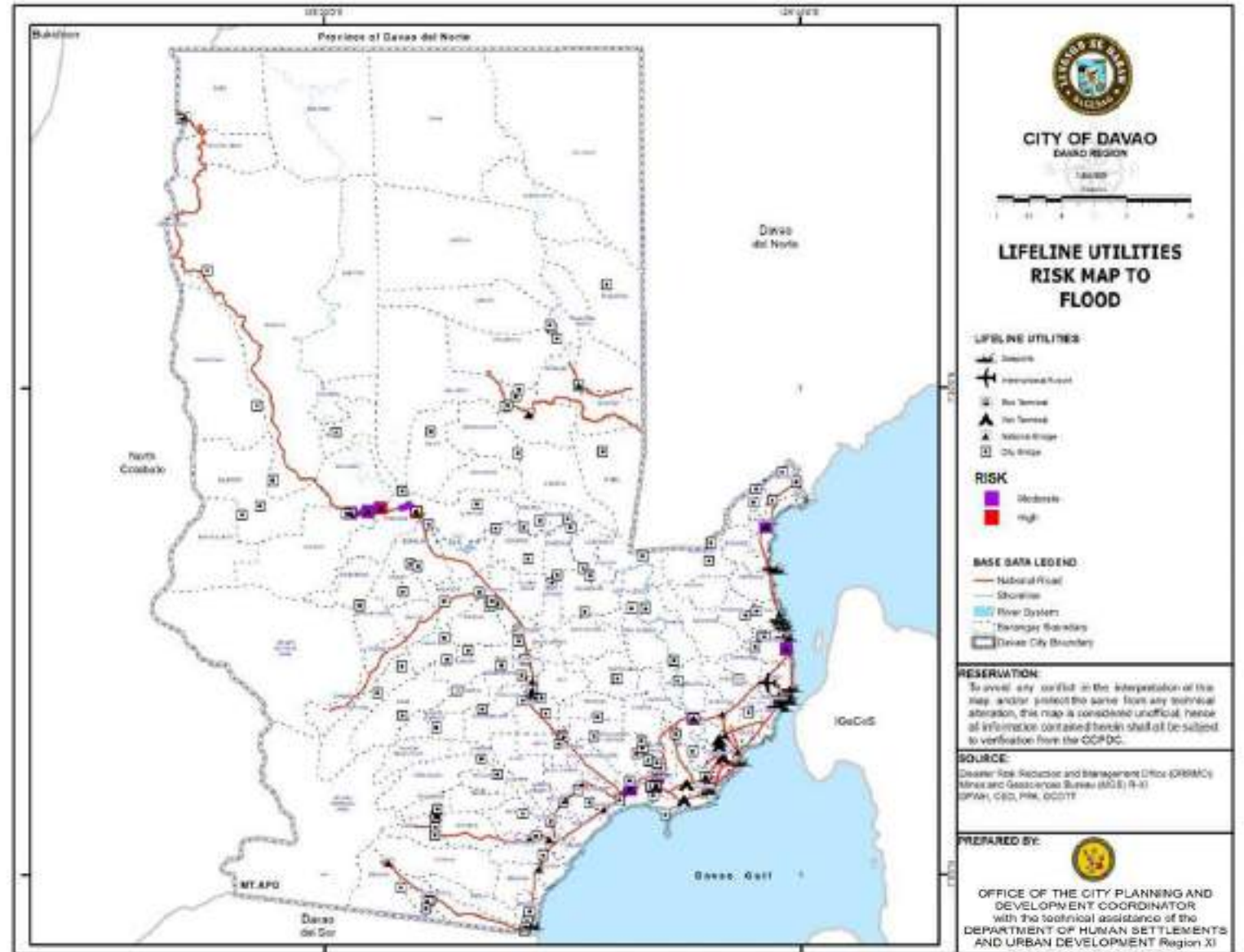
Map 1. 49 Lifeline Utilities Vulnerability Map to Storm Surge, Davao City



Disaster Risk Assessment for Flood

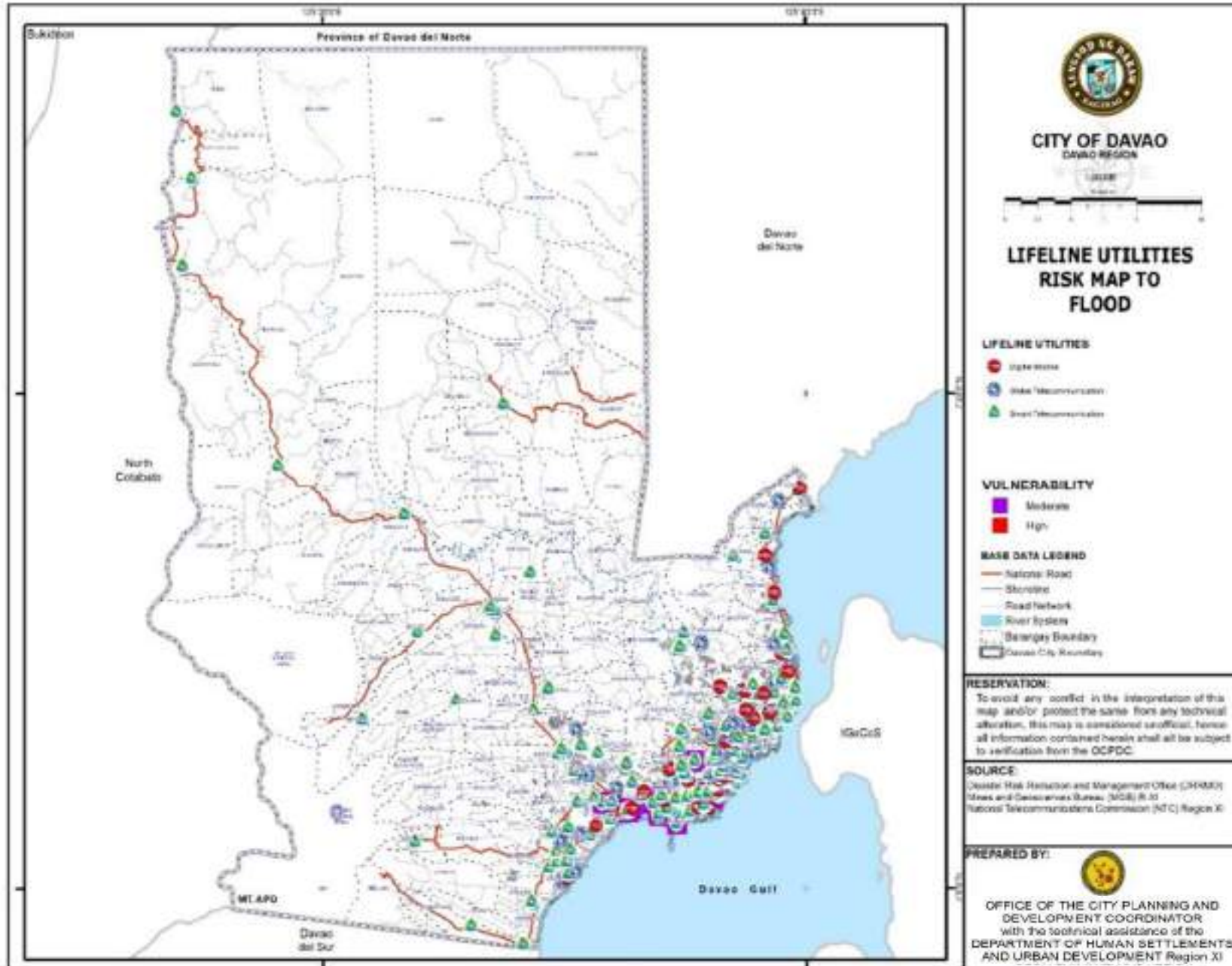
- A total of 6.56 kilometers of road are moderately at risk to flood.
- Matina Bridge, Pagan Grande, Pangí Bridge, and Tamugan Bridge have high risk score.
- Calinan, Tugbok and Matina Substation are moderately at risk to flood.
- Out of 33 sources which are moderately and highly susceptible to flood with corresponding likelihood of occurrence in their area, a total of 21 sources are at high risk to flood.
- 116 mainline pipes are at high risk of flood. These mainlines are found in 19-B, Ma-a, Mandug, Matina aplaya, Matina crossing, Matina Pangí, Talomo, Tigatto and Tugbok.
- A total of 12 wells located in Talomo, Bago-Aplaya, Tugbok and Los Amigos are at moderate risk of flood.
- 26 cell sites are at moderate risk to flood.

Map 1. 50 Lifeline Utilities Risk Map to Flood, Davao City



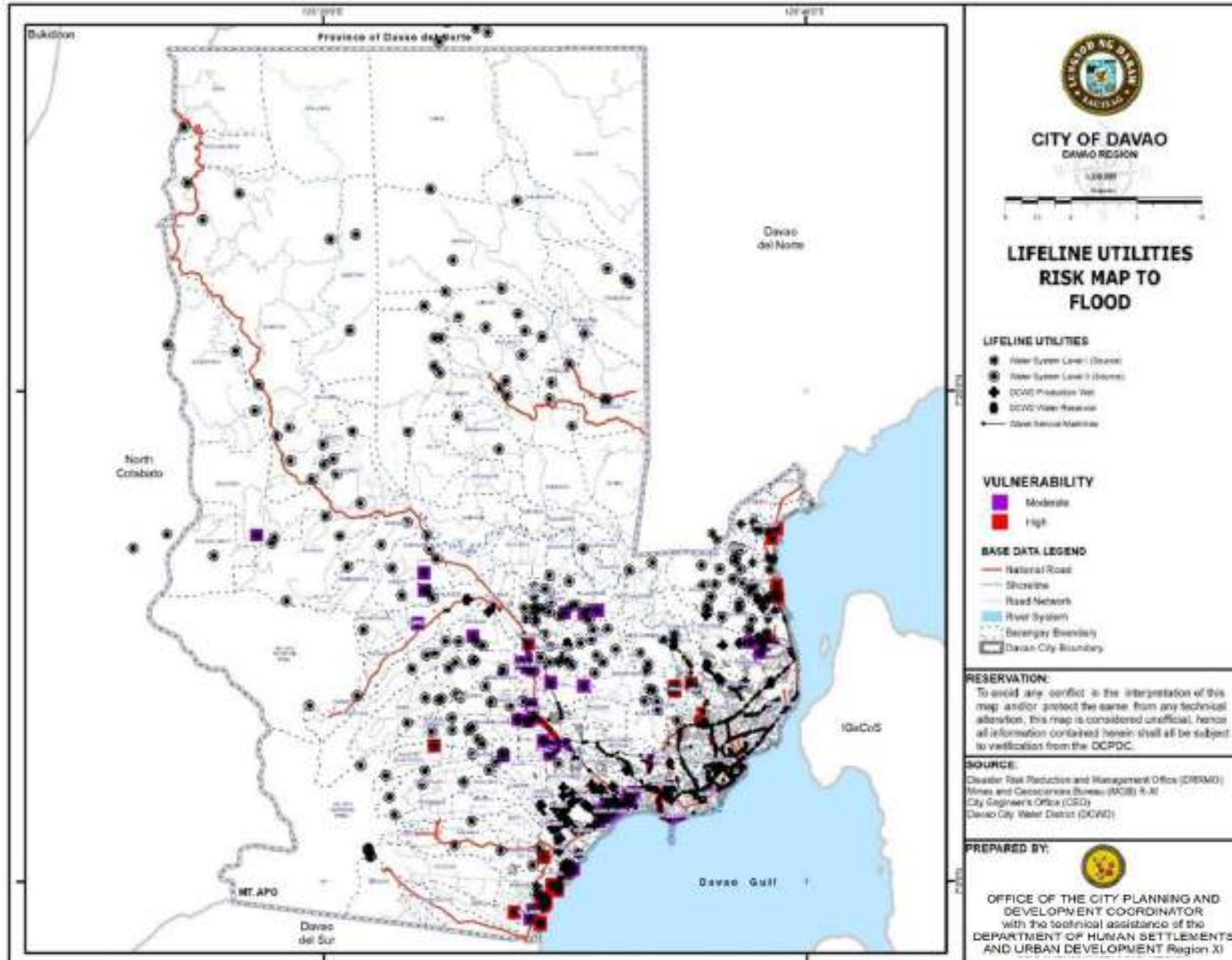
Disaster Risk Assessment for Flood

Map 1. 51 Lifeline Utilities, Cell Sites, Risk Map to Flood, Davao City



Disaster Risk Assessment for Flood

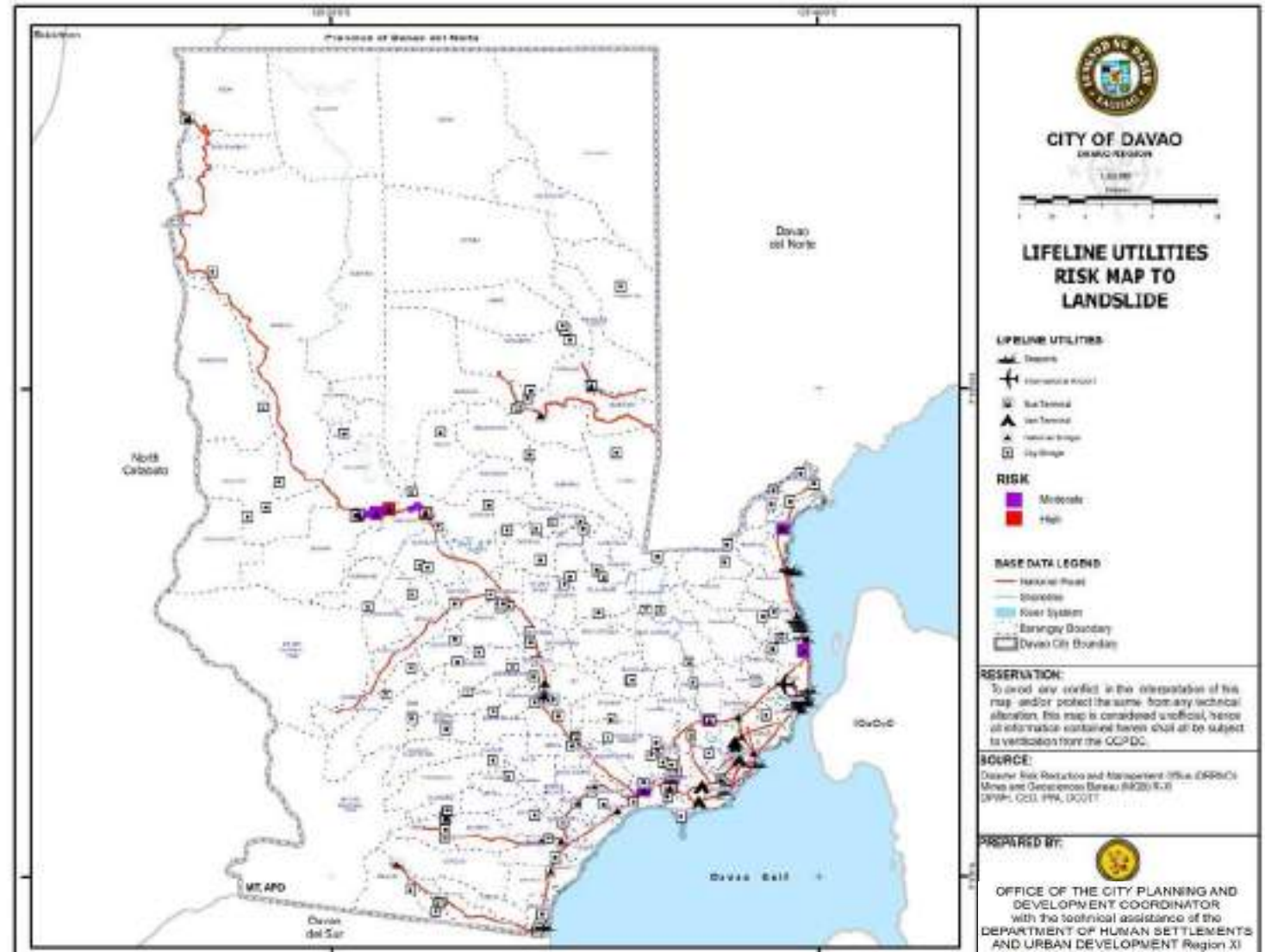
Map 1.52 Lifeline Utilities, Water Utilities , Risk Map to Flood, Davao City



Disaster Risk Assessment for Landslide

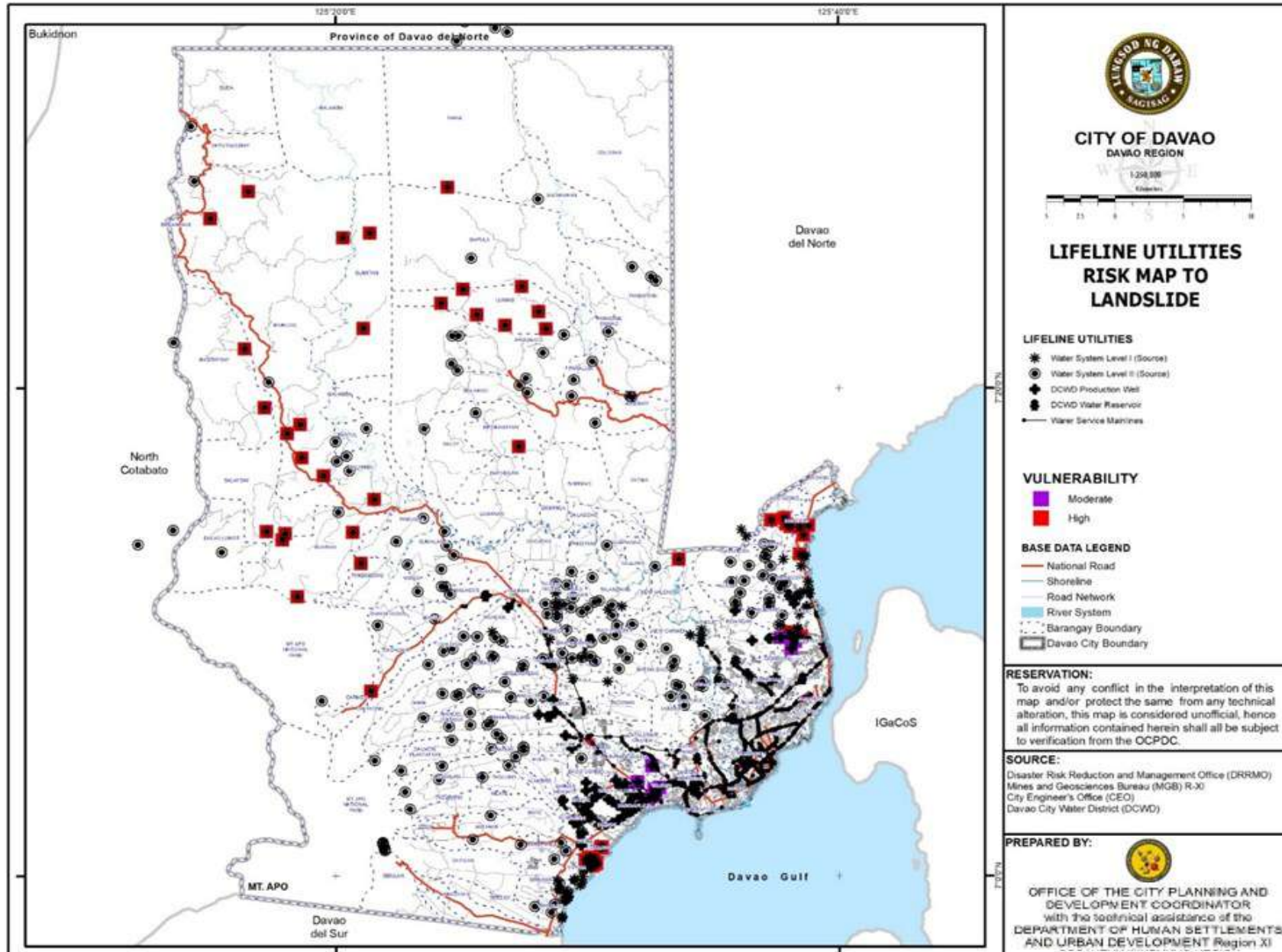
- A total of 0.67 kilometers of Davao-Bukidnon Road is at high risk to landslide, while 5.57 kilometers of C.P Garcia Highway is moderately at risk of landslide
- Spring sources in Bunawan, Panacan, Daliao San Isidro are at high risk to landslide incidents
- For Level II Water System, a total of 28 spring sources and one well found in barangays Callawa, Carmen, Gumitan, Lumiad, Magsaysay, Marilog, Megkwayan, Suawan, Tambobong and Tapak are at high risk of landslide
- A total of 8,112.84 meters of mainline pipes are at high risk of landslide.
- Wells located in Purok 27 and Purok 24 of Barangay Panacan are in moderate risk for landslide.
- A total of 23 out of 26 cell sites are assessed to be moderately at risk to landslide. These cell sites are found in Matina Aplaya, Matina Crossing, Ma-a Talomo, Talomo Proper and Bucana.

Map 1.53 Lifeline Utilities, Risk Map to Landslide, Davao City



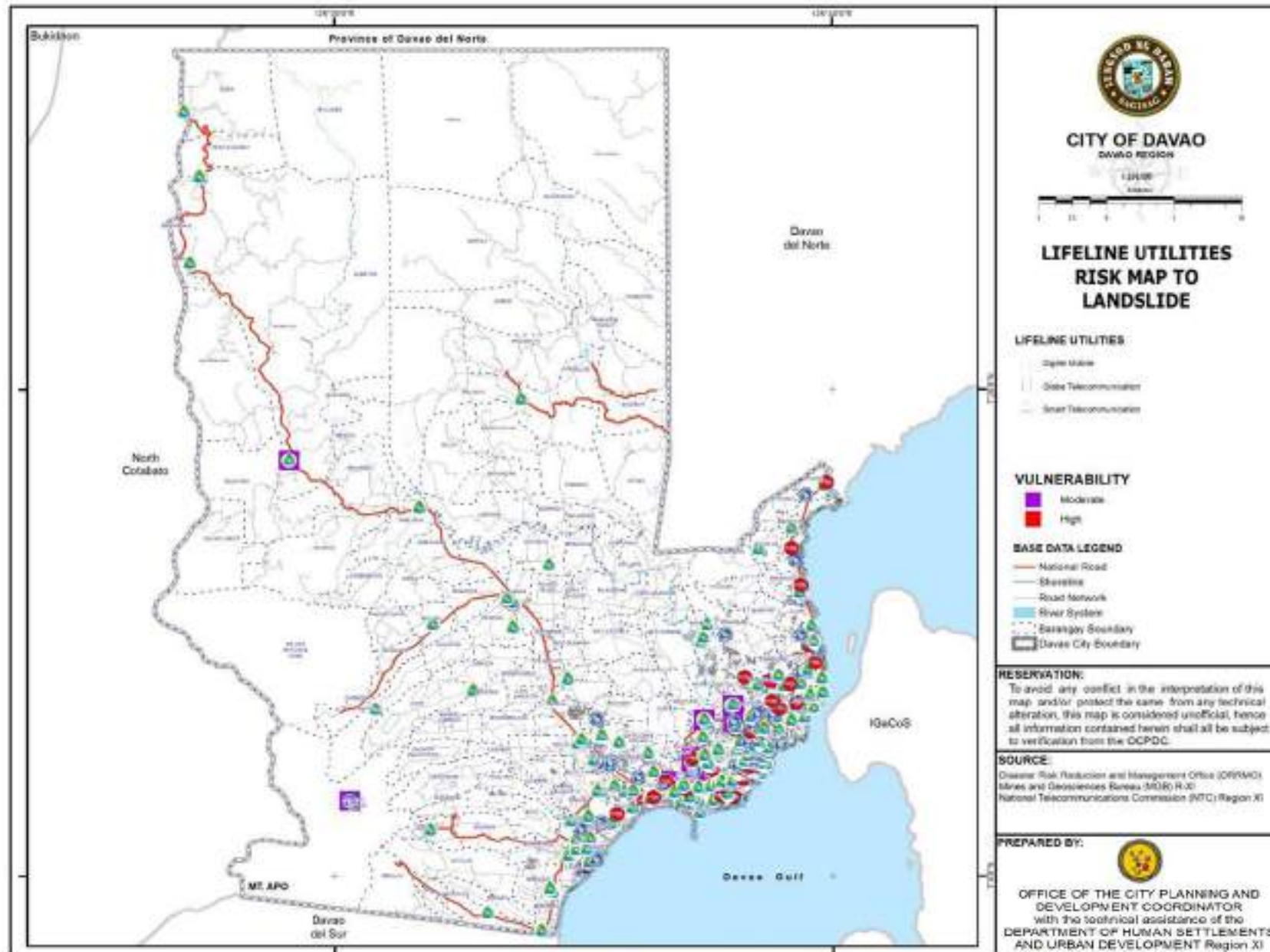
Disaster Risk Assessment for Landslide

Map 1.54 Lifeline Utilities, Water Utilities, Risk Map to Landslide, Davao City



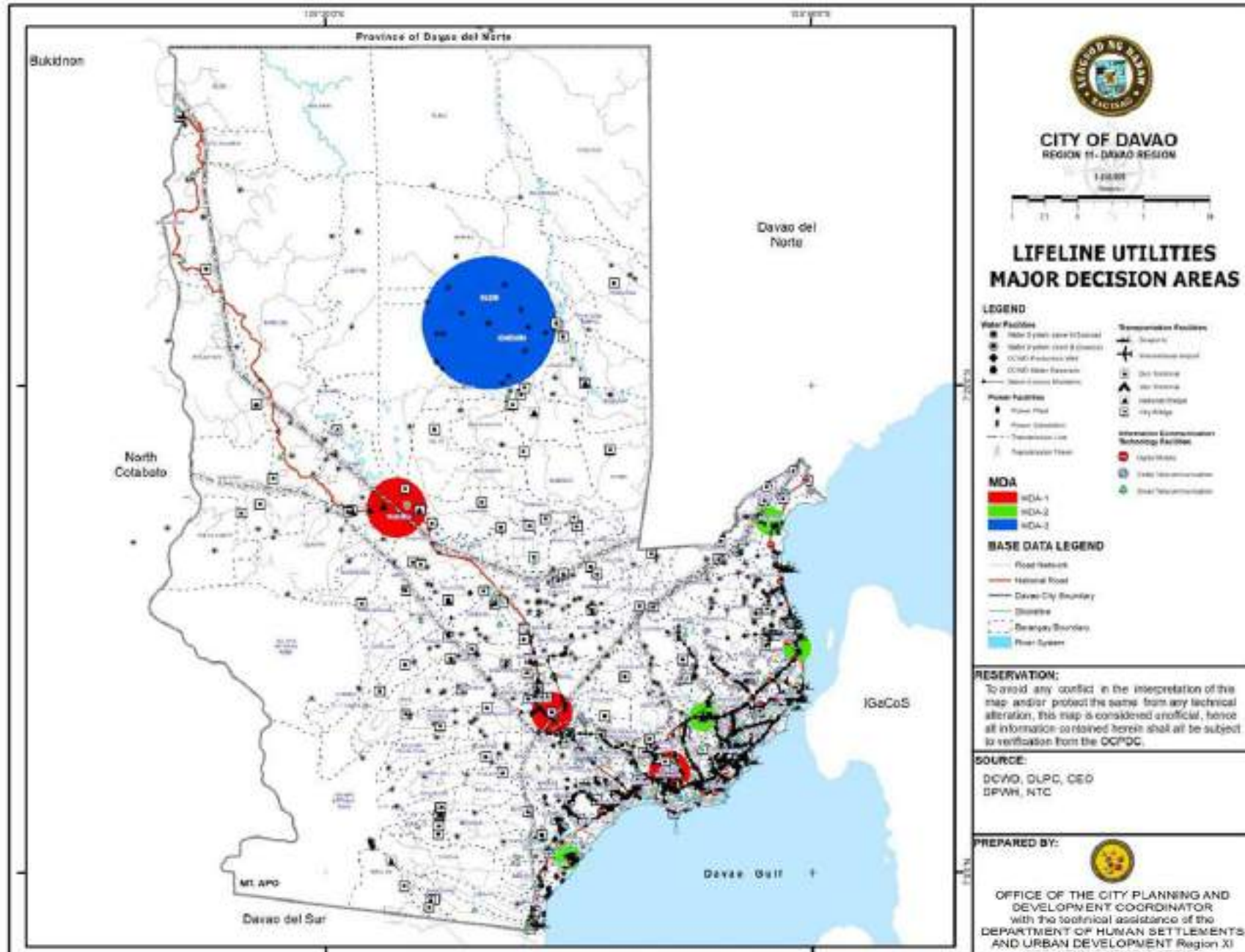
Disaster Risk Assessment for Landslide

Map 1.55 Lifeline Utilities, Cell Sites , Risk Map to Landslide, Davao City



Lifeline Utilities Major Decision Areas

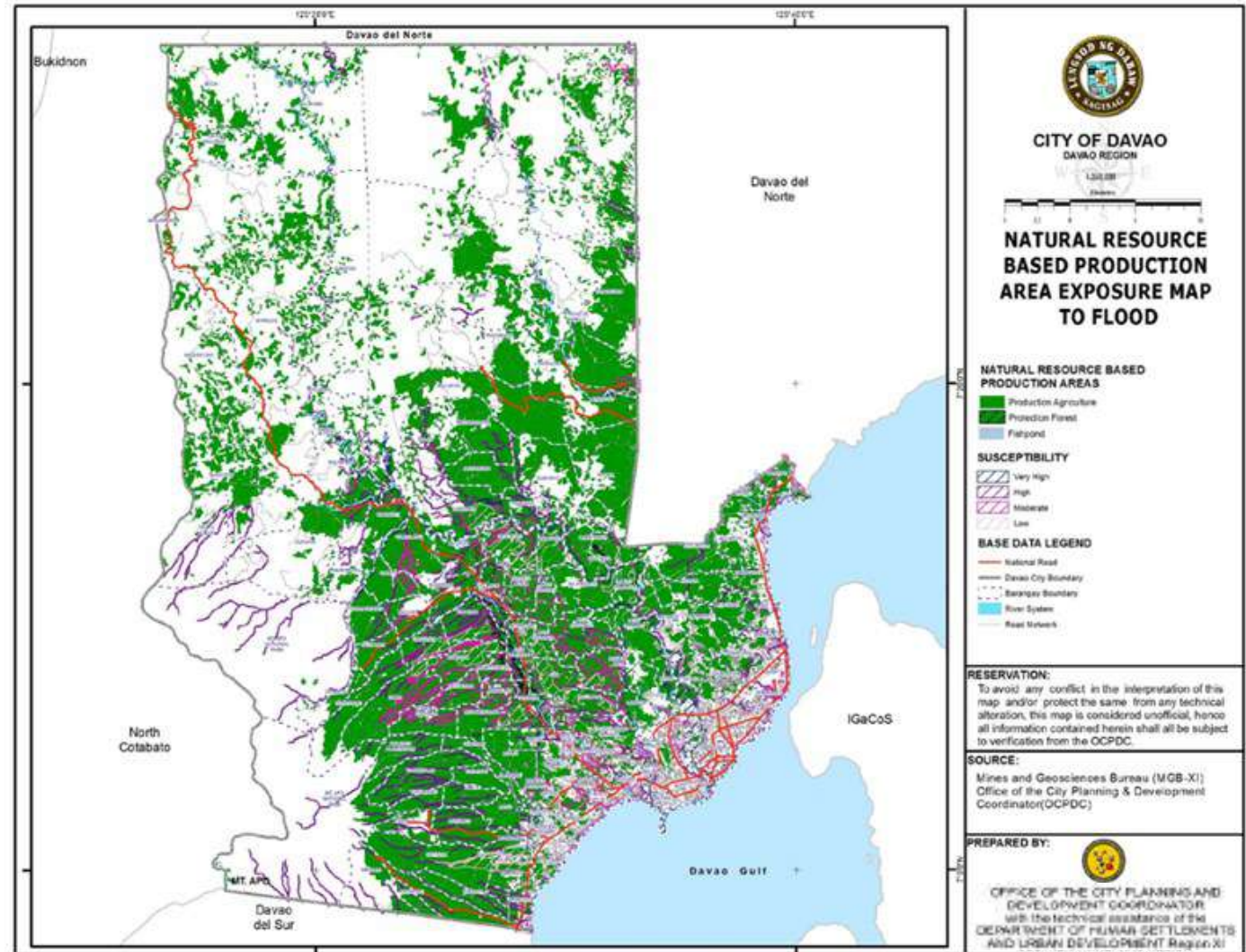
Map 1.56 Lifeline Utilities, Cell Sites , Risk Map to Landslide, Davao City



Natural Resource-Based Production Area Exposure to Flood

- A total of 129 barangays, which have NRBPAs, are susceptible to floods.
- Of the total, 82 barangays are mostly planted with coconuts, which occupy a combined land size of 77,489 hectares and reap an annual average output per hectare at ₱2,983,870.
- There are also 4,583 farming families who attended climate field school, 4,659 farming families who use sustainable production techniques, and 5,463 farmers who have access to hazard information.
- The remaining barangays, on the other hand, have different dominant varieties.
- Vegetables- dominant in Buda and Salumay (2,104.36 hectares).
- Rice- largely planted in Calinan, Gumitan, and Los Amigos (1,790.22 hectares).
- Corn- widely planted in Lumiad, Baganihan, and Magsaysay (2,635 hectares).
- Bananas- are propagated in in Tigatto, San Isidro, Sirib, Tamayong, Salaysay, Bago Aplaya, Pañalum areas and Dalian Plantation (7,798.81 hectares), whether for local or international markets.
- Pelagic fishes- dominate in Matina Aplaya and Lasang (460.68 hectares).
- Catfish (hito)- propagated in Los Amigos (27.50 hectares).
- Pineapples (777.62 hectares), mango (730.75 hectares) and abaca (501.15 hectares)- Barangays Cawayan, Sirawan, and Sibulan.

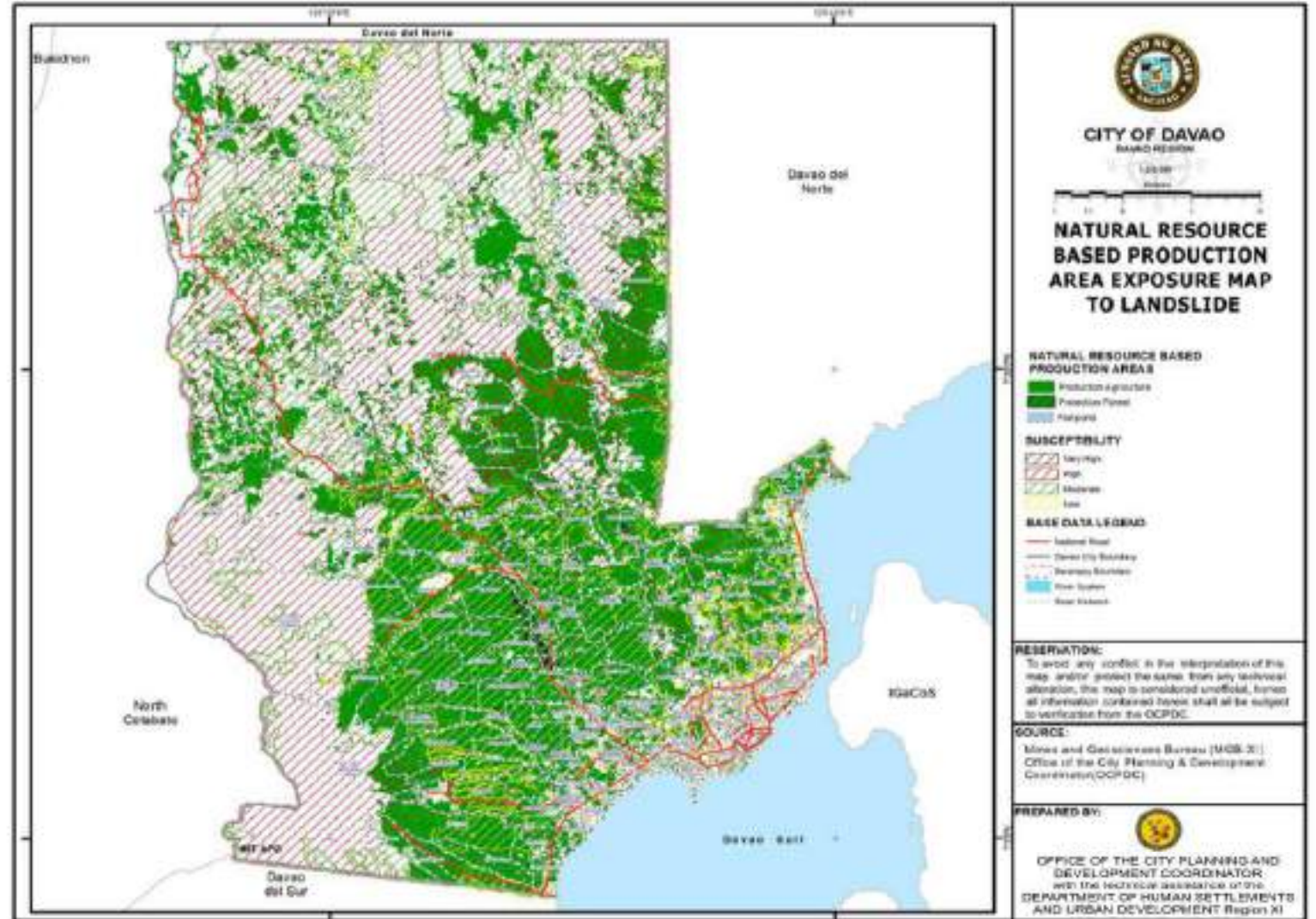
Map 1.57 Natural Resource Based Production Area Exposure Map to Flood , Davao City



Natural Resource-Based Production Area Exposure to Landslide

- At least 128 barangays, which have NRBPA, are susceptible to landslides.
- The dominant crop in these areas are coconuts, which occupy to 77,489.04 hectares in 82 barangays.
- These coconut farms are source of income for 53,617 farming dependent households. Farmers in these areas are also educated on the impacts of climate change and are able to utilize sustainable production techniques.
- If ever the farms would be affected by landslides, a total of 4,200 farmers in these areas have access to insurance. At least 9,800 of them have alternative livelihood. Other areas have different dominant varieties. All of these areas have early warning systems in case of emergencies.

Map 1.58 Natural Resource Based Production Area Exposure Map to Landslide , Davao City



Natural Resource-Based Production Area Exposure to Liquefaction and Fault line

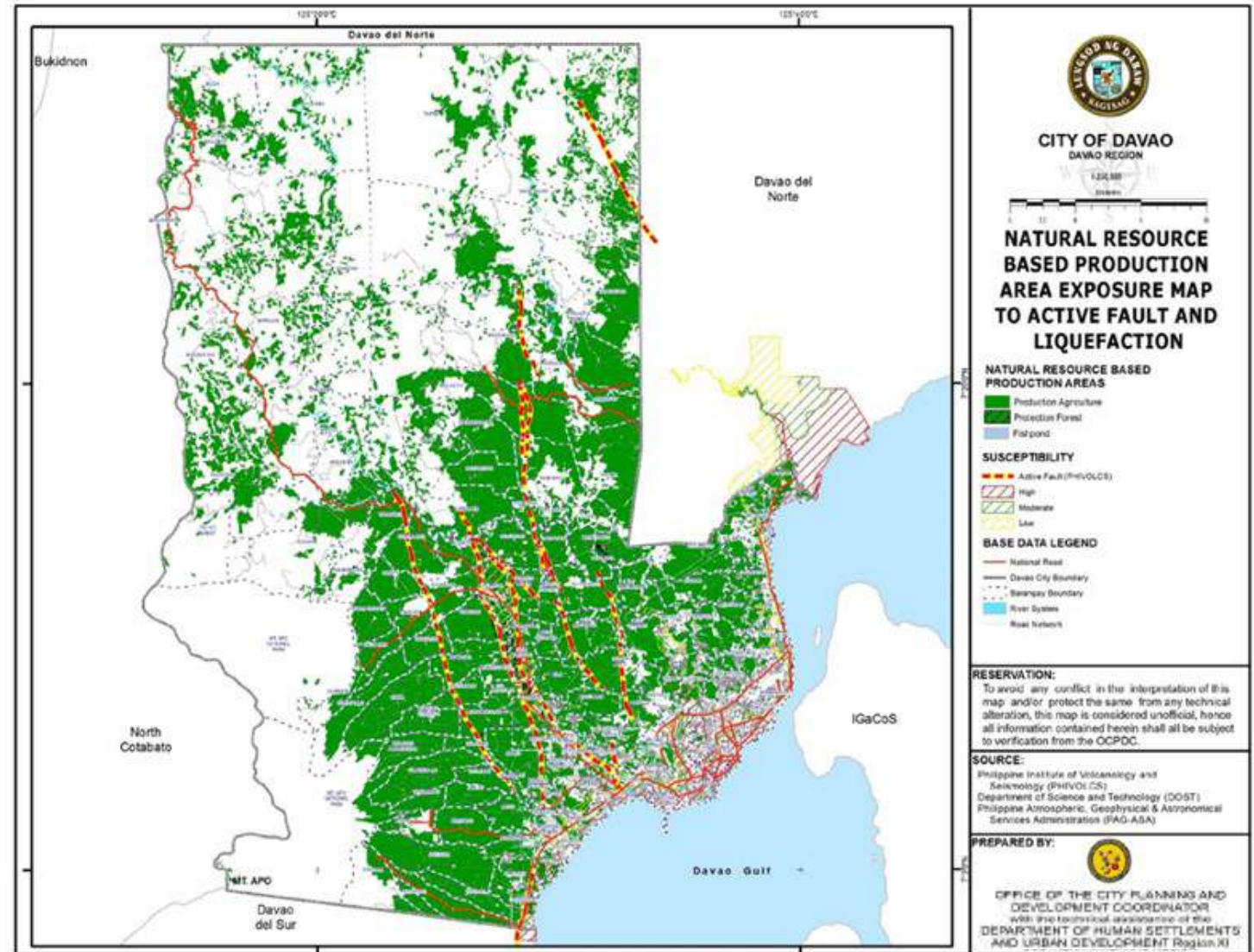
Map 1.60 Natural Resource Based Production Area Exposure Map to Active Fault and Liquefaction , Davao City

Liquefaction

- A total of 49 barangays with NRBPA are susceptible to liquefaction. Half of these have coconuts as dominant crop.
- All of these sites have 141,980 farming dependent households, though only 0.48% of them have attended climate field school.
- Only 0.54% of the farming dependent households are also able to use sustainable production techniques.
- At least 683 farmers have access to hazard information while 1,016 individuals have alternative livelihood.

Fault Line

- Fault line systems are present in 54 barangays, which have NRBPA.
- Most of the barangays with NRBPA but have presence of fault line systems are planted with coconuts, which have a combined annual output per hectare of ₱1,674,568.
- All of these sites have 110,936 farming dependent households.
- Of the total number, only 2.32% are able to attend climate field school. Only 2.12% of the farming dependent households are able to use sustainable production techniques. At least 1.98% of them have access to insurance while 4.31% have alternative livelihood.
- Should there be movements in the fault line systems, the City Government have resources to respond and provide aid to the farming households. There are also early warning systems that are installed in the affected barangays.



Natural Resource-Based Production Area Adaptive Capacity

Flood– NRBPA in nine (9) barangays have the lowest adaptive capacity. These areas have the lowest adaptive capacity should there be flooding incidents in the areas. Among these include Malabog, Mapula, Pandaitan, Baganihan, Dalag Lumot, Datu Salumay, Tapak and Gumitan. In case when their sources of income (e.g. farming, livelihood) would be affected by floods, a total of 2,120 individuals have alternative livelihood.

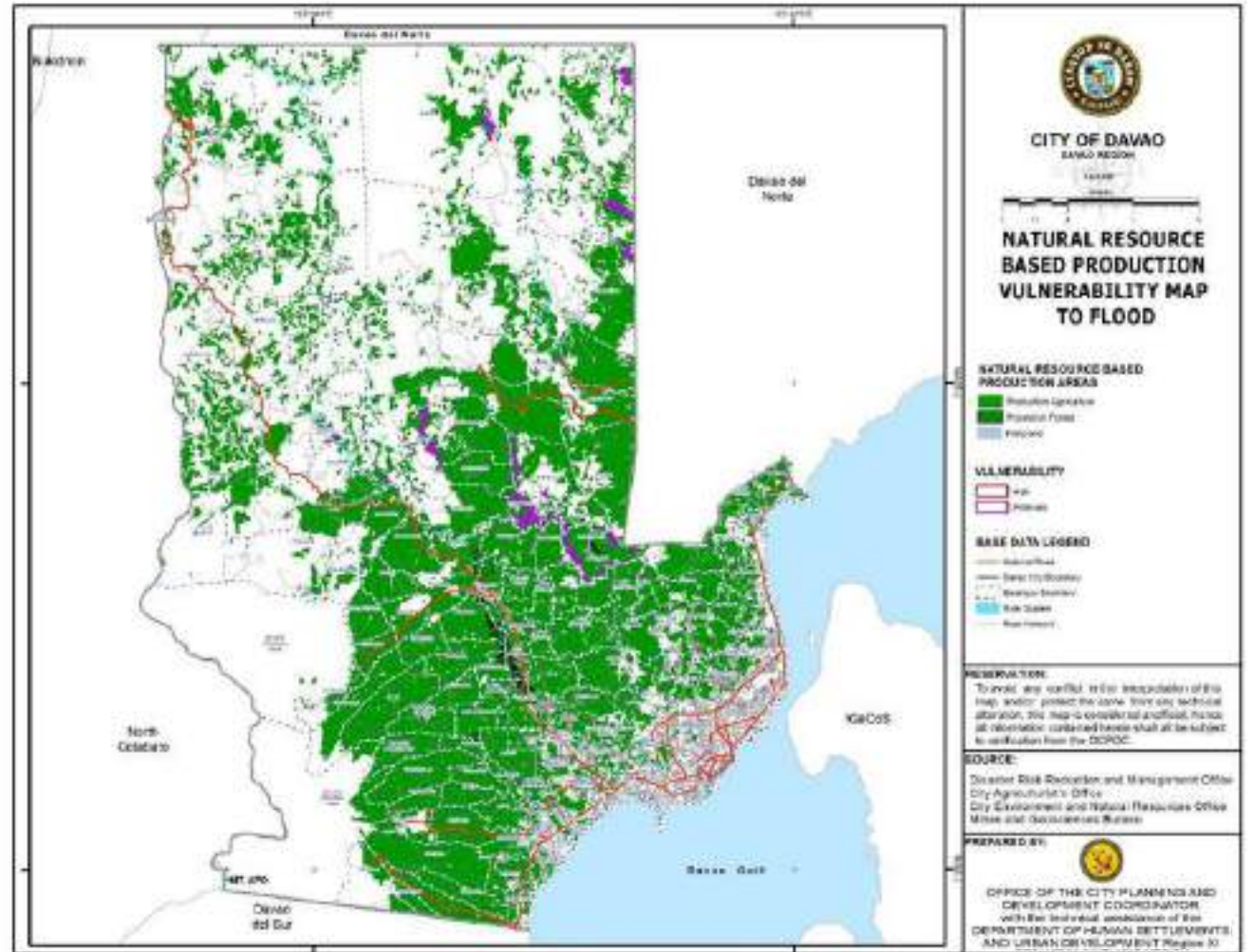
Landslide– A total of 25 barangays with NRBPA have the lowest adaptive score, where pursuing adaptation measures would be costly whenever there are landslide incidents. At least 7,452 individuals would have alternative livelihood if ever their main sources of income would be affected by landslides.

Liquefaction– All the 24 barangays NRBPA have high adaptive capacity score which means that they can address and pursue adaptation measures whenever a liquefaction would arise.

Storm Surge – A total of 12 barangays with NRBPA have moderate adaptive capacity score. These include the natural resources in Bago Aplaya, Bucana, Matina Aplaya, Talomo, Bunawan Proper, Ilang, Lasang, Panacan, Tibungco, Binugao, Lizada, and Sirawan. This means that the city government or concerned barangays with NRBPA can accommodate within its resources the cost for adapting and mitigating the hazard impacts to natural resources.

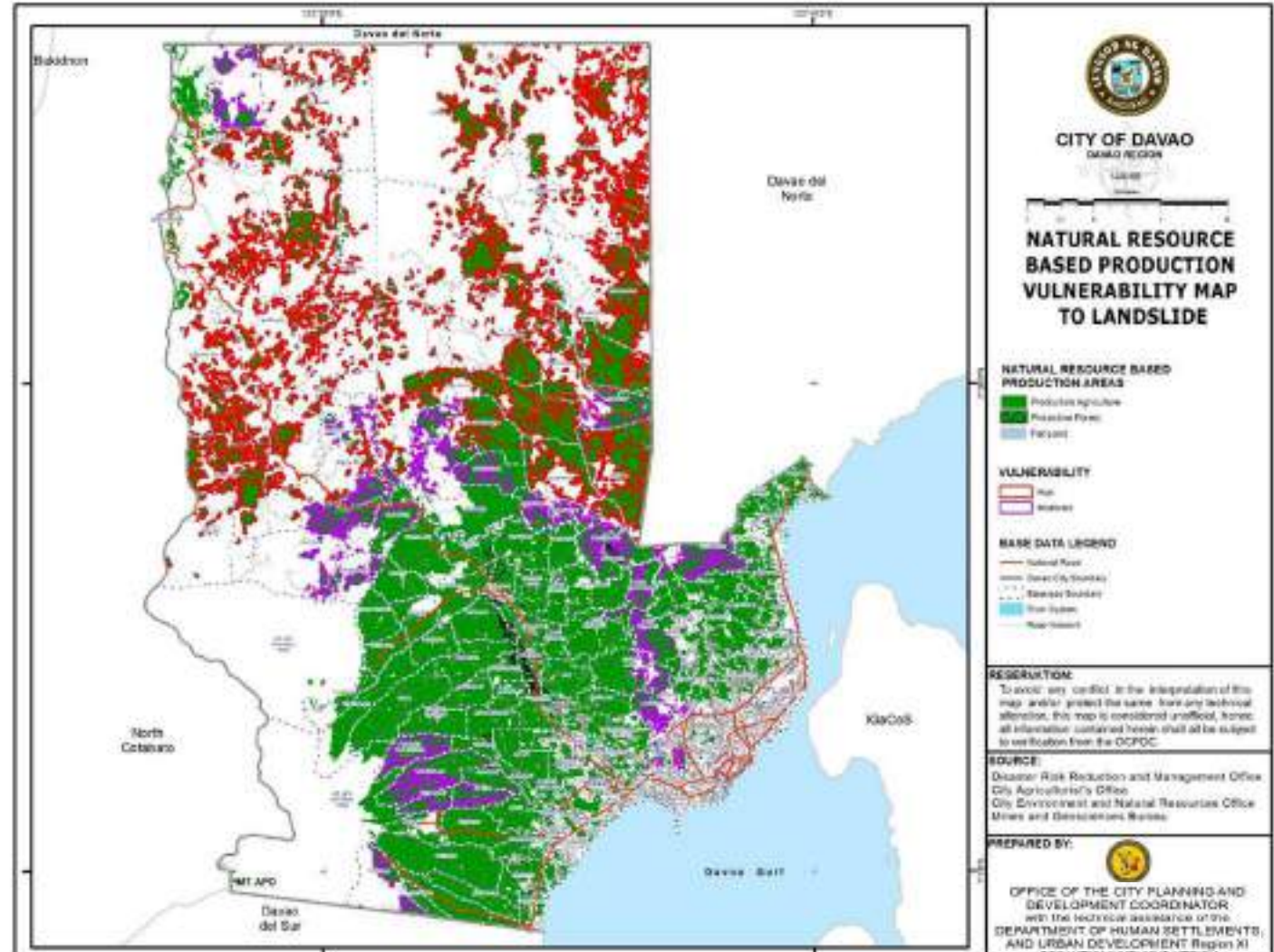
Map 1.62 Natural Resource Based Production Area Vulnerability Map, to Flood, Davao City

Flood– There are no NRBPAs that have high vulnerability scores with regards to floods. Of the 129 barangays with NRBPAs that are susceptible to floods, 11 sites have moderate vulnerability.



Map 1.62 Natural Resource Based Production Area Vulnerability Map, to Landslide, Davao City

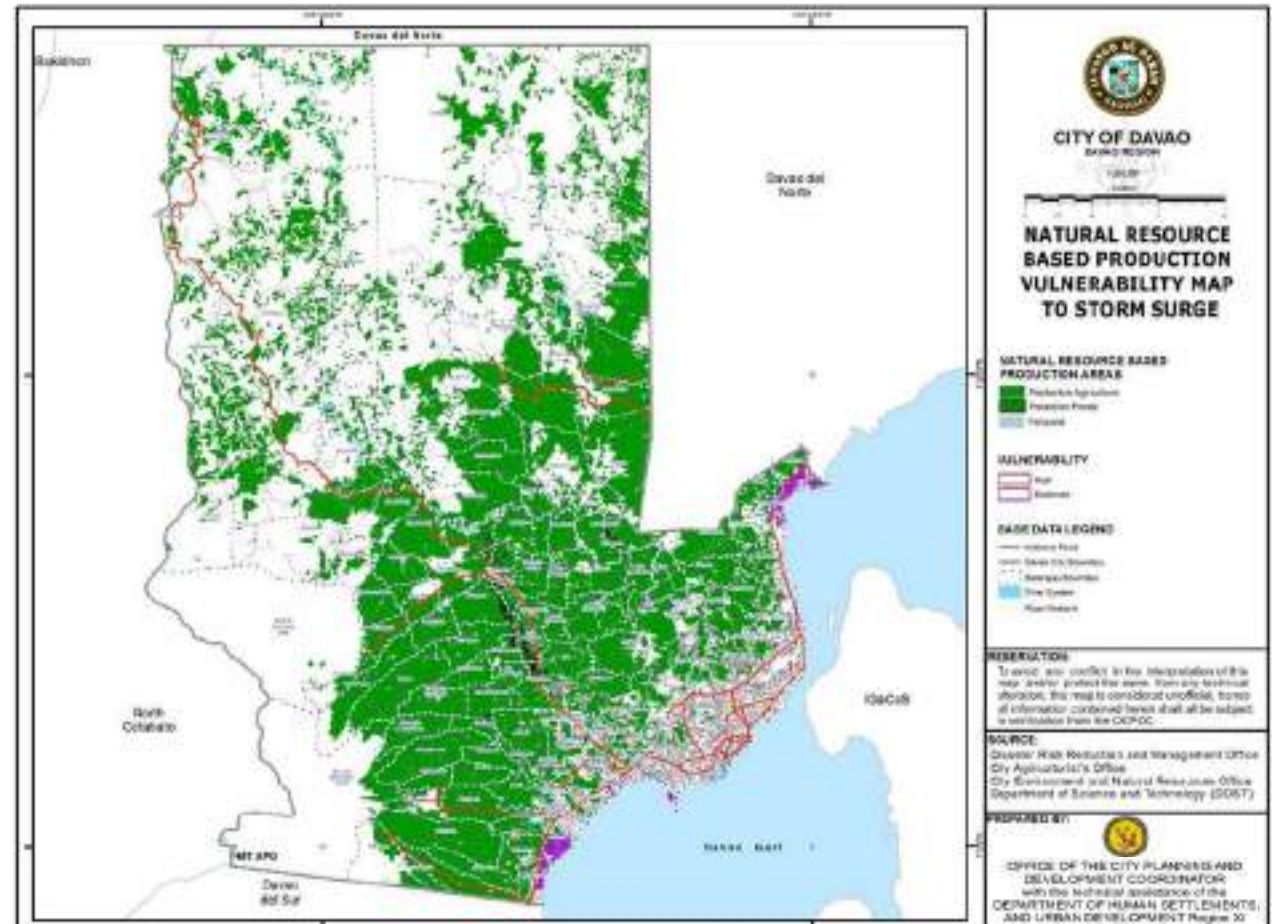
Landslide— Twenty-one (21) barangays with NRBPAs are highly vulnerable to landslides. Among these are Colosas, Fatima, Lumiad, Malabog, Mapula, Pandaitan, Panalum, Paquibato Proper, Paradise Embac, Salapawan, Sumimao, Tapak, Megkawayan, Baganihan, Dalag Lumot, Datu Salumay, Gumitan, Magsaysay, Malamba, Marilog Proper, and Salaysay.



Map 1.63 Natural Resource Based Production Area Vulnerability Map, to Storm Surge, Davao City

Storm Surge- Storm surges are expected to cause moderate impacts in NRBPA within Bago Aplaya, Bucana, Matina Aplaya, Talomo Proper, Bunawan Proper, Ilang, Lasang, Panacan, Tibungco, Binugao, Lizada, and Sirawan. Only the NRBPA in Dumoy and San Isidro have low vulnerabilities to storm surge.

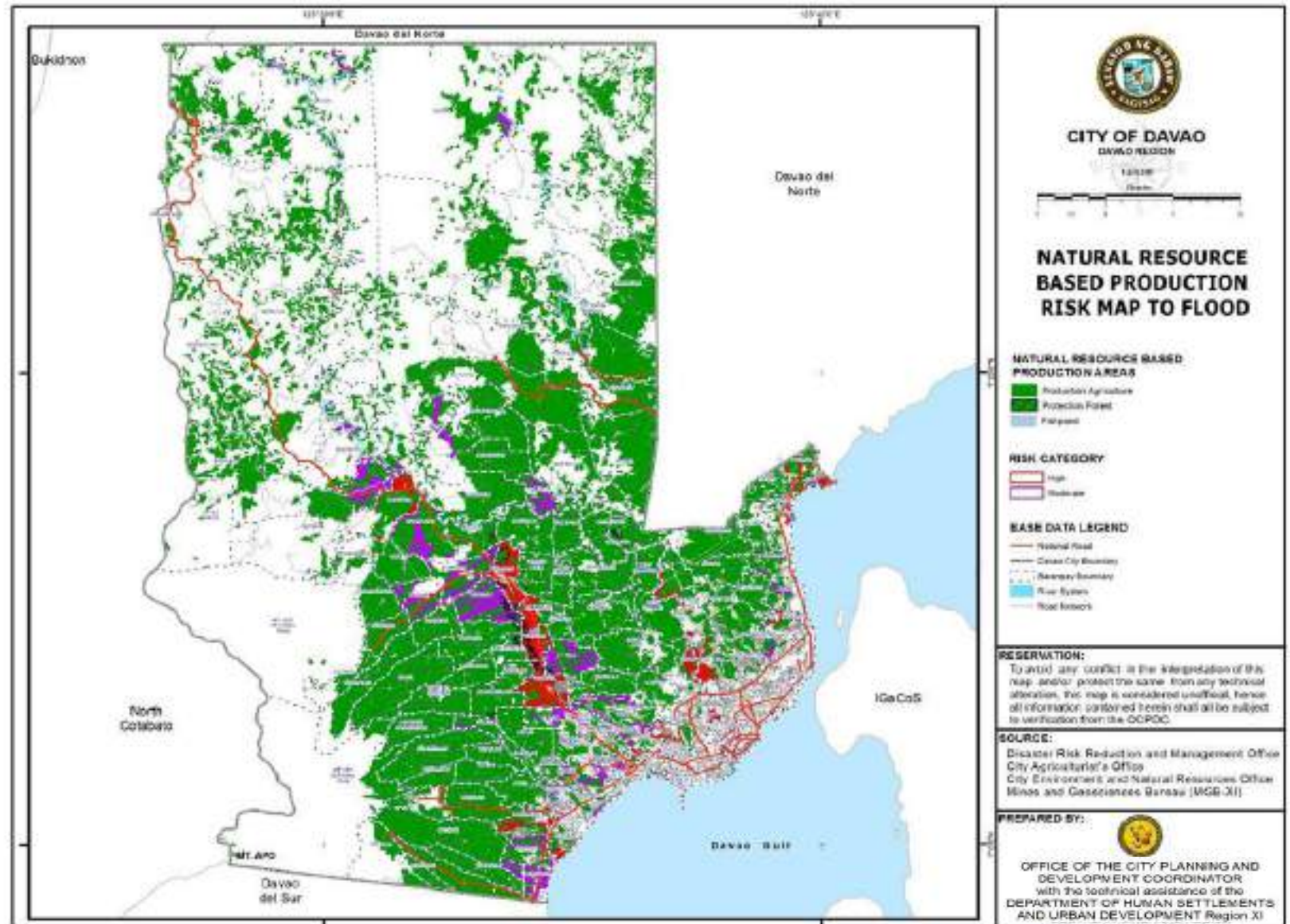
Liquefaction –All 19 barangays with NRBPA listed in the table have low vulnerabilities to liquefaction (Table CN – 21). These are Bago Aplaya, Bago Gallera, Bucana, Catalunan Grande, Dumoy, Ma-A, Matina Aplaya, Matina Crossing, Matina Pang, Talomo Proper, Mandug, Tigatto, Waan, Bunawan Proper, Ilang, Lasang, Panacan, San Isidro, Binugao, Daliao, Lizada, Sirawan, Toril Proper, and New Carmen.



Natural Resource-Based Production Area Disaster Risk Assessment for Flood

Map 1.64 Natural Resource Based Production Area Risk Map to Flood, Davao City

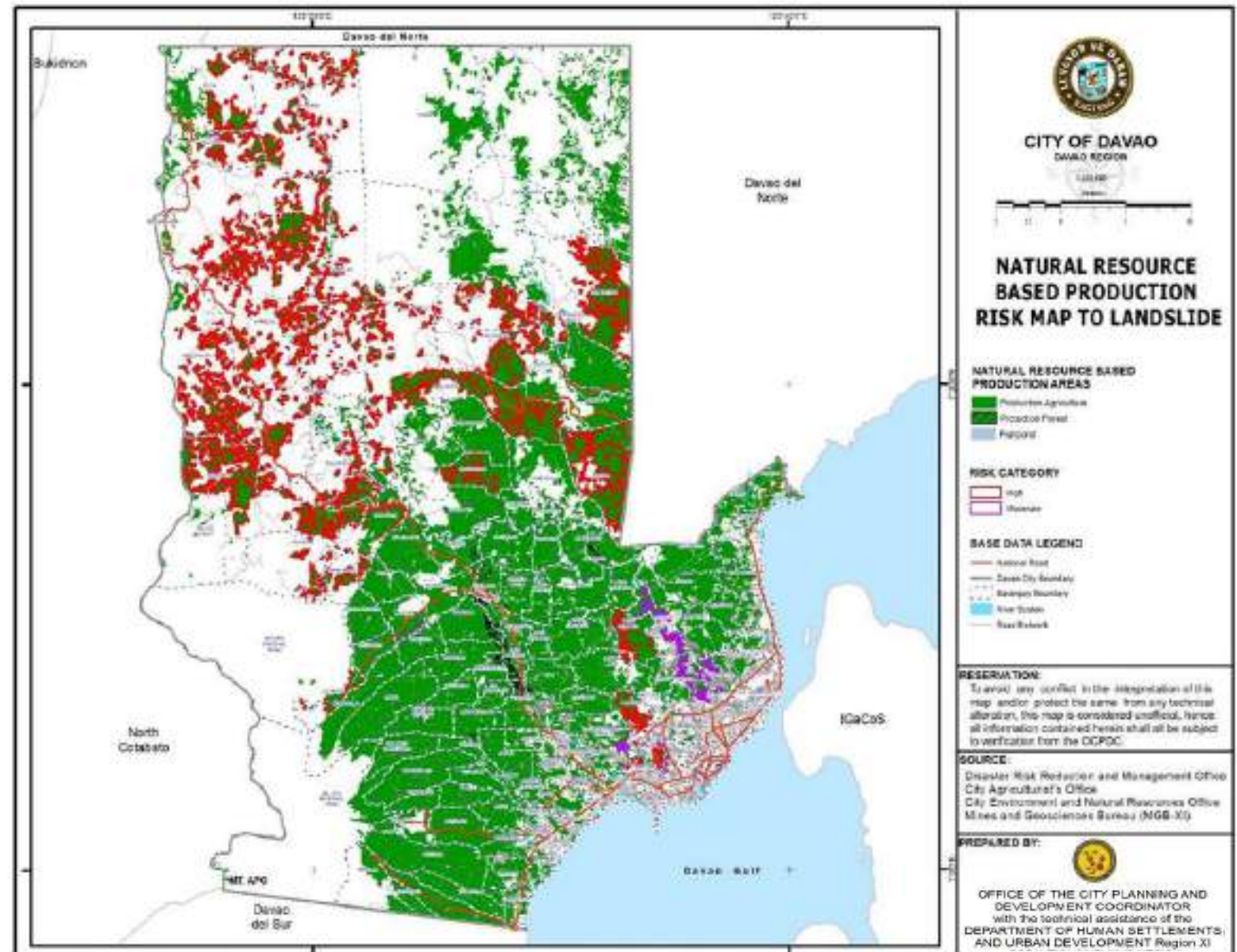
Flood – 21 barangays are at risk to flooding. Noting on the possible extent of damages to NRBPA, the natural resources in Bucana, Ma-a, Matina Aplaya, Matina Crossing, Matina Pangi, Talomo Proper, Mandug, Tigatto, Waan, Bunawan Proper, Lasang, Panacan, Calinan, Riverside, Gumitan, Tamugan, Lizada, Marapangi, Toril Proper, Los Amigos, and Tugbok Proper are identified as high risk areas.



Natural Resource-Based Production Area Disaster Risk Assessment for Landslide

Map 1.65 Natural Resource Based Production Area Risk Map to Landslide, Davao City

Landslide- 20 barangays are at risk to landslides namely, Langub, Matina Pangi, Lumiad, Malabog, Pandaitan, Paquibato Proper, Carmen, Tambobong, Inayangan, Baganihan, Buda, Datu Salumay, Gumitan, Magsaysay, Malamba, Marilog Proper, Salaysay, Suawan, Tamugan, and New Carmen



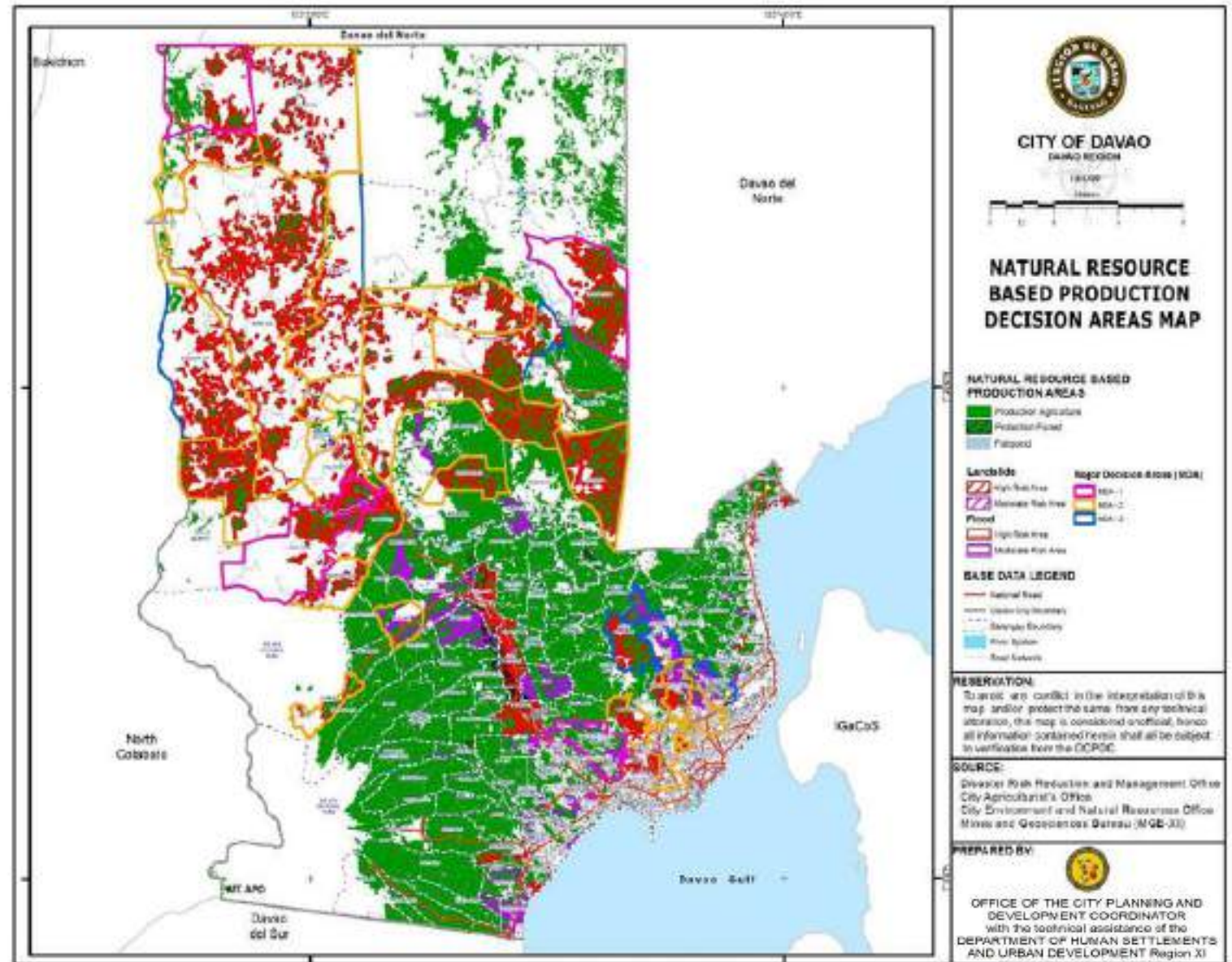
Natural Resource-Based Production Areas Major Decision Areas

Map 1.66 Natural Resource Based Production Area Decision Areas. Davao City

Major Decision Areas 1- Buda, Suawan, Pandaitan, Catalunan Grande,

Major Decision Areas 2- Baganihan, Datu Salumay, Malamba, Marilog, Salaysay, Tamugan, Fatima, Lumiad, Malabog, Carmen, Baguio, Tambobong, Inayangan, Buhangin, Tigatto, Ma-a

Major Decision Areas 3- Gumitan, Magsaysay, Paquibato, New Carmen, Cabantian, Mandug, Matina Pangil



Integrated Major Decision Areas

The Integrated Major Decision Areas categorized into Major Decision Area-1, Major Decision Area-2, Major Decision Area-3, summarizes the priority areas for intervention of the local government in terms of policies and projects in the next ten (10) years as a result of the Climate and Disaster Risk Assessment made, based on the five (5) exposed elements: Population, Critical Point Facilities, Lifeline Utilities, Natural Resource-Based Production Areas, and Urban Use.

After the assessment, Suawan, Matina Crossing, Talomo, Marilog, Tigatto, Ma-a, Matina Pangi, Panacan, Tamugan, Calinan, 19-B, Mintal, Tugbok, Bunawan, Bucana, Matina Aplaya were identified as Integrated Major Decision Areas-1. MDA-1 is the top priority area for immediate attention and implementation of risk mitigation projects and programs.

On the other hand, Buhangin, Leon Garcia Sr., 8-A, Los Amigos, Malabog, Salaysay are identified as Integrated Major Decision Areas-2. These barangays are the second highest priority, while barangays 1-A, 2-A, 5-A, 21-C, 22-C, 23-C, 31-D, Centro, Waan, Lasang, Bago-Aplaya and Catalunan Pequeño are identified as Integrated Major Decision Areas-3, the third highest priority for risk and disaster-mitigation projects.

Integrated Major Decision Areas-1

Barangay	Technical Findings	Policy Interventions
SUAWAN	This barangay has been identified as Major Decision Area-1 for Critical Point Facilities, Lifeline Utilities and NRBPA because of high landslide risk of facilities and land area.	<p>Critical Point Facilities:</p> <ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities. <p>For Lifeline Utilities:</p> <ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Strengthen the slope protection projects by concerned agencies. • Hazard retrofitting of existing structure Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk • Road concreting and increase road elevation above the flood height. • Establish road embankment protection • Improve drainage to allow flood waters to flow through culverts. <p>NRBPA</p> <ul style="list-style-type: none"> • Improve extension services with emphasis on climate and hazard resilient production techniques. • Establishment of irrigation and/or rainwater harvesting facilities to sustain 1,684.68 hectares of high value fruit tree production. • Encourage the use of risk transfer instrument (i.e. crop insurance) • Crop diversification • Changing crop and/or those crops with reduced water requirements • Establishment of early warning system for agricultural crop production • Provision of forestry based alternative and/or non-agriculture based livelihood opportunities • Reduced run-off through watershed reforestation or agro-forestry production • Establishment of warehouses for temporary storage • Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)
SUAWAN	This barangay has been identified as Major Decision Area-1 for Critical Point Facilities, Lifeline Utilities and NRBPA because of high landslide risk of facilities and land area.	<p>For population</p> <ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard resilient design. • Implement slope protection measures (e.g., installation of geo-nets in slopes) • Landslide mitigation design shall be included in the local and national budgets • Enforce the National Greening Program • Relocation program for informal settlers shall be implemented • Pursue flood control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center • Set up state-of-the-art early warning device system

Integrated Major Decision Areas-1

Barangay	Technical Findings	Policy Interventions
MATINA CROSSING	<p>This barangay has been identified as Major Decision Area-1 for Population and Lifeline Utilities because of high flood and landslide risk. The Urban Uses particularly the Residential use is also at high risk to landslide leading it to be identified as MDA-3 for urban use. This barangay is also identified as MDA-3 for critical point facilities because of one (1) police substation, one (1) health center, and two (2) school facilities are at high risk to flood.</p>	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council <p>Lifeline Utilities</p> <ul style="list-style-type: none"> • Hazard retrofitting of existing structure Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk <p>Urban Use</p> <ul style="list-style-type: none"> • Mandatory retrofitting of existing structures; formulation of flood contingency plans • LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; • Educate residents on natural warning signs & the severity of disasters; • LGU to regulate illegal construction of houses on steep slopes. • Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; • Encourage structure owners to secure building insurances. • Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads. • Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas. <p>Critical Point Facilities</p> <ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard resilient design • Construction of flood control projects like river/ seawalls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks • Forging partnerships with private and non-government organizations in construction of new facilities.

Integrated Major Decision Areas-1		
Barangay	Technical Findings	Policy Interventions
		<ul style="list-style-type: none"> • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
TALOMO	This barangay has been identified as Major Decision Area-1 for Population and Lifeline Utilities, and Major Decision Area-3 for Critical Point Facilities and Urban Use because of moderate to high flood risk and landslide risk of exposed area.	<p>Critical Point Facilities</p> <ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard resilient design • Construction of flood control projects like river/ seawalls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities. <p>Urban Use</p> <ul style="list-style-type: none"> • Mandatory retrofitting of existing structures; • LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; • Educate residents on natural warning signs & the severity of disasters; • LGU to regulate illegal construction of houses on steep slopes. • Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; • Encourage structure owners to secure building insurances. • Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads. • Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas. <p>Lifeline Utilities</p> <ul style="list-style-type: none"> • Hazard retrofitting of existing structure Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk <p>NRBPA</p> <ul style="list-style-type: none"> • Improve extension services with emphasis on climate and hazard resilient production techniques. • Encourage the use of risk transfer instrument (i.e. crop insurance) • Improve extension services with emphasis on climate and hazard resilient production techniques. • Encourage the use of risk transfer instrument (i.e. crop insurance) • Crop diversification • Changing crop and/or those crops with reduced water requirements • Provision of forestry based alternative and/or non-agriculture based livelihood opportunities • Reduced run-off through watershed reforestation or agro-forestry production • Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)

Integrated Major Decision Areas-1

Barangay	Technical Findings	Policy Interventions
		<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council
MARILOG	<p>This barangay is identified as Major Decision Area-1 for Critical Point Facilities and Urban Use, and Major Decision Area 2 for Natural Resource Based Production Areas and Population because of high landslide risk.</p>	<ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. <p>Population</p> <ul style="list-style-type: none"> • Forging partnerships with private and non-government organizations in construction of new facilities • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities. <p>NRBPA</p> <ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities. <p>Urban Use</p> <ul style="list-style-type: none"> • LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; • Educate residents on natural warning signs and the severity of disasters; • LGU to regulate illegal construction of houses on steep slopes; • Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.

Integrated Major Decision Areas-1

Barangay	Technical Findings	Policy Interventions
TIGATTO	<p>This area has been identified as Major Decision Area-1 for Population and MDA-2 for NRBPA, Lifeline Utilities, because of the flood risk and vulnerability to storm surge. This barangay is also identified as MDA-2 for Urban Use because of high landslide risk for industrial and residential areas.</p>	<p>Lifeline Utilities</p> <ul style="list-style-type: none"> ● Hazard retrofitting of existing structure ● Hazard retrofitting of existing structure ● Establishment of alternate roads parallel to existing bridge, to ensure uninterrupted linkage <p>NRBPA</p> <ul style="list-style-type: none"> ● Improve extension services with emphasis on climate and hazard resilient production techniques. Encourage the use of risk transfer instrument (i.e. crop insurance); Improve extension services with emphasis on climate and hazard resilient production techniques. ● Establishment of irrigation and/or rainwater harvesting facilities to sustain 354.51 hectares of high value fruit tree production. ● Encourage the use of risk transfer instrument (i.e. crop insurance) ● Crop diversification ● Changing crop and/or those crops with reduced water requirements ● Establishment of early warning system for agricultural crop production ● Provision of forestry based alternative and/or non-agriculture based livelihood opportunities ● Reduced run-off through watershed reforestation or agro-forestry production ● Establishment of warehouses for temporary storage ● Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan) <p>Population</p> <ul style="list-style-type: none"> ● Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines ● The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway ● Pursue flood control measures ● The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded ● Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms ● Set up state-of-the-art early warning device system ● Strengthen the Barangay Disaster Risk Reduction and Management Council <p>Urban Use</p> <ul style="list-style-type: none"> ● LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; ● Educate residents on natural warning signs & the severity of disasters; ● LGU to regulate illegal construction of houses on steep slopes.; ● Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; ● Encourage structure owners to secure building insurances. ● Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.; ● Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/ structures at the affected areas.

Integrated Major Decision Areas-1		
Barangay	Technical Findings	Policy Interventions
TIGATTO	<p>This area has been identified as Major Decision Area-1 for Population and MDA-2 for NRBPA, Lifeline Utilities, because of the flood risk and vulnerability to storm surge. This barangay is also identified as MDA-2 for Urban Use because of high landslide risk for industrial and residential areas.</p>	<p>Lifeline Utilities</p> <ul style="list-style-type: none"> • Hazard retrofitting of existing structure • Hazard retrofitting of existing structure • Establishment of alternate roads parallel to existing bridge, to ensure uninterrupted linkage <p>NRBPA</p> <ul style="list-style-type: none"> • Improve extension services with emphasis on climate and hazard resilient production techniques. Encourage the use of risk transfer instrument (i.e. crop insurance); Improve extension services with emphasis on climate and hazard resilient production techniques. • Establishment of irrigation and/or rainwater harvesting facilities to sustain 354.51 hectares of high value fruit tree production. • Encourage the use of risk transfer instrument (i.e. crop insurance) • Crop diversification • Changing crop and/or those crops with reduced water requirements • Establishment of early warning system for agricultural crop production • Provision of forestry based alternative and/or non-agriculture based livelihood opportunities • Reduced run-off through watershed reforestation or agro-forestry production • Establishment of warehouses for temporary storage • Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan) <p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue flood control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council <p>Urban Use</p> <ul style="list-style-type: none"> • LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; • Educate residents on natural warning signs & the severity of disasters; • LGU to regulate illegal construction of houses on steep slopes.; • Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; • Encourage structure owners to secure building insurances. • Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.; • Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.

Integrated Major Decision Areas-1		
Barangay	Technical Findings	Policy Interventions
		<ul style="list-style-type: none"> • Provision of forestry based alternative and/or non-agriculture based livelihood opportunities • Reduced run-off through watershed reforestation or agro-forestry production • Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan) <p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council
MATINA PANGI	This barangay identified as Major Decision Area-1 for lifeline utilities and population and Major Decision Area 2 for Urban Use because of high flood and landslide risk.	<p>Critical Point Facilities</p> <ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard resilient design • Construction of flood control projects like river/ seawalls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities. <p>Urban Use</p> <ul style="list-style-type: none"> • Mandatory retrofitting of existing structures; formulation of flood contingency plans • LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; • Educate residents on natural warning signs and the severity of disasters; • LGU to regulate illegal construction of houses on steep slopes. • Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; • Encourage structure owners to secure building insurances. • Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads. • Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas. <p>Lifeline Utilities</p> <ul style="list-style-type: none"> • Hazard retrofitting of existing structure Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk

Integrated Major Decision Areas-1		
Barangay	Technical Findings	Policy Interventions
		<p>NRBPA</p> <ul style="list-style-type: none"> • Improve extension services with emphasis on climate and hazard resilient production techniques. • Encourage the use of risk transfer instrument (i.e. crop insurance) • Improve extension services with emphasis on climate and hazard resilient production techniques. • Encourage the use of risk transfer instrument (i.e. crop insurance) • Crop diversification Changing crop and/or those crops with reduced water requirements • Provision of forestry based alternative and/or non-agriculture based livelihood opportunities • Reduced run-off through watershed reforestation or agro-forestry production • Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan) <p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council
PANACAN	This barangay has been identified as MDA-1 for Urban Use because of 67.73 ha of residential area at high risk to landslide. This barangay is also identified as Major Decision Area-1 for Population and Major Decision Area-2 for Lifeline Utilities.	<p>Population</p> <ul style="list-style-type: none"> • Forging partnerships with private and non-government organizations in construction of new facilities • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities. <p>Lifeline Utilities</p> <ul style="list-style-type: none"> • Hazard retrofitting of existing structure Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk. <p>Urban Use</p> <ul style="list-style-type: none"> • LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; • Educate residents on natural warning signs & the severity of disasters; • LGU to regulate illegal construction of houses on steep slopes • Imposition of hazard resistant design standards/regulations within susceptible areas; • Conduct site specific hazard mapping as basis for the establishment of structural design regulation; • Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.

Integrated Major Decision Areas-1

Barangay	Technical Findings	Policy Interventions
TAMUGAN	<p>This barangay has been identified as Major Decision Area-1 of Critical Point Facilities and Lifeline Utilities, Major Decision Area-2 for NRBPA, and Major Decision Area-3 for Population because of high landslide risk.</p>	<p>Critical Point Facilities</p> <ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities. <p>Lifeline Utilities</p> <ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Strengthen the slope protection projects by concerned agencies. • Hazard retrofitting of existing structure Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high riskRoad concreting and increase road elevation above the flood height. • Establish road embankment protection • Improve drainage to allow flood waters to flow through culverts. <p>NRBPA</p> <ul style="list-style-type: none"> • Improve extension services with emphasis on climate and hazard resilient production techniques. • Establishment of irrigation and/or rainwater harvesting facilities to sustain 1,684.68 hectares of high value fruit tree production. • Encourage the use of risk transfer instrument (i.e. crop insurance) • Crop diversification • Changing crop and/or those crops with reduced water requirements • Establishment of early warning system for agricultural crop production • Provision of forestry based alternative and/or non-agriculture based livelihood opportunities • Reduced run-off through watershed reforestation or agro-forestry production • Establishment of warehouses for temporary storage • Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan) <p>For Population:</p> <ul style="list-style-type: none"> • Implement slope protection measures (e.g., installation of geo-nets in slopes) • Landslide mitigation design shall be included in the local and national budgetsEnforce the National Greening Program • Relocation program for informal settlers shall be implemented • Pursue flood control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center • Set up state-of-the-art early warning device system

Integrated Major Decision Areas-1

Barangay	Technical Findings	Policy Interventions
CALINAN	<p>This barangay is identified as Major Decision Area-1 for Population and Urban Use and Major Decision Area-3 for Critical Point Facilities due to high flood risk.</p>	<p>Population</p> <ul style="list-style-type: none"> • Forging partnerships with private and non-government organizations in construction of new facilities • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities. <p>Critical Point Facilities</p> <ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure that employs hazard resilient design. • Future construction of critical point facilities should follow standards for hazards resiliency. • Forging partnerships with private and non-government organizations in construction of new facilities • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities <p>Urban Use</p> <ul style="list-style-type: none"> • Mandatory retrofitting of existing structures; formulation of flood contingency plans • LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; • Educate residents on natural warning signs & the severity of disasters; • Encourage structure owners to secure building insurances. • For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone; • imposition of hazard resistant design standards/regulations within flood susceptible areas; • conduct site specific flood mapping as basis for the establishment of structural design regulation; • Imposition of hazard resistant design standard regulations within flood susceptible areas;

Integrated Major Decision Areas-1

Barangay	Technical Findings	Policy Interventions
19-B	<p>This barangay has been identified as Major Decision Area-1 of Population and Major Decision Area-3 for Urban Use due to high flood risk. Same barangay is also identified as Major Decision Area-2 of Lifeline Utilities because of the presence of main line pipes which area at high risk to food.</p>	<p>Urban Use</p> <ul style="list-style-type: none"> • Implement mandatory evacuation/relocation policy on affected structures/dwellings; • LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; • For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone; • Mandatory retrofitting of existing structures; formulation of flood contingency plans; • Imposition of hazard resistant design standard regulations within flood susceptible areas; • Conduct site specific flood hazard mapping as basis for the establishment of structural design regulation • Educate residents on natural warning signs & the severity of disasters; • Encourage structure owners to secure building insurances. <p>Lifeline Utilities</p> <ul style="list-style-type: none"> • Establishment of alternate routes. • Hazard retrofitting of existing structure • Strengthen contingency plans for alternative methods of water supply delivery to affected areas; • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials). <p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway. • Pursue flood control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council

Integrated Major Decision Areas-1		
Barangay	Technical Findings	Policy Interventions
MINTAL	This barangay has been identified as Major Decision Area-1 for Lifeline Utilities and Population and MDA-3 for Urban Use because of the presence of moderate to high flood risk.	<p>Urban Use</p> <ul style="list-style-type: none"> • LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; • For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone; • Mandatory retrofitting of existing structures; formulation of flood contingency plans; • Imposition of hazard resistant design standard regulations within flood susceptible areas; • conduct site specific flood hazard mapping as basis for the establishment of structural design regulation • Educate residents on natural warning signs & the severity of disasters; • Encourage structure owners to secure building insurances. <p>Lifeline Utilities</p> <ul style="list-style-type: none"> • Establishment of alternate routes. • Hazard retrofitting of existing structure • Strengthen contingency plans for alternative methods of water supply delivery to affected areas; • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials). <p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway. • Pursue flood control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council

Integrated Major Decision Areas-1		
Barangay	Technical Findings	Policy Interventions
TUGBOK	This barangay identified as Major Decision Area-1 for Lifeline Utilities and Population because of high flood and landslide risk.	<p>Critical Point Facilities</p> <ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard resilient design • Construction of flood control projects like riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks <p>For Urban Use</p> <ul style="list-style-type: none"> • Implement mandatory evacuation/relocation policy on affected structures/dwellings; • Plant more trees; • maintain and monitor structure; Imposition of hazard resistant design standard regulations within flood susceptible areas; • conduct site specific flood hazard mapping as basis for the establishment of structural design regulation • Hazard retrofitting of existing structure <p>For Lifeline Utilities:</p> <ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials). • The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards. • Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk. <p>For Population:</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines. • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway. • Pursue disaster control measures. • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded. • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms. • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council.

Integrated Major Decision Areas-1

Barangay	Technical Findings	Policy Interventions
TUGBOK	<p>This barangay identified as Major Decision Area-1 for Lifeline Utilities and Population because of high flood and landslide risk.</p>	<p>Critical Point Facilities</p> <ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard resilient design • Construction of flood control projects like riverbank riprapping • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks <p>For Urban Use</p> <ul style="list-style-type: none"> • Implement mandatory evacuation/relocation policy on affected structures/dwellings; • Plant more trees; • maintain and monitor structure; Imposition of hazard resistant design standard regulations within flood susceptible areas; • conduct site specific flood hazard mapping as basis for the establishment of structural design regulation • Hazard retrofitting of existing structure <p>For Lifeline Utilities:</p> <ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials). • The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards. • Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk. <p>For Population:</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines. • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway. • Pursue disaster control measures. • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded. • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms. • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council.

Integrated Major Decision Areas-1

Barangay	Technical Findings	Policy Interventions
BUNAWAN	<p>This barangay has been identified as Major Decision Area-1 for Population; Major Decision Area-2 for Lifeline Utilities; and Major Decision Area-3 for Urban Use because of moderate to high flood risk and vulnerability to storm surge.</p>	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council <p>Lifeline Utilities</p> <ul style="list-style-type: none"> • Hazard retrofitting of existing structure Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk <p>Urban Use</p> <ul style="list-style-type: none"> • Implement mandatory evacuation/relocation policy on affected structures/dwellings; • LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; • For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone; • Mandatory retrofitting of existing structures; formulation of flood contingency plans; • Imposition of hazard resistant design standard regulations within flood susceptible areas; • conduct site specific flood hazard mapping as basis for the establishment of structural design regulation • Maintain and monitor structure; • Educate residents on natural warning signs & the severity of disasters; • Encourage structure owners to secure building insurances. <p>Lifeline Utilities</p> <ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas • Strict implementation of material specification standards and construction (National building code of the Philippines) • Establishment of alternate roads parallel to existing bridge, to ensure uninterrupted linkage • Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk • Retrofitting of existing bridge to accommodate 100 years of floods. • Strengthen contingency plans for alternative methods of water supply delivery to affected areas • Follow National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials. <p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council

Integrated Major Decision Areas-1		
Barangay	Technical Findings	Policy Interventions
BUCANA	<p>This barangay is identified as Major Decision Area-1 for Population, Major Decision Area-2 for Urban Use and Major Decision Area 3 for Critical Point Facilities.</p>	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway. • Pursue flood control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council <p>Critical Point Facilities</p> <ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard resilient design • Construction of flood control projects like river/ seawalls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Programs) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities. <p>Urban Use</p> <ul style="list-style-type: none"> • Implement mandatory evacuation/relocation policy on affected structures/dwellings; • For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone; • Mandatory retrofitting of existing structures; • Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Integrated Major Decision Areas-1

Barangay	Technical Findings	Policy Interventions
MATINA APLAYA	<p>This barangay is identified as Major Decision Area -1 for Population, Major Decision Area 3 for Critical Point Facilities and Major Decision Area 2 for Urban Use because of high flood risk.</p>	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway. • Pursue flood control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council <p>Critical Point Facilities</p> <ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard resilient design • Construction of flood control projects like river/ seawalls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities. <p>Urban Use</p> <ul style="list-style-type: none"> • Implement mandatory evacuation/relocation policy on affected structures/dwellings; • For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone; • Mandatory retrofitting of existing structures; • Imposition of hazard resistant design standard regulations within flood susceptible areas; • Conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Major Decision Areas-2		
Barangay	Technical Findings	Policy Interventions
BUHANGIN	<p>This barangay is identified to be Major Decision Area 2 for Lifeline Utilities and Natural Resource Based Production Areas and Urban Use. It is also identified as Major Decision Area 3 for Population.</p>	<p>Lifeline Utilities</p> <ul style="list-style-type: none"> • Establishment of alternate routes. • Hazard retrofitting of existing structure • Establishment of alternate roads parallel to existing bridge, to ensure uninterrupted linkage <p>NRBPA</p> <ul style="list-style-type: none"> • Improve extension services with emphasis on climate and hazard resilient production techniques. • Encourage the use of risk transfer instrument (i.e. crop insurance) • Improve extension services with emphasis on climate and hazard resilient production techniques. • Encourage the use of risk transfer instrument (i.e. crop insurance) • Crop diversification • Changing crop and/or those crops with reduced water requirements • Provision of forestry based alternative and/or non-agriculture based livelihood opportunities • Reduced run-off through watershed reforestation or agro-forestry production • Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan) <p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway. • Pursue flood control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council <p>Urban Use</p> <ul style="list-style-type: none"> • LGU to conduct census tagging along landslide prone areas at the earliest possible time and relocate qualified beneficiaries to their safe dwellings; • Concerned gov't agency to strictly monitor developmental activities such as construction of buildings, embankments, road cutting, cut and fill which may cause modification of natural slopes and blocking of surface drainage; • Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas; • Rehabilitation support through immediate replacement of lost or damaged land and facilities; • Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.

Major Decision Areas-2		
Barangay	Technical Findings	Policy Interventions
LEON GARCIA SR.	This barangay is identified as Major Decision Area -1 for Population and Major Decision Area 3 for Critical Point Facilities.	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway. • Pursue flood control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council <p>Critical Point Facilities</p> <ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard resilient design • Construction of flood control projects like river/ seawalls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities.
8-A	This area is identified as Major Decision Area-1 for Population and Major Decision Area-3 for Urban Use because of high risk to flood.	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council <p>Urban Use</p> <ul style="list-style-type: none"> • Mandatory retrofitting of existing structures; formulation of flood contingency plans; Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Major Decision Areas-2		
Barangay	Technical Findings	Policy Interventions
LOS AMIGOS	This area is identified as Major Decision Area-1 for Population and Major Decision Area-3 for Urban Use because of high risk to flood.	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council <p>Urban Use</p> <ul style="list-style-type: none"> • Mandatory retrofitting of existing structures; formulation of flood contingency plans; Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
MALABOG	This barangay is identified as Major Decision Area 1 for Lifeline Utilities, Major Decision Area 2 for Critical Point Facilities and Natural Resource Based Production Areas.	<p>Lifeline Utilities</p> <ul style="list-style-type: none"> • Establishment of alternate routes.. • Hazard retrofitting of existing structure • Establishment of alternate roads parallel to existing bridge, to ensure uninterrupted linkage <p>Critical Point Facilities</p> <ul style="list-style-type: none"> • Rehabilitation and retrofitting of existing structure with hazard resilient design • Construction of flood control projects like river/ seawalls, riverbank riprapping, and flood control gates and pumping stations • Regular declogging of canals and other water ways • Future construction of facilities buildings should adopt hazard resilient designs • Partnership with private and business organization for the construction of flood control projects (Adopt-A-School Program) • Strengthen community early warning system and disaster preparedness activity in the community • Establish service delivery networks • Forging partnerships with private and non-government organizations in construction of new facilities. • Conduct of Inventory and regular monitoring and evaluation of Critical Point Facilities to assess its structure and resiliency to hazards. • Strengthen the coordination and service delivery system of agencies and LGU to the affected community. • Enhance the early warning system and disaster preparedness of the communities. <p>NRBPA</p> <ul style="list-style-type: none"> • Improve extension services with emphasis on climate and hazard resilient production techniques. • Encourage the use of risk transfer instrument (i.e. crop insurance) • Improve extension services with emphasis on climate and hazard resilient production techniques. • Encourage the use of risk transfer instrument (i.e. crop insurance) • Crop diversification • Changing crop and/or those crops with reduced water requirements • Provision of forestry based alternative and/or non-agriculture based livelihood opportunities • Reduced run-off through watershed reforestation or agro-forestry production • Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)

Major Decision Areas-2		
Barangay	Technical Findings	Policy Interventions
SALAYSAY	This area is identified as Major Decision Area 2 for NRBPA and Population and Major Decision Area-3 for Urban Use because of high landslide risk.	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council <p>• NRBPA</p> <ul style="list-style-type: none"> • Improve extension services with emphasis on climate and hazard resilient production techniques. • Encourage the use of risk transfer instrument (i.e. crop insurance); Improve extension services with emphasis on climate and hazard resilient production techniques. • Establishment of irrigation and/or rainwater harvesting facilities to sustain 354.51 hectares of high value fruit tree production. • Encourage the use of risk transfer instrument (i.e. crop insurance) • Crop diversification • Changing crop and/or those crops with reduced water requirements • Establishment of early warning system for agricultural crop production • Provision of forestry based alternative and/or non-agriculture based livelihood opportunities • Reduced run-off through watershed reforestation or agro-forestry production • Establishment of warehouses for temporary storage • Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayá) <p>Urban Use</p> <ul style="list-style-type: none"> • LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; • Educate residents on natural warning signs & the severity of disasters; • LGU to regulate illegal construction of houses on steep slopes.; Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; • Encourage structure owners to secure building insurances. • Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.; • Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/ structures at the affected areas.

Major Decision Areas-3

Barangay	Technical Findings	Policy Interventions
1-A	This barangay has been identified as Major Decision Area-1 for Population because of high flood risk.	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway. • Pursue flood control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council
2-A	This area is identified as Major Decision Area-1 for Population	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council
5-A	This area is identified as Major Decision Area-1 for Population	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council <p>Population</p>

Major Decision Areas-3

Barangay	Technical Findings	Policy Interventions
		<ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council
21-C	This area is identified as Major Decision Area-1 for Population	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council
22-C	This area is identified as Major Decision Area-1 for Population	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council

Major Decision Areas-3

Barangay	Technical Findings	Policy Interventions
23-C	This area is identified as Major Decision Area-1 for Population	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council
31-D	This area is identified as Major Decision Area-1 for Population	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council
CENTRO	This area is identified as Major Decision Area-1 for Population.	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council
WAAN	This area is identified as Major Decision Area-1 for Population	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council

Major Decision Areas-3

Barangay	Technical Findings	Policy Interventions
LASANG	This area is identified as Major Decision Area-1 for Population	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council
BAGO APLAYA	This area is identified as Major Decision Area-1 for Population	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council
CATALUNAN PEQUEÑO	This area is identified as Major Decision Area-1 for Population	<p>Population</p> <ul style="list-style-type: none"> • Strict implementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines • The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway • Pursue disaster control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms • Set up state-of-the-art early warning device system • Strengthen the Barangay Disaster Risk Reduction and Management Council

Map 1.66 Integrated Major Decision Areas. Davao City

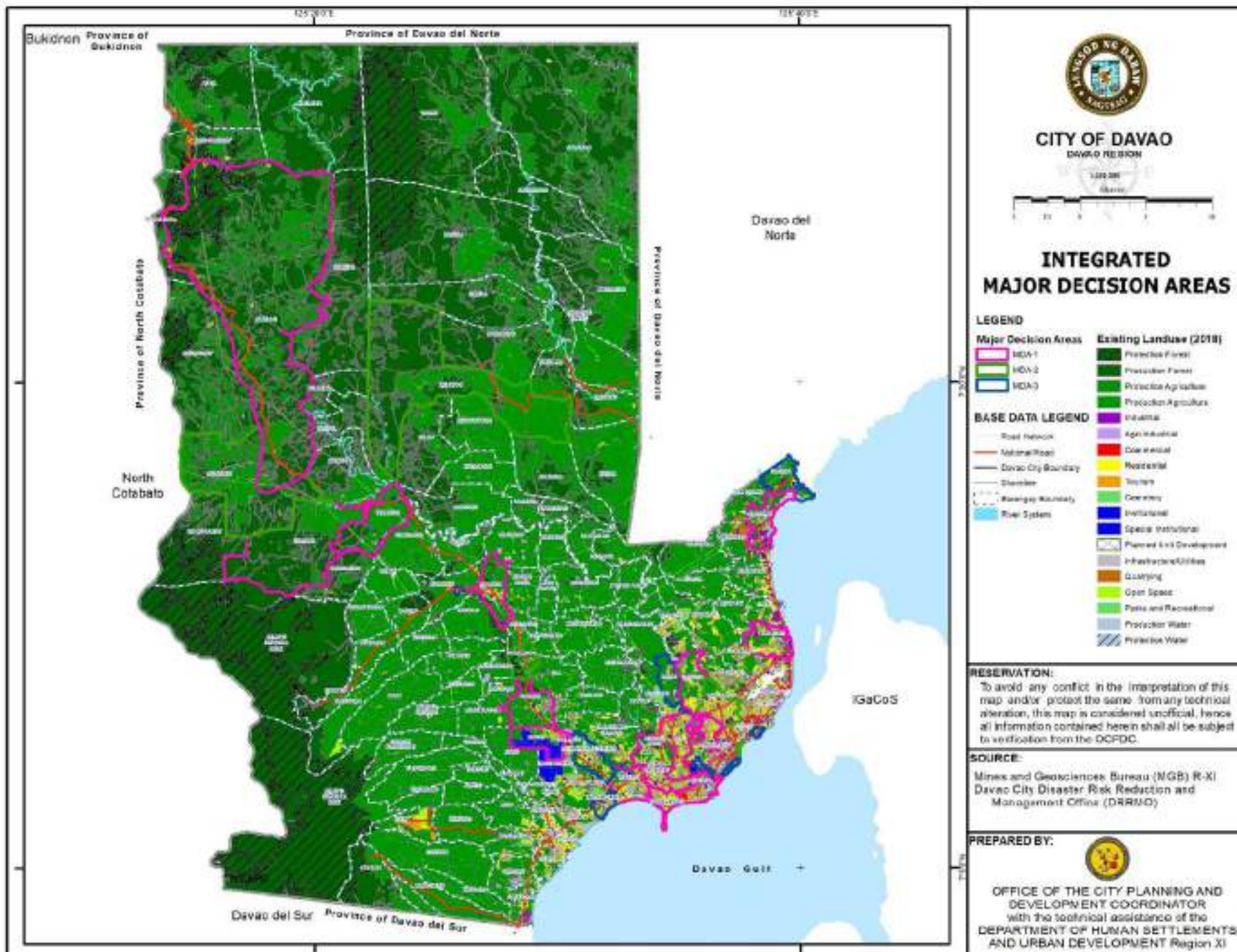


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Major Decision Area 2 (MDA-2)	1108
Major Decision Area 3 (MDA-3)	1108

Flood

Climate Change Vulnerability Assessment for Lifeline Utilities

Lifeline Utilities are systems of infrastructure that enable connectivity and sustainability of basic utilities and communication services within the community. Roads, bridges, cellular towers, waterlines, and transmission towers are among the lifeline utilities that the community needs to survive.

Climate stimuli such as increase in temperature and the increase in rainfall can bring direct and indirect impacts to our lifeline utilities. The increase in temperature directly yields drought that can have various effects such as uneven flexible road pavement, power loss, and increase of power and water demand. These direct effects may cause traffic congestion, power and water interruption which put the daily productivity and income of a community at risk. Meanwhile, increase in rainfall, brings about rain-induced hazards such as flooding, landslide and sea level rise. Occurrence of these hazards is detrimental to the roads and telecommunication structures. Debris from the landslide render road networks and some roads impassable depending on the severity of the landslide.

A thorough assessment of the vulnerability of this utilities provides opportunity to develop mitigation measures to assure survival and adaptability of the utilities upon hazard occurrence.

Exposure Database

The exposure database contains baseline information on potentially affected elements for lifeline utilities. It describes vulnerabilities/sensitivities/ adaptive capacities using indicators. It provides the baseline information for the conduct of the Climate Change Vulnerability Assessment and Disaster Risk Assessment.

INDICATOR	DESCRIPTION
EXPOSURE	
Classification	The general classification or use of the lifeline (Road, Water distribution network, power)
Length/Distance	Estimated linear meters/kilometers
Construction/replacement cost	Estimated construction cost per linear kilometers
SENSITIVITY/VULNERABILITY	
Construction Materials Used	Construction materials used (i.e Concrete, Asphalt, Gravel, Dirt)
Condition	Qualitative assessment of the existing condition of the distribution/access network
Structure employing hazard mitigation design	Proportion of structures employing site preparation, hazard resistant and/or climate proofed design standards
ADAPTIVE CAPACITY	
Insurance Coverage	Proportion of structures covered by insurance
Government Infrastructure Related Investment	Local government capacity to invest in infrastructure related projects (mitigation and construction of redundant systems)

Exposure Database for Roads

A total of 15 portions are highly susceptible to flood. The Davao Bukidnon Road has the longest road network exposed at 15.67 meters. It is followed by Fatima-Malabog Road with 8.8631 meters exposed and Carlos P. Garcia Highway with 4.9353 meters.

Table LU –1. Lifeline Utilities, Roads, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
2nd Avenue	HF	0.0055	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
2nd Avenue	LF	0.1996	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
5th Ave.	LF	0.2043	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Agdao Flyover	MF	0.4734	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Bonifacio Rotonda	LF	0.0839	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Buhangin Road	LF	0.1394	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Calinan-Baguio-Cadalian Road	HF	2.4488	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Calinan-Baguio-Cadalian Road	MF	0.4303	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Calinan-Baguio-Cadalian Road	LF	0.3427	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Calinan-Baguio-Cadalian Road	LF	0.3427	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Calinan-Baguio-Cadalian Road	LF	1.7356	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	HF	0.1052	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	HF	0.0399	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU –1. Lifeline Utilities, Roads, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Carlos P. Garcia Highway	HF	0.0817	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	HF	0.3295	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	HF	0.0314	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	MF	0.3522	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	MF	0.1119	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	MF	0.0129	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	LF	0.8425	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	LF	0.0549	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	LF	0.1044	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	HF	0.0063	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	VHF	0.3292	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	VHF	0.2961	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Claro M. Recto St.	LF	1.2152	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Dacudao Avenue	MF	1.1168	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Dacudao Avenue	LF	0.5480	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	HF	2.2435	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU –1. Lifeline Utilities, Roads, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Davao-Bukidnon Road	HF	0.5888	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	HF	0.9692	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	HF	0.3905	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	HF	1.6118	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	HF	0.6323	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	HF	0.9835	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	HF	0.8472	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	MF	0.2592	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	MF	1.9633	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	MF	1.1280	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	MF	0.5791	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	MF	0.6943	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	MF	0.0412	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	MF	0.5601	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	LF	4.9508	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	LF	0.3442	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU –1. Lifeline Utilities, Roads, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Davao-Bukidnon Road	VHF	0.3309	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	VHF	2.0777	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	VHF	1.6613	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	MF	0.2861	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	HF	2.4449	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	MF	0.0825	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	MF	0.0331	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	MF	0.0126	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	LF	0.0604	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	LF	0.1787	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	HF	0.2037	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	HF	0.1551	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	MF	0.6234	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	MF	0.0860	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	MF	0.0480	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	MF	0.0329	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU –1. Lifeline Utilities, Roads, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Davao - Agusan Highway	VHF	0.0842	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	MF	0.1324	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	HF	0.0685	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	HF	0.1062	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	MF	0.0245	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	HF	0.0880	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	HF	0.0993	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	MF	0.0226	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	MF	0.0444	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	HF	0.0796	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	VHF	0.0262	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Don Julian Rodriguez Ave. (Maa Road)	HF	0.5272	28,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Don Julian Rodriguez Ave. (Maa Road)	MF	0.3069	28,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Don Julian Rodriguez Ave. (Maa Road)	MF	0.3612	28,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Don Julian Rodriguez Ave. (Maa Road)	LF	2.8187	28,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Dumanlas Rd.	LF	0.0422	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU –1. Lifeline Utilities, Roads, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Eden-Tagurano Road	HF	0.1210	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Florentino Torres St	LF	1.6838	65,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Inawayan-Baracatan Road	HF	0.0328	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
J.P. Cabaguio Avenue	MF	1.4047	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
J.P. Cabaguio Avenue	LF	0.0136	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	LF	4.0756	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Leon Garcia St.	MF	0.2600	49,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Leon Garcia St.	LF	0.3911	49,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Libby Road	MF	0.0494	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Libby Road	HF	0.0075	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Libby Road	LF	0.5439	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Libby Road	LF	4.4314	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Libby Road	MF	1.7755	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Maa Radio Station St.	HF	0.1871	28,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Maa Radio Station St.	MF	0.1576	28,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Maa Radio Station St.	LF	0.0746	28,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU –1. Lifeline Utilities, Roads, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Maa Radio Station St.	LF	0.0545	28,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mabuhay-Pañalum-Paquibato Road	HF	0.2632	44,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mabuhay-Pañalum-Paquibato Road	MF	0.1382	44,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Manggahan St.	HF	0.5772	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Manggahan St.	LF	1.4078	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	HF	0.0730	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	HF	0.1741	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	HF	0.7103	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	HF	0.1954	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	MF	0.2950	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	MF	0.7051	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Manggahan St.	HF	0.5772	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Manggahan St.	LF	1.4078	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	HF	0.0730	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	HF	0.1741	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	HF	0.7103	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU –1. Lifeline Utilities, Roads, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Mc. Arthur Highway	HF	0.1954	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	MF	0.2950	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	MF	0.7051	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	MF	0.1347	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	MF	0.2224	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	MF	0.1283	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	MF	0.2059	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	MF	0.4105	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	LF	0.1620	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	LF	0.7807	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	LF	0.6079	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	LF	0.8323	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	LF	8.0360	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	LF	3.2213	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	HF	0.4010	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	HF	0.1792	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU –1. Lifeline Utilities, Roads, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Mc. Arthur Highway	HF	0.2129	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	VHF	0.4510	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	VHF	0.4510	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	MF	1.1842	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Pakiputan Wharf Road	MF	0.4554	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Pichon St.	HF	0.1014	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Pichon St.	LF	0.8439	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quezon Boulevard	LF	4.2215	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	HF	0.5484	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	HF	0.0351	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	LF	3.3481	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	LF	0.1155	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	VHF	0.4730	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	LF	1.8125	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	VHF	0.2199	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	HF	0.4003	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU –1 Lifeline Utilities, Roads, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Rafael Castillo St.	MF	0.8161	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	LF	1.2702	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Ramon Magsaysay Ave.	LF	1.3741	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Sta. Ana Ave.	LF	1.2910	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Toril-Bayabas-Eden Road	HF	0.2472	30,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Toril-Bayabas-Eden Road	HF	0.2321	30,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Toril-Bayabas-Eden Road	HF	0.0626	30,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Toril-Bayabas-Eden Road	MF	0.2519	30,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Toril-Bayabas-Eden Road	LF	0.1764	30,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Toril-Bayabas-Eden Road	LF	0.4906	30,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Toril-Bayabas-Eden Road	LF	0.7113	30,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	HF	0.0003	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	VHF	0.0003	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	HF	0.0002	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	VHF	0.0002	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
J.P. Cabaguio Avenue	MF	0.0001	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU –1 Lifeline Utilities, Roads, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
J.P. Cabaguio Avenue	LF	0.0001	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Pichon St.	HF	0.0005	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Pichon St.	LF	0.0005	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	HF	0.0001	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	LF	0.0001	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	HF	0.0001	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	VHF	0.0001	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	HF	0.0008	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	VHF	0.0008	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	LF	0.0001	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	VHF	0.0001	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	HF	0.0003	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	LF	0.0003	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	MF	0.0003	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	LF	0.0003	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Exposure Database for Bridges

A total of 26 bridges are located in a high flood-susceptibility area, due to the location of the bridges in major rivers. The top three (3) bridges which are assessed to be highly susceptible to flood are Bolton Bridge 2 with 185.30 meters exposed length, Bolton Bridge 1 with 185.30 meters exposed length , and Davao River Bridge with 141.11 meters exposed length.

Almost all bridges made of concrete are in good condition with hazard resistant design. All existing bridges do not have damage insurance coverage and addressing damages are mostly done through repairs/retrofitting using either national government fund resources or those funded by regional line agencies. As to the available financial resource, DPWH XI has available resources to fund improvements. However, fund availability depends upon current priorities.

Table LU –1. Lifeline Utilities, Bridges, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Agdao Flyover	M	382.98	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Angalan Br. I	H	12.10	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Angalan Br. II	H	11.92	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

Table LU –2. Lifeline Utilities, Bridges, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Angalan Br. II	H	11.92	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Angalan Br. III	H	48.88	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund a availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Angalan Br. IV	H	15.90	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Angalan Br. V	H	18.00	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

Table LU –2. Lifeline Utilities, Bridges, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Bolton Br. 1	H	185.30	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Bolton Br. 2	H	196.88	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Buhangin Flyover	L	488.07	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Bunawan Br. 1	H	49.76	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

Table LU –2. Lifeline Utilities, Bridges, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Bunawan Br. 2	H	47.79	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Davao River Br.	H	141.11	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Generoso Br. 1	H	89.94	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Generoso Br. 2	H	87.60	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

Table LU –2. Lifeline Utilities, Bridges, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Libby Br.	M	24.69	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Lipadas Br. I	M	37.80	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Lipadas Br. II	M	40.00	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Matina Br.	H	38.66	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

Table LU –2. Lifeline Utilities, Bridges, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Nalum Br.	L	23.54	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Pagan Grande	H	45.48	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Pagan Pequeño	H	89.93	1,200,000	Steel	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Panacan Br.	H	23.53	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

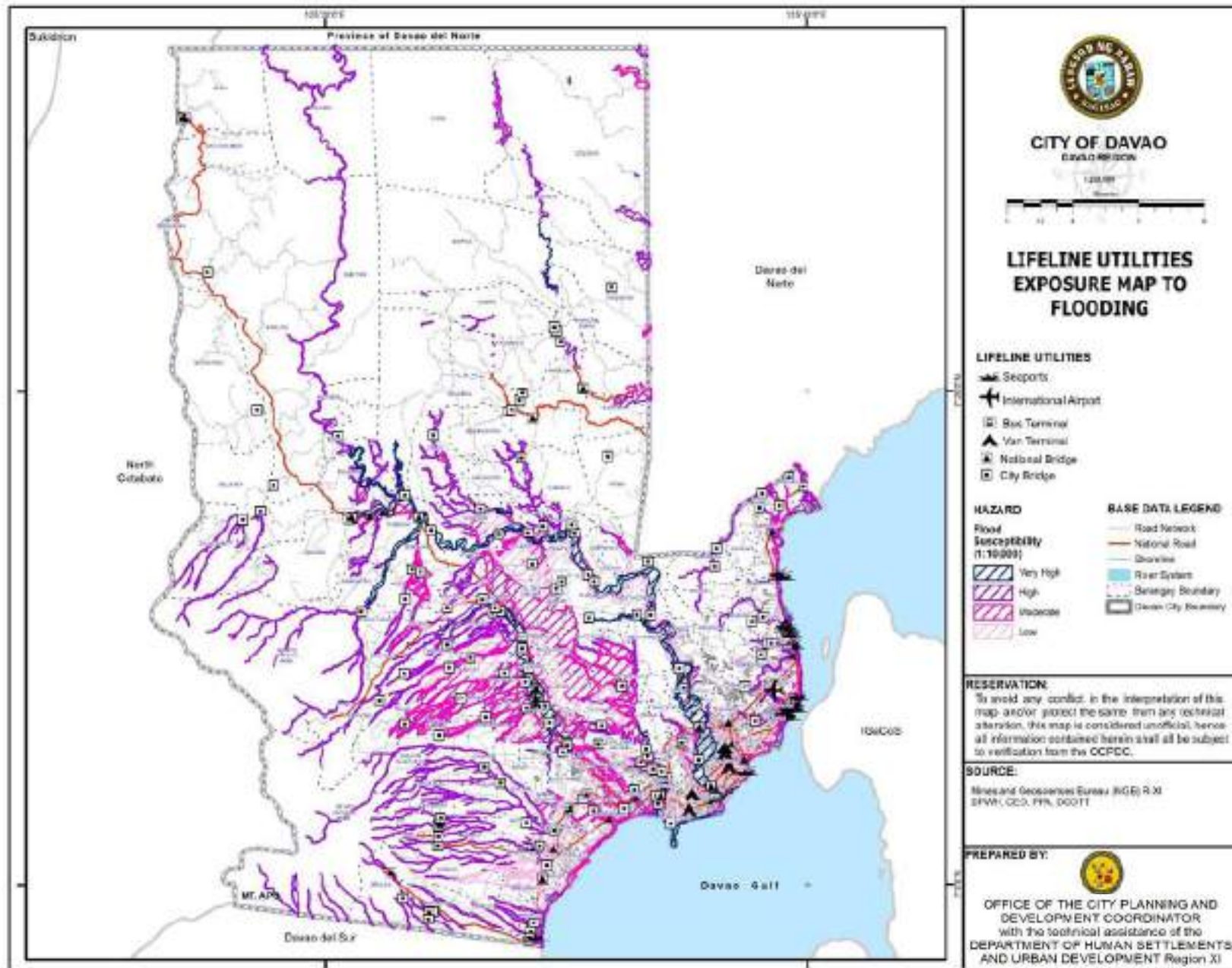
Table LU –2. Lifeline Utilities, Bridges, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Pangi Br.	H	121.69	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Piedad Br.	M	47.82	1,200,000	Steel	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Sasa Br.	H	18.43	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Suawan Br.	H	45.00	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

Table LU –2. Lifeline Utilities, Bridges, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Tagurano Br.	H	12.46	1,200,000	Bailey	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Talomo Br. 1	H	48.10	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Talomo Br. 2	H	48.11	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Tamugan Br.	H	104.96	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

Map 5.1. Lifeline Utilities Exposure Map to Flooding, Davao City



Exposure Database for Power Substations

A total of three (3) substations are located in high flood susceptibility area. These are: Calinan Substation, Tugbok Substation and Matina Substation. These newly upgraded substations were made of concrete and steel. These are designed to withstand typhoon, earthquake, fire, flood, oil spill, and sabotage and terrorism. As for its adaptive capacity, the substations have risk insurance.

Table LU– 3. Lifeline Utilities, Power Substations, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	FLOOD SUSCEPTIBILITY	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Calinan Sub-station	High/Very High	1,000.00	140 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; with Roofdeck c) Equipment Support : All Steel Structures	a) Operational b) Newly Up-graded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Tugbok Sub-station	High	1,809.00	130 Million	a) Perimeter Fence: Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside b) Control Building: Pre-painted Metal Sheet Cladding Wall and Concrete Floor ; Pre-painted Roofing Sheet. c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Matina Sub-station	High	1,000.00	120 Million	a) Perimeter Fence : Concrete Fence (3.0m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE

Table LU– 3. Lifeline Utilities, Power Substations, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	FLOOD SUSCEPTIBILITY	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Pampanga Substation	Moderate	1,031.00	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs. ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Toril Substation	Low	1,125	125 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Dumoy Substation	Low	1,322	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs. ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Puan Substation	Low	803	85 Million	a) Perimeter Fence : Concrete Fence b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Bangkal Substation'	Low	1,142.00	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

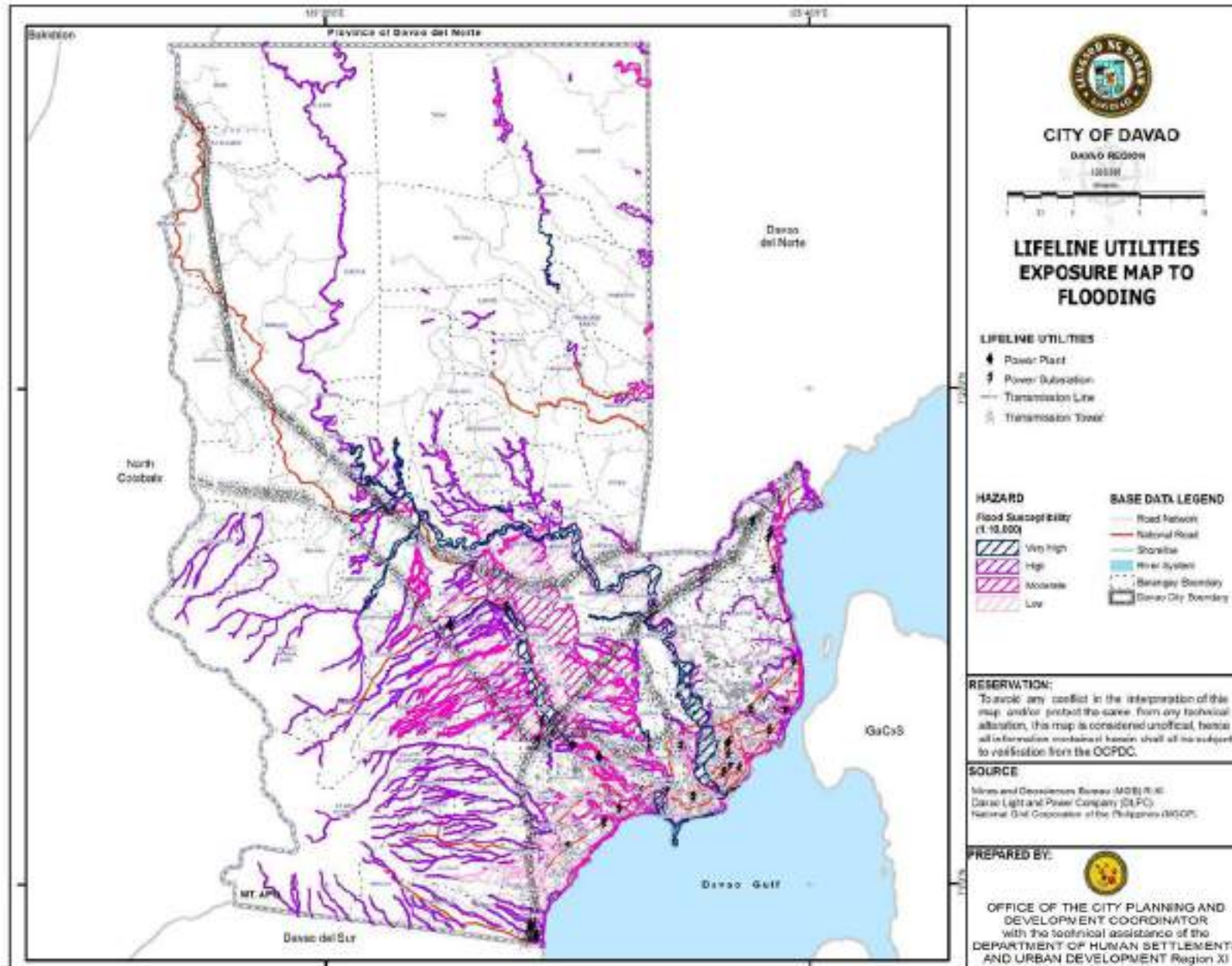
Table LU– 3. Lifeline Utilities, Power Substations, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	FLOOD SUSCEPTIBILITY	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Ecoland Substation	Low	1,547.00	120 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Maa Substation	Low	1,308.00	145 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; with Roofdeck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
P.Reyes Substation	Low	825.86	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : Concrete POle and STEel Beams	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Gaisano Substation	Low	454.00	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Sta Ana Substation	Low	607.00	135 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) & Bended Metal Sheets b) Control Building: Concrete Wall and Floor ; with Roofdeck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

Table LU– 3. Lifeline Utilities, Power Substations, Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	FLOOD SUSCEPTIBILITY	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Victoria Substation	Low	595.00	120 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Up-graded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Bajada Sub-station	Low		200 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
ERA Substation	Low	11,926.00	200 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE

Map 5.2. Lifeline Utilities Exposure Map of Power Substations to Flooding, Davao City



Exposure Database for Water Level I

A total of three (3) spring sources in Tibungco, two (2) spring sources in Panacan and Binugao, and one (1) well from Lizada are highly susceptible to flood. The replacement cost for each spring source is ₱41586.32. As these are spring sources, they do not have hazard resistant design, insurance coverage and government resources availability can be obtained only upon request.

Apart from that, 26 spring sources and deep wells in Bunawan, Talomo, River, Ula, Riverside, Daliao and Sirawan are moderately susceptible to flood.

Table LU– 4. Lifeline Utilities, Level I Water Supply System, Exposure Database Table for Flood, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MANDUG	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
BUNAWAN	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
MAHAYAG	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
BUNAWAN	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
TIBUNGCO	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
TIBUNGCO	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
TIBUNGCO	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
PANACAN	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
PANACAN	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
TALOMO RIVER	MF	DEEPWELL	5,500,000	FAIR	Yes: Casing of the well	There is no insurance coverage but there is warranty 1 month if the water pump is installed by the supplier	YES. For funding proposal
ULA	MF	DEEPWELL	5,500,000	FAIR	Yes: Casing of the well	There is no insurance coverage but there is warranty 1 month if the water pump is installed by the supplier	YES. For funding proposal
ULA	LF	DEEPWELL	5,500,000	FAIR	Yes : of the casing of the well	There is no insurance coverage but there is warranty 1 month if the water pump is installed by the supplier	YES. For funding proposal
RIVERSIDE	MF	DEEPWELL	5,500,000	FAIR	Yes: Casing of the well	There is no insurance coverage but there is warranty 1 month if the water pump is installed by the supplier	YES. For funding proposal
DALIAO	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal

Table LU– 4. Lifeline Utilities, Level I Water Supply System, Exposure Database Table for Flood, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
DALIAO	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
LIZADA	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAO	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
LIZADA	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
LIZADA	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
LIZADA	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
LIZADA	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
LIZADA	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
LIZADA	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
LIZADA	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal

Table LU– 4. Lifeline Utilities, Level I Water Supply System, Exposure Database Table for Flood, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
SIRAWAN	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
SIRAWAN	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
SIRAWAN	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
SIRAWAN	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
SIRAWAN	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
SIRAWAN	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
SIRAWAN	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
SIRAWAN	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
SIRAWAN	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
SIRAWAN	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
SIRAWAN	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
BINUGAO	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
BINUGAO	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
LUBOGAN	LF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal

Exposure Database for Level II Water System

A total of eleven (11) spring sources and six (6) deep wells found in Binugao, Sirawan, Sibulan, Mt. Apo National Park, Tungkalan, Daliaon Plantation, Subasta, Waan, Cawayan, Baguio, Malagos, Salaysay are highly susceptible to flood. Spring sources have an estimated replacement cost of ₱41,586.32 each. As for deep wells, replacement cost varies per type. Spring sources do not have hazard resistant design, while deep wells do have a casing which protects it from flood.

Table LU– 5. Lifeline Utilities Level II Water System Exposure Database Table for Flood, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
BINUGAO	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
SIRAWAN	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
BINUGAO	MF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
SIRAWAN	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
SIRAWAN	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
MARAPANGI	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
SIBULAN	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
MT. APO NATIONAL PARK	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
MT. APO NATIONAL PARK	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
TUNGKALAN	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
TUNGKALAN	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
DALIAON PLANTATION	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
MANUEL GUIANGA	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
SIRIB	MF	5HP	82,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal

Table LU– 5. Lifeline Utilities Level II Water System Exposure Database Table for Flood, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDI-TION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERN-MENT RESOURCES
MT. APO NATION-AL PARK	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
TAGAKPAN	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
BALENGAENG	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
ANGALAN	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
SIRIB	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
SIRIB	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
SIRIB	MF	3HP	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
TAGAKPAN	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
SUBASTA	HF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
WAAN	VHF	18GS20	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
WAAN	VHF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
TAGAKPAN	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
TIGATTO	HF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
BALENGAENG	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
MATINA BIAO	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
LOS AMIGOS	MF	3HP	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal

Table LU– 5. Lifeline Utilities Level II Water System Exposure Database Table for Flood, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
SUBASTA	HF	3HP	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
CAWAYAN	MF	3HP	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
SUBASTA	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
BIAO ESCUELA	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
LOS AMIGOS	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
LOS AMIGOS	MF	1HP	31,000.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
CAWAYAN	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
MATINA BIAO	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is onemonth warranty if the water pump is installed by the supplier	YES. For funding proposal
BIAO GUIANGA	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
BIAO GUIANGA	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
BIAO ESCUELA	MF	3HP	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
SUBASTA	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
CAWAYAN	MF	3HP	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
BIAO ESCUELA	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
BIAO GUIANGA	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
BIAO ESCUELA	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal

Table LU– 5. Lifeline Utilities Level II Water System Exposure Database Table for Flood, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RE-SISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
BIAO GUIANGA	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
BAGUIO	HF	3HP	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
BIAO JOAQUIN	MF	1.5HP	38,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
TALOMO RIVER	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
TALOMO RIVER	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
BIAO JOAQUIN	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
TALANDANG	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
BIAO JOAQUIN	MF	1.5HP	38,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
TALOMO RIVER	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
TALOMO RIVER	MF	1.5HP	38,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
TALOMO RIVER	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
TALOMO RIVER	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
TALOMO RIVER	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
TALOMO RIVER	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
BIAO JOAQUIN	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
MALAGOS	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
TALOMO RIVER	MF	2HP	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
GUMALANG	MF	3HP	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
SALAYSAY	HF	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal

Exposure Database for Water Level III

Out of 205,952.31 meters of main line pipes, 6,624.29 meters are highly susceptible to flood. The longest line pipe is in Ma-a with 1,153.29 meters, followed by 629.46 meters located in Barangay Talomo, 644.79 meters located in Barangay Ma-a. The size of mainline pipes range from 150-1000 mm and its type include MLCSP and PVC. All of these pipes are in good condition and has been designed to withstand flooding. There is no insurance coverage allotted, however, the DCWD allots 3% of its sales for the repair/maintenance/rehabilitation of these mainline pipes.

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MUDIANG	VHF	MLCSP	300	19,100.00	650.63	GOOD	YES	NO	DCWD reserve fund
CALINAN	HF	PVC	150	11,200.00	30.35	GOOD	YES	NO	DCWD reserve fund
CALINAN	VHF	PVC	200	12,500.00	85.89	GOOD	YES	NO	DCWD reserve fund
CALINAN	HF	PVC	200	12,500.00	91.26	GOOD	YES	NO	DCWD reserve fund
WANGAN	HF	PVC	200	12,500.00	20.62	GOOD	YES	NO	DCWD reserve fund
CALINAN	MF	PVC	200	12,500.00	22.81	GOOD	YES	NO	DCWD reserve fund
RIVERSIDE	VHF	MLCSP	250	17,700.00	47.65	GOOD	YES	NO	DCWD reserve fund
RIVERSIDE	HF	PVC	150	11,200.00	22.74	GOOD	YES	NO	DCWD reserve fund
CALINAN	LF	PVC	200	12,500.00	87.38	GOOD	YES	NO	DCWD reserve fund
5-A	LF	PVC	150	11,200.00	41.07	GOOD	YES	NO	DCWD reserve fund
5-A	LF	MLCSP	300	19,100.00	44.51	GOOD	YES	NO	DCWD reserve fund
8-A	LF	MLCSP	300	19,100.00	5.99	GOOD	YES	NO	DCWD reserve fund
6-A	LF	MLCSP	300	19,100.00	93.54	GOOD	YES	NO	DCWD reserve fund
10-A	LF	PVC	150	11,200.00	160.52	GOOD	YES	NO	DCWD reserve fund
8-A	LF	MLCSP	600	40,100.00	32.69	GOOD	YES	NO	DCWD reserve fund
10-A	LF	PVC	150	11,200.00	162.51	GOOD	YES	NO	DCWD reserve fund
12-B	LF	PVC	150	11,200.00	365.93	GOOD	YES	NO	DCWD reserve fund
11-B	HF	PVC	150	11,200.00	164.29	GOOD	YES	NO	DCWD reserve fund
39-D	LF	MLCSP	300	19,100.00	21.63	GOOD	YES	NO	DCWD reserve fund
39-D	LF	MLCSP	300	19,100.00	134.09	GOOD	YES	NO	DCWD reserve fund
37-D	LF	MLCSP	300	19,100.00	76.08	GOOD	YES	NO	DCWD reserve fund
32-D	LF	MLCSP	300	19,100.00	236.99	GOOD	YES	NO	DCWD reserve fund
24-C	LF	MLCSP	300	19,100.00	2.96	GOOD	YES	NO	DCWD reserve fund
24-C	LF	PVC	150	11,200.00	187.67	GOOD	YES	NO	DCWD reserve fund
32-D	LF	MLCSP	300	19,100.00	222.24	GOOD	YES	NO	DCWD reserve fund
30-C	LF	MLCSP	300	19,100.00	10.29	GOOD	YES	NO	DCWD reserve fund
11-B	LF	MLCSP	300	19,100.00	117.30	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
28-C	LF	PVC	150	11,200.00	165.94	GOOD	YES	NO	DCWD reserve fund
28-C	LF	PVC	150	11,200.00	164.76	GOOD	YES	NO	DCWD reserve fund
30-C	LF	PVC	150	11,200.00	117.93	GOOD	YES	NO	DCWD reserve fund
28-C	LF	PVC	150	11,200.00	6.71	GOOD	YES	NO	DCWD reserve fund
32-D	LF	MLCSP	300	19,100.00	67.83	GOOD	YES	NO	DCWD reserve fund
32-D	LF	MLCSP	400	23600	31.07	GOOD	YES	NO	DCWD reserve fund
30-C	LF	MLCSP	400	23600	500.92	GOOD	YES	NO	DCWD reserve fund
12-B	LF	MLCSP	400	23600	40.79	GOOD	YES	NO	DCWD reserve fund
30-C	LF	PVC	150	11,200.00	34.82	GOOD	YES	NO	DCWD reserve fund
11-B	LF	MLCSP	300	19,100.00	91.64	GOOD	YES	NO	DCWD reserve fund
15-B	LF	MLCSP	400	23600	8.27	GOOD	YES	NO	DCWD reserve fund
14-B	LF	MLCSP	400	23600	63.08	GOOD	YES	NO	DCWD reserve fund
18-B	LF	MLCSP	300	19,100.00	194.44	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	300	19,100.00	2.43	GOOD	YES	NO	DCWD reserve fund
18-B	LF	MLCSP	300	19,100.00	3.62	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	300	19,100.00	115.53	GOOD	YES	NO	DCWD reserve fund
12-B	LF	PVC	150	11,200.00	58.01	GOOD	YES	NO	DCWD reserve fund
19-B	LF	PVC	150	11,200.00	37.77	GOOD	YES	NO	DCWD reserve fund
18-B	LF	MLCSP	300	19,100.00	13.35	GOOD	YES	NO	DCWD reserve fund
13-B	LF	MLCSP	300	19,100.00	42.75	GOOD	YES	NO	DCWD reserve fund
PACIANO BANGOY	LF	PVC	150	11,200.00	18.93	GOOD	YES	NO	DCWD reserve fund
18-B	LF	PVC	150	11,200.00	34.32	GOOD	YES	NO	DCWD reserve fund
18-B	LF	PVC	150	11,200.00	10.91	GOOD	YES	NO	DCWD reserve fund
32-D	LF	MLCSP	300	19,100.00	26.31	GOOD	YES	NO	DCWD reserve fund
30-C	LF	MLCSP	300	19,100.00	12.67	GOOD	YES	NO	DCWD reserve fund
28-C	LF	PVC	150	11,200.00	8.52	GOOD	YES	NO	DCWD reserve fund
28-C	LF	PVC	150	11,200.00	110.26	GOOD	YES	NO	DCWD reserve fund
28-C	LF	PVC	150	11,200.00	59.34	GOOD	YES	NO	DCWD reserve fund
28-C	LF	PVC	150	11,200.00	15.83	GOOD	YES	NO	DCWD reserve fund
28-C	LF	PVC	150	11,200.00	54.80	GOOD	YES	NO	DCWD reserve fund
26-C	LF	PVC	150	11,200.00	6.50	GOOD	YES	NO	DCWD reserve fund
28-C	LF	PVC	150	11,200.00	59.36	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
30-C	LF	PVC	150	11,200.00	114.89	GOOD	YES	NO	DCWD reserve fund
14-B	LF	PVC	150	11,200.00	0.45	GOOD	YES	NO	DCWD reserve fund
14-B	LF	PVC	150	11,200.00	100.83	GOOD	YES	NO	DCWD reserve fund
TOMAS MONTEVERDE	LF	PVC	150	11,200.00	2.87	GOOD	YES	NO	DCWD reserve fund
TOMAS MONTEVERDE	LF	PVC	150	11,200.00	123.65	GOOD	YES	NO	DCWD reserve fund
TOMAS MONTEVERDE	LF	PVC	150	11,200.00	119.84	GOOD	YES	NO	DCWD reserve fund
15-B	LF	MLCSP	400	23600	160.75	GOOD	YES	NO	DCWD reserve fund
TOMAS MONTEVERDE	MF	PVC	150	11,200.00	11.50	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	LF	MLCSP	400	23600	175.51	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	MF	PVC	150	11,200.00	57.96	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	LF	PVC	150	11,200.00	28.80	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	LF	PVC	150	11,200.00	101.84	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	LF	PVC	150	11,200.00	25.00	GOOD	YES	NO	DCWD reserve fund
15-B	MF	PVC	150	11,200.00	39.81	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	300	19,100.00	22.26	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	300	19,100.00	27.18	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	300	19,100.00	51.94	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	300	19,100.00	111.40	GOOD	YES	NO	DCWD reserve fund
PACIANO BANGOY	LF	PVC	150	11,200.00	2.57	GOOD	YES	NO	DCWD reserve fund
18-B	LF	PVC	150	11,200.00	213.68	GOOD	YES	NO	DCWD reserve fund
8-A	LF	MLCSP	300	19,100.00	52.05	GOOD	YES	NO	DCWD reserve fund
8-A	LF	MLCSP	300	19,100.00	34.25	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	300	19,100.00	58.49	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	255.23	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	54.75	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	69.38	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	67.38	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	72.51	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	750	48,500.00	8.42	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	PVC	150	11,200.00	67.51	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	PVC	150	11,200.00	69.38	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	246.01	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
BUCANA	LF	PVC	150	11,200.00	2.79	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	73.68	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	PVC	150	11,200.00	8.29	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	300	19,100.00	7.81	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	69.00	GOOD	YES	NO	DCWD reserve fund
8-A	LF	MLCSP	600	40,100.00	33.04	GOOD	YES	NO	DCWD reserve fund
11-B	LF	MLCSP	300	19,100.00	65.48	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	300	19,100.00	8.09	GOOD	YES	NO	DCWD reserve fund
8-A	LF	MLCSP	600	40,100.00	16.56	GOOD	YES	NO	DCWD reserve fund
9-A	LF	MLCSP	600	40,100.00	44.64	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	300	19,100.00	224.13	GOOD	YES	NO	DCWD reserve fund
8-A	LF	MLCSP	600	40,100.00	49.02	GOOD	YES	NO	DCWD reserve fund
9-A	LF	MLCSP	600	40,100.00	3.21	GOOD	YES	NO	DCWD reserve fund
10-A	LF	MLCSP	300	19,100.00	30.07	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	300	19,100.00	39.23	GOOD	YES	NO	DCWD reserve fund
11-B	LF	MLCSP	300	19,100.00	50.70	GOOD	YES	NO	DCWD reserve fund
2-A	LF	MLCSP	300	19,100.00	113.84	GOOD	YES	NO	DCWD reserve fund
6-A	LF	MLCSP	300	19,100.00	95.72	GOOD	YES	NO	DCWD reserve fund
5-A	LF	MLCSP	300	19,100.00	133.79	GOOD	YES	NO	DCWD reserve fund
32-D	LF	MLCSP	300	19,100.00	201.85	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	300	19,100.00	64.28	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	300	19,100.00	131.61	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	400	23600	14.20	GOOD	YES	NO	DCWD reserve fund
5-A	LF	PVC	150	11,200.00	171.57	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	300	19,100.00	96.96	GOOD	YES	NO	DCWD reserve fund
8-A	LF	MLCSP	600	40,100.00	80.77	GOOD	YES	NO	DCWD reserve fund
8-A	LF	MLCSP	600	40,100.00	55.96	GOOD	YES	NO	DCWD reserve fund
19-B	MF	MLCSP	600	40,100.00	110.12	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	MF	MLCSP	400	23600	17.76	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	LF	MLCSP	400	23600	63.34	GOOD	YES	NO	DCWD reserve fund
5-A	MF	MLCSP	300	19,100.00	107.30	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	250	17,700.00	158.17	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
BAGO GALLERA	MF	MLCSP	250	17,700.00	64.59	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	MF	MLCSP	250	17,700.00	604.49	GOOD	YES	NO	DCWD reserve fund
DUMOY	LF	MLCSP	400	23600	51.53	GOOD	YES	NO	DCWD reserve fund
DUMOY	LF	MLCSP	400	23600	335.52	GOOD	YES	NO	DCWD reserve fund
DUMOY	LF	MLCSP	400	23600	66.22	GOOD	YES	NO	DCWD reserve fund
DUMOY	HF	MLCSP	400	23600	116.44	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	300	19,100.00	106.54	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	300	19,100.00	90.25	GOOD	YES	NO	DCWD reserve fund
DUMOY	LF	MLCSP	300	19,100.00	529.87	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	300	19,100.00	69.16	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	MF	MLCSP	250	17,700.00	229.30	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	250	17,700.00	3.93	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	PVC	150	11,200.00	53.11	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	PVC	150	11,200.00	15.54	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	PVC	150	11,200.00	2.85	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	800	52,800.00	44.64	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	800	52,800.00	290.13	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	900	56,500.00	214.09	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	900	56,500.00	102.07	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	PVC	150	11,200.00	7.27	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	236.93	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	900	56,500.00	36.87	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	900	56,500.00	96.56	GOOD	YES	NO	DCWD reserve fund
TALOMO	HF	PVC	150	11,200.00	173.39	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	HF	PVC	150	11,200.00	61.88	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	MLCSP	750	48,500.00	18.19	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	750	48,500.00	126.37	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	HF	MLCSP	750	48,500.00	134.30	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	750	48,500.00	146.85	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	MLCSP	750	48,500.00	209.23	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	HF	PVC	150	11,200.00	96.58	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	VHF	PVC	150	11,200.00	38.24	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MATINA APLAYA	VHF	PVC	150	11,200.00	154.20	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	LF	PVC	150	11,200.00	149.77	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	700	44,200.00	51.73	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	700	44,200.00	49.78	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	750	48,500.00	109.99	GOOD	YES	NO	DCWD reserve fund
TALOMO	HF	MLCSP	750	48,500.00	67.50	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	PVC	150	11,200.00	74.05	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	VHF	PVC	150	11,200.00	7.28	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	220.22	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	PVC	150	11,200.00	80.28	GOOD	YES	NO	DCWD reserve fund
TALOMO	VHF	PVC	150	11,200.00	102.64	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	HF	PVC	150	11,200.00	174.49	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	VHF	PVC	150	11,200.00	106.03	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	HF	PVC	150	11,200.00	2.66	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	VHF	MLCSP	750	48,500.00	112.32	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	HF	MLCSP	750	48,500.00	153.34	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	HF	PVC	150	11,200.00	326.59	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	VHF	MLCSP	750	48,500.00	8.67	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	750	48,500.00	1.00	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	250	17,700.00	166.16	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	750	48,500.00	132.25	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	250	17,700.00	62.30	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	MLCSP	250	17,700.00	61.15	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	600	40,100.00	571.17	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	500	33,200.00	134.63	GOOD	YES	NO	DCWD reserve fund
39-D	VHF	MLCSP	300	19,100.00	23.90	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	LF	PVC	150	11,200.00	95.18	GOOD	YES	NO	DCWD reserve fund
8-A	LF	MLCSP	300	19,100.00	6.70	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	300	19,100.00	105.93	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	274.50	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	PVC	150	11,200.00	79.00	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	PVC	150	11,200.00	12.02	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
BUCANA	LF	PVC	150	11,200.00	14.21	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	PVC	150	11,200.00	95.76	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	PVC	150	11,200.00	37.24	GOOD	YES	NO	DCWD reserve fund
7-A	LF	MLCSP	600	40,100.00	59.90	GOOD	YES	NO	DCWD reserve fund
2-A	LF	MLCSP	350	20,800.00	214.03	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	PVC	150	11,200.00	80.03	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	1.01	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	PVC	150	11,200.00	78.94	GOOD	YES	NO	DCWD reserve fund
18-B	MF	PVC	150	11,200.00	175.92	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	MF	MLCSP	400	23600	9.02	GOOD	YES	NO	DCWD reserve fund
15-B	LF	MLCSP	400	23600	28.77	GOOD	YES	NO	DCWD reserve fund
15-B	LF	MLCSP	400	23600	310.31	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	62.93	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	71.10	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	67.73	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	456.04	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	750	48,500.00	424.58	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	700	44,200.00	97.50	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	MLCSP	700	44,200.00	7.40	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	750	48,500.00	68.62	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	750	48,500.00	181.20	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	750	48,500.00	424.59	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	PVC	150	11,200.00	229.10	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	8.13	GOOD	YES	NO	DCWD reserve fund
MA-A	MF	PVC	150	11,200.00	137.90	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	350	20,800.00	13.06	GOOD	YES	NO	DCWD reserve fund
MA-A	HF	MLCSP	300	19,100.00	626.19	GOOD	YES	NO	DCWD reserve fund
MA-A	MF	MLCSP	300	19,100.00	194.93	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	300	19,100.00	188.62	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	300	19,100.00	1.59	GOOD	YES	NO	DCWD reserve fund
17-B	LF	MLCSP	300	19,100.00	13.23	GOOD	YES	NO	DCWD reserve fund
16-B	LF	MLCSP	300	19,100.00	37.68	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
13-B	LF	MLCSP	300	19,100.00	2.10	GOOD	YES	NO	DCWD reserve fund
13-B	LF	MLCSP	300	19,100.00	49.44	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	101.35	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	71.97	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	70.12	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	123.94	GOOD	YES	NO	DCWD reserve fund
BAGO OSHIRO	LF	MLCSP	250	17,700.00	50.04	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	250	17,700.00	10.03	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	70.95	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	75.38	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	74.97	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	62.80	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	74.07	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	65.52	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	76.59	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	96.92	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	200.67	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	62.98	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	169.54	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	56.27	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	64.45	GOOD	YES	NO	DCWD reserve fund
BALIOK	LF	MLCSP	250	17,700.00	92.14	GOOD	YES	NO	DCWD reserve fund
BALIOK	LF	MLCSP	250	17,700.00	347.48	GOOD	YES	NO	DCWD reserve fund
BALIOK	LF	MLCSP	250	17,700.00	10.75	GOOD	YES	NO	DCWD reserve fund
BALIOK	MF	MLCSP	300	19,100.00	14.00	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	32.52	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	36.50	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	HF	PVC	150	11,200.00	116.06	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	MLCSP	750	48,500.00	72.60	GOOD	YES	NO	DCWD reserve fund
TALOMO	HF	MLCSP	750	48,500.00	4.59	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	MLCSP	750	48,500.00	201.95	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	750	48,500.00	19.29	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
13-B	LF	MLCSP	300	19,100.00	2.10	GOOD	YES	NO	DCWD reserve fund
13-B	LF	MLCSP	300	19,100.00	49.44	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	101.35	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	71.97	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	70.12	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	123.94	GOOD	YES	NO	DCWD reserve fund
BAGO OSHIRO	LF	MLCSP	250	17,700.00	50.04	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	250	17,700.00	10.03	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	70.95	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	75.38	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	74.97	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	62.80	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	74.07	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	65.52	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	76.59	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	96.92	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	200.67	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	62.98	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	169.54	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	56.27	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	64.45	GOOD	YES	NO	DCWD reserve fund
BALIOK	LF	MLCSP	250	17,700.00	92.14	GOOD	YES	NO	DCWD reserve fund
BALIOK	LF	MLCSP	250	17,700.00	347.48	GOOD	YES	NO	DCWD reserve fund
BALIOK	LF	MLCSP	250	17,700.00	10.75	GOOD	YES	NO	DCWD reserve fund
BALIOK	MF	MLCSP	300	19,100.00	14.00	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	32.52	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	36.50	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	HF	PVC	150	11,200.00	116.06	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	MLCSP	750	48,500.00	72.60	GOOD	YES	NO	DCWD reserve fund
TALOMO	HF	MLCSP	750	48,500.00	4.59	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	MLCSP	750	48,500.00	201.95	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	750	48,500.00	19.29	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
11-B	LF	PVC	150	11,200.00	13.05	GOOD	YES	NO	DCWD reserve fund
10-A	LF	PVC	150	11,200.00	142.32	GOOD	YES	NO	DCWD reserve fund
11-B	LF	MLCSP	300	19,100.00	54.95	GOOD	YES	NO	DCWD reserve fund
11-B	LF	MLCSP	300	19,100.00	64.27	GOOD	YES	NO	DCWD reserve fund
11-B	LF	MLCSP	300	19,100.00	51.47	GOOD	YES	NO	DCWD reserve fund
7-A	HF	MLCSP	600	40,100.00	57.59	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	VHF	PVC	150	11,200.00	18.95	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	0.87	GOOD	YES	NO	DCWD reserve fund
9-A	LF	MLCSP	600	40,100.00	11.89	GOOD	YES	NO	DCWD reserve fund
7-A	LF	MLCSP	600	40,100.00	47.21	GOOD	YES	NO	DCWD reserve fund
7-A	LF	MLCSP	600	40,100.00	58.15	GOOD	YES	NO	DCWD reserve fund
10-A	LF	PVC	150	11,200.00	47.41	GOOD	YES	NO	DCWD reserve fund
10-A	LF	PVC	150	11,200.00	111.52	GOOD	YES	NO	DCWD reserve fund
9-A	LF	PVC	150	11,200.00	78.36	GOOD	YES	NO	DCWD reserve fund
9-A	LF	PVC	150	11,200.00	46.61	GOOD	YES	NO	DCWD reserve fund
10-A	LF	PVC	150	11,200.00	2.36	GOOD	YES	NO	DCWD reserve fund
9-A	LF	PVC	150	11,200.00	190.27	GOOD	YES	NO	DCWD reserve fund
10-A	LF	PVC	150	11,200.00	9.56	GOOD	YES	NO	DCWD reserve fund
9-A	LF	PVC	150	11,200.00	183.82	GOOD	YES	NO	DCWD reserve fund
7-A	LF	MLCSP	600	40,100.00	150.53	GOOD	YES	NO	DCWD reserve fund
7-A	LF	MLCSP	500	33,200.00	140.13	GOOD	YES	NO	DCWD reserve fund
7-A	LF	MLCSP	600	40,100.00	7.69	GOOD	YES	NO	DCWD reserve fund
6-A	LF	MLCSP	600	40,100.00	80.98	GOOD	YES	NO	DCWD reserve fund
7-A	LF	MLCSP	500	33,200.00	3.52	GOOD	YES	NO	DCWD reserve fund
4-A	LF	MLCSP	500	33,200.00	182.25	GOOD	YES	NO	DCWD reserve fund
6-A	LF	MLCSP	350	20,800.00	1.74	GOOD	YES	NO	DCWD reserve fund
5-A	LF	MLCSP	350	20,800.00	11.53	GOOD	YES	NO	DCWD reserve fund
2-A	HF	MLCSP	350	20,800.00	100.23	GOOD	YES	NO	DCWD reserve fund
TALOMO	HF	MLCSP	900	56,500.00	78.13	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	800	52,800.00	248.74	GOOD	YES	NO	DCWD reserve fund
TALOMO	HF	MLCSP	800	52,800.00	45.84	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	750	48,500.00	79.51	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
WILFREDO AQUINO	VHF	MLCSP	300	19,100.00	234.02	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	VHF	PVC	150	11,200.00	47.99	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	VHF	PVC	150	11,200.00	14.63	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	VHF	PVC	150	11,200.00	38.75	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	LF	PVC	150	11,200.00	87.81	GOOD	YES	NO	DCWD reserve fund
2-A	LF	MLCSP	300	19,100.00	39.19	GOOD	YES	NO	DCWD reserve fund
2-A	LF	MLCSP	350	20,800.00	173.02	GOOD	YES	NO	DCWD reserve fund
TALOMO	VHF	MLCSP	900	56,500.00	73.84	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	LF	PVC	150	11,200.00	28.56	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	PVC	150	11,200.00	109.47	GOOD	YES	NO	DCWD reserve fund
28-C	LF	PVC	150	11,200.00	0.83	GOOD	YES	NO	DCWD reserve fund
24-C	LF	PVC	150	11,200.00	84.43	GOOD	YES	NO	DCWD reserve fund
30-C	LF	MLCSP	400	23600	65.86	GOOD	YES	NO	DCWD reserve fund
32-D	VHF	MLCSP	300	19,100.00	47.65	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	LF	PVC	150	11,200.00	34.89	GOOD	YES	NO	DCWD reserve fund
10-A	LF	MLCSP	300	19,100.00	70.38	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	300	19,100.00	33.13	GOOD	YES	NO	DCWD reserve fund
11-B	LF	PVC	150	11,200.00	12.97	GOOD	YES	NO	DCWD reserve fund
10-A	LF	PVC	150	11,200.00	142.86	GOOD	YES	NO	DCWD reserve fund
8-A	LF	MLCSP	600	40,100.00	274.30	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	MF	MLCSP	250	17,700.00	660.23	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	250	17,700.00	341.35	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	300	19,100.00	30.23	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	300	19,100.00	62.21	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	300	19,100.00	122.33	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	300	19,100.00	331.11	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	250	17,700.00	694.00	GOOD	YES	NO	DCWD reserve fund
26-C	LF	PVC	150	11,200.00	3.71	GOOD	YES	NO	DCWD reserve fund
27-C	LF	PVC	150	11,200.00	155.64	GOOD	YES	NO	DCWD reserve fund
27-C	LF	PVC	150	11,200.00	150.89	GOOD	YES	NO	DCWD reserve fund
TOMAS MONTEVERDE	LF	PVC	150	11,200.00	10.44	GOOD	YES	NO	DCWD reserve fund
TOMAS MONTEVERDE	LF	PVC	150	11,200.00	56.38	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
TOMAS MONTEVERDE	LF	PVC	150	11,200.00	51.40	GOOD	YES	NO	DCWD reserve fund
LEON GARCIA SR.	LF	PVC	150	11,200.00	9.75	GOOD	YES	NO	DCWD reserve fund
32-D	LF	MLCSP	300	19,100.00	118.33	GOOD	YES	NO	DCWD reserve fund
32-D	LF	MLCSP	300	19,100.00	86.96	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	600	40,100.00	148.22	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	600	40,100.00	479.92	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	600	40,100.00	130.39	GOOD	YES	NO	DCWD reserve fund
TOMAS MONTEVERDE	LF	PVC	150	11,200.00	153.26	GOOD	YES	NO	DCWD reserve fund
TOMAS MONTEVERDE	MF	PVC	150	11,200.00	23.81	GOOD	YES	NO	DCWD reserve fund
TOMAS MONTEVERDE	MF	PVC	150	11,200.00	169.10	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	MF	PVC	150	11,200.00	6.83	GOOD	YES	NO	DCWD reserve fund
TOMAS MONTEVERDE	LF	PVC	150	11,200.00	46.10	GOOD	YES	NO	DCWD reserve fund
20-B	LF	PVC	150	11,200.00	52.02	GOOD	YES	NO	DCWD reserve fund
PACIANO BANGOY	LF	PVC	150	11,200.00	12.10	GOOD	YES	NO	DCWD reserve fund
20-B	LF	PVC	150	11,200.00	41.11	GOOD	YES	NO	DCWD reserve fund
PACIANO BANGOY	LF	PVC	150	11,200.00	1.20	GOOD	YES	NO	DCWD reserve fund
18-B	LF	PVC	150	11,200.00	48.43	GOOD	YES	NO	DCWD reserve fund
20-B	LF	PVC	150	11,200.00	1.49	GOOD	YES	NO	DCWD reserve fund
PACIANO BANGOY	LF	PVC	150	11,200.00	5.98	GOOD	YES	NO	DCWD reserve fund
18-B	LF	PVC	150	11,200.00	170.17	GOOD	YES	NO	DCWD reserve fund
18-B	LF	PVC	150	11,200.00	278.99	GOOD	YES	NO	DCWD reserve fund
19-B	LF	PVC	150	11,200.00	2.77	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	HF	MLCSP	300	19,100.00	37.07	GOOD	YES	NO	DCWD reserve fund
2-A	LF	MLCSP	300	19,100.00	71.13	GOOD	YES	NO	DCWD reserve fund
2-A	HF	MLCSP	300	19,100.00	55.93	GOOD	YES	NO	DCWD reserve fund
39-D	LF	MLCSP	300	19,100.00	5.37	GOOD	YES	NO	DCWD reserve fund
DUMOY	LF	MLCSP	600	40,100.00	461.42	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	600	40,100.00	513.65	GOOD	YES	NO	DCWD reserve fund
31-D	LF	MLCSP	300	19,100.00	9.14	GOOD	YES	NO	DCWD reserve fund
37-D	LF	MLCSP	300	19,100.00	63.83	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	250	17,700.00	517.10	GOOD	YES	NO	DCWD reserve fund
9-A	LF	PVC	150	11,200.00	26.58	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
7-A	LF	PVC	150	11,200.00	6.79	GOOD	YES	NO	DCWD reserve fund
9-A	LF	PVC	150	11,200.00	156.68	GOOD	YES	NO	DCWD reserve fund
8-A	LF	MLCSP	600	40,100.00	24.82	GOOD	YES	NO	DCWD reserve fund
9-A	LF	MLCSP	600	40,100.00	258.69	GOOD	YES	NO	DCWD reserve fund
7-A	LF	MLCSP	600	40,100.00	32.72	GOOD	YES	NO	DCWD reserve fund
7-A	LF	MLCSP	600	40,100.00	131.91	GOOD	YES	NO	DCWD reserve fund
7-A	LF	MLCSP	600	40,100.00	78.89	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	750	48,500.00	142.84	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	600	40,100.00	837.34	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	600	40,100.00	169.94	GOOD	YES	NO	DCWD reserve fund
TALOMO	HF	MLCSP	250	17,700.00	85.41	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	300	19,100.00	154.59	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	500	33,200.00	65.78	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	400	23600	47.64	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	400	23600	48.77	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	400	23600	47.27	GOOD	YES	NO	DCWD reserve fund
DUMOY	LF	MLCSP	250	17,700.00	269.22	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	750	48,500.00	457.25	GOOD	YES	NO	DCWD reserve fund
6-A	HF	MLCSP	600	40,100.00	101.25	GOOD	YES	NO	DCWD reserve fund
TALOMO	HF	MLCSP	900	56,500.00	119.84	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	900	56,500.00	10.74	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	900	56,500.00	45.08	GOOD	YES	NO	DCWD reserve fund
8-A	LF	MLCSP	300	19,100.00	56.73	GOOD	YES	NO	DCWD reserve fund
8-A	LF	MLCSP	300	19,100.00	276.02	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	PVC	150	11,200.00	124.24	GOOD	YES	NO	DCWD reserve fund
DUMOY	LF	MLCSP	500	33,200.00	541.27	GOOD	YES	NO	DCWD reserve fund
DUMOY	LF	MLCSP	500	33,200.00	516.11	GOOD	YES	NO	DCWD reserve fund
DUMOY	LF	MLCSP	250	17,700.00	27.30	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	300	19,100.00	39.52	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	VHF	MLCSP	300	19,100.00	42.46	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	VHF	PVC	150	11,200.00	31.66	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	MF	PVC	150	11,200.00	91.74	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
TALOMO	MF	MLCSP	450	24,300.00	8.64	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	450	24,300.00	39.25	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	600	40,100.00	4.63	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	600	40,100.00	41.60	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	400	23600	143.05	GOOD	YES	NO	DCWD reserve fund
5-A	LF	PVC	150	11,200.00	45.76	GOOD	YES	NO	DCWD reserve fund
5-A	LF	PVC	150	11,200.00	115.79	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	PVC	150	11,200.00	360.06	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	PVC	150	11,200.00	61.17	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	13.10	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	PVC	150	11,200.00	1.49	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	358.81	GOOD	YES	NO	DCWD reserve fund
5-A	LF	PVC	150	11,200.00	54.49	GOOD	YES	NO	DCWD reserve fund
5-A	LF	PVC	150	11,200.00	64.49	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	400	23600	167.70	GOOD	YES	NO	DCWD reserve fund
BALIOK	LF	MLCSP	250	17,700.00	510.75	GOOD	YES	NO	DCWD reserve fund
BALIOK	LF	MLCSP	250	17,700.00	67.82	GOOD	YES	NO	DCWD reserve fund
BALIOK	LF	MLCSP	250	17,700.00	317.43	GOOD	YES	NO	DCWD reserve fund
BALIOK	LF	MLCSP	300	19,100.00	520.13	GOOD	YES	NO	DCWD reserve fund
BALIOK	LF	MLCSP	300	19,100.00	345.53	GOOD	YES	NO	DCWD reserve fund
BALIOK	MF	MLCSP	300	19,100.00	398.28	GOOD	YES	NO	DCWD reserve fund
DUMOY	LF	MLCSP	400	23600	315.81	GOOD	YES	NO	DCWD reserve fund
DUMOY	LF	MLCSP	400	23600	272.80	GOOD	YES	NO	DCWD reserve fund
BALIOK	LF	MLCSP	400	23600	15.06	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	MF	MLCSP	350	20,800.00	819.14	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	350	20,800.00	18.62	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	450	24,300.00	861.61	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	450	24,300.00	171.98	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	700	44,200.00	13.77	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	700	44,200.00	219.87	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	700	44,200.00	7.87	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	250	17,700.00	10.74	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
19-B	LF	MLCSP	400	23600	493.70	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	400	23600	82.77	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	MF	MLCSP	250	17,700.00	65.56	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	MF	MLCSP	250	17,700.00	405.51	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	450	24,300.00	423.27	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	MF	MLCSP	250	17,700.00	52.93	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	300	19,100.00	207.43	GOOD	YES	NO	DCWD reserve fund
BAGO OSHIRO	LF	MLCSP	250	17,700.00	607.45	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	250	17,700.00	253.52	GOOD	YES	NO	DCWD reserve fund
BAGO OSHIRO	LF	MLCSP	250	17,700.00	14.98	GOOD	YES	NO	DCWD reserve fund
BAGO OSHIRO	LF	MLCSP	250	17,700.00	13.64	GOOD	YES	NO	DCWD reserve fund
BAGO OSHIRO	LF	MLCSP	250	17,700.00	6.33	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	250	17,700.00	10.28	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	250	17,700.00	12.77	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	250	17,700.00	266.09	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	250	17,700.00	29.66	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	PVC	150	11,200.00	63.07	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	750	48,500.00	22.87	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	750	48,500.00	434.31	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	250	17,700.00	25.07	GOOD	YES	NO	DCWD reserve fund
7-A	LF	MLCSP	600	40,100.00	74.86	GOOD	YES	NO	DCWD reserve fund
5-A	LF	PVC	150	11,200.00	17.24	GOOD	YES	NO	DCWD reserve fund
5-A	LF	PVC	150	11,200.00	21.39	GOOD	YES	NO	DCWD reserve fund
31-D	LF	MLCSP	300	19,100.00	33.02	GOOD	YES	NO	DCWD reserve fund
37-D	LF	MLCSP	300	19,100.00	104.48	GOOD	YES	NO	DCWD reserve fund
31-D	LF	MLCSP	300	19,100.00	12.87	GOOD	YES	NO	DCWD reserve fund
37-D	LF	MLCSP	300	19,100.00	97.71	GOOD	YES	NO	DCWD reserve fund
38-D	LF	MLCSP	300	19,100.00	13.57	GOOD	YES	NO	DCWD reserve fund
37-D	MF	MLCSP	300	19,100.00	227.02	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	MF	MLCSP	300	19,100.00	239.57	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	MF	MLCSP	400	23600	53.67	GOOD	YES	NO	DCWD reserve fund
GOV. VICENTE DUTERTE	MF	MLCSP	400	23600	206.29	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
GOV. VICENTE DUTERTE	LF	MLCSP	400	23600	24.97	GOOD	YES	NO	DCWD reserve fund
GOV. VICENTE DUTERTE	MF	MLCSP	400	23600	91.18	GOOD	YES	NO	DCWD reserve fund
GOV. VICENTE DUTERTE	MF	MLCSP	400	23600	20.82	GOOD	YES	NO	DCWD reserve fund
GOV. VICENTE DUTERTE	LF	MLCSP	400	23600	66.75	GOOD	YES	NO	DCWD reserve fund
GOV. VICENTE DUTERTE	LF	MLCSP	400	23600	124.74	GOOD	YES	NO	DCWD reserve fund
UBALDE	HF	MLCSP	400	23600	173.79	GOOD	YES	NO	DCWD reserve fund
UBALDE	LF	MLCSP	400	23600	8.77	GOOD	YES	NO	DCWD reserve fund
UBALDE	LF	MLCSP	400	23600	12.73	GOOD	YES	NO	DCWD reserve fund
GOV. VICENTE DUTERTE	LF	MLCSP	400	23600	368.65	GOOD	YES	NO	DCWD reserve fund
SAN ANTONIO	LF	MLCSP	400	23600	196.92	GOOD	YES	NO	DCWD reserve fund
UBALDE	HF	MLCSP	400	23600	9.54	GOOD	YES	NO	DCWD reserve fund
LAPU - LAPU	LF	MLCSP	400	23600	77.32	GOOD	YES	NO	DCWD reserve fund
LAPU - LAPU	LF	MLCSP	400	23600	102.74	GOOD	YES	NO	DCWD reserve fund
LAPU - LAPU	LF	MLCSP	400	23600	191.48	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	300	19,100.00	37.02	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	300	19,100.00	39.11	GOOD	YES	NO	DCWD reserve fund
32-D	LF	MLCSP	500	33,200.00	19.37	GOOD	YES	NO	DCWD reserve fund
10-A	LF	MLCSP	500	33,200.00	173.65	GOOD	YES	NO	DCWD reserve fund
4-A	LF	MLCSP	500	33,200.00	147.97	GOOD	YES	NO	DCWD reserve fund
10-A	LF	PVC	150	11,200.00	169.02	GOOD	YES	NO	DCWD reserve fund
4-A	LF	PVC	150	11,200.00	2.89	GOOD	YES	NO	DCWD reserve fund
4-A	LF	MLCSP	500	33,200.00	263.63	GOOD	YES	NO	DCWD reserve fund
4-A	HF	MLCSP	500	33,200.00	36.32	GOOD	YES	NO	DCWD reserve fund
UBALDE	HF	MLCSP	400	23600	56.80	GOOD	YES	NO	DCWD reserve fund
LAPU - LAPU	HF	MLCSP	400	23600	162.28	GOOD	YES	NO	DCWD reserve fund
CENTRO	LF	MLCSP	400	23600	93.79	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	600	40,100.00	265.56	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	600	40,100.00	108.04	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	600	40,100.00	38.19	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	600	40,100.00	67.42	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	PVC	100	11,000.00	11.77	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	750	48,500.00	277.72	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MATINA CROSSING	LF	MLCSP	750	48,500.00	228.64	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	VHF	MLCSP	750	48,500.00	134.23	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	VHF	PVC	150	11,200.00	16.87	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	VHF	PVC	150	11,200.00	32.12	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	VHF	PVC	150	11,200.00	11.21	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	VHF	PVC	150	11,200.00	21.56	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	HF	PVC	150	11,200.00	143.01	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	HF	PVC	150	11,200.00	42.88	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	PVC	150	11,200.00	123.86	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	PVC	150	11,200.00	100.87	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	PVC	150	11,200.00	69.27	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	40.60	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	300	19,100.00	72.23	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	MLCSP	300	19,100.00	76.88	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	44.36	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	122.26	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	PVC	150	11,200.00	66.40	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	VHF	PVC	150	11,200.00	73.05	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	VHF	PVC	150	11,200.00	38.45	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	VHF	PVC	150	11,200.00	42.39	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	VHF	PVC	150	11,200.00	43.58	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	LF	PVC	150	11,200.00	52.77	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	MLCSP	300	19,100.00	115.43	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	LF	PVC	150	11,200.00	72.06	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	250	17,700.00	274.45	GOOD	YES	NO	DCWD reserve fund
SASA	HF	PVC	200	12,500.00	95.78	GOOD	YES	NO	DCWD reserve fund
PAMPANGA	MF	MLCSP	300	19,100.00	5.00	GOOD	YES	NO	DCWD reserve fund
PAMPANGA	MF	MLCSP	300	19,100.00	14.98	GOOD	YES	NO	DCWD reserve fund
PAMPANGA	MF	MLCSP	300	19,100.00	45.71	GOOD	YES	NO	DCWD reserve fund
V. HIZON	MF	MLCSP	250	17,700.00	2.85	GOOD	YES	NO	DCWD reserve fund
PAMPANGA	HF	MLCSP	250	17,700.00	12.43	GOOD	YES	NO	DCWD reserve fund
SASA	HF	MLCSP	250	17,700.00	75.16	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
PAMPANGA	MF	MLCSP	250	17,700.00	13.90	GOOD	YES	NO	DCWD reserve fund
PAMPANGA	HF	MLCSP	250	17,700.00	209.85	GOOD	YES	NO	DCWD reserve fund
SASA	MF	PVC	200	12,500.00	61.06	GOOD	YES	NO	DCWD reserve fund
V. HIZON	MF	MLCSP	250	17,700.00	386.94	GOOD	YES	NO	DCWD reserve fund
PAMPANGA	MF	MLCSP	250	17,700.00	23.61	GOOD	YES	NO	DCWD reserve fund
PAMPANGA	MF	MLCSP	250	17,700.00	23.06	GOOD	YES	NO	DCWD reserve fund
PAMPANGA	LF	MLCSP	300	19,100.00	336.36	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	300	19,100.00	255.78	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	300	19,100.00	12.92	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	300	19,100.00	262.23	GOOD	YES	NO	DCWD reserve fund
MA-A	MF	MLCSP	300	19,100.00	15.65	GOOD	YES	NO	DCWD reserve fund
SASA	HF	MLCSP	250	17,700.00	87.14	GOOD	YES	NO	DCWD reserve fund
MA-A	MF	MLCSP	350	20,800.00	348.23	GOOD	YES	NO	DCWD reserve fund
MA-A	HF	MLCSP	350	20,800.00	137.11	GOOD	YES	NO	DCWD reserve fund
MA-A	HF	MLCSP	800	52,800.00	194.54	GOOD	YES	NO	DCWD reserve fund
MA-A	MF	MLCSP	800	52,800.00	10.29	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	800	52,800.00	12.31	GOOD	YES	NO	DCWD reserve fund
19-B	HF	MLCSP	300	19,100.00	152.65	GOOD	YES	NO	DCWD reserve fund
V. HIZON	HF	MLCSP	250	17,700.00	5.00	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	HF	MLCSP	400	23600	5.59	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	HF	MLCSP	350	20,800.00	5.20	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	LF	MLCSP	600	40,100.00	9.88	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	MF	MLCSP	350	20,800.00	13.07	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	350	20,800.00	489.24	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	MF	MLCSP	350	20,800.00	542.95	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	350	20,800.00	663.83	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	350	20,800.00	177.14	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	350	20,800.00	104.91	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	MF	MLCSP	350	20,800.00	798.81	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	350	20,800.00	505.33	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	350	20,800.00	274.94	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	350	20,800.00	280.59	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
BAGO APLAYA	LF	MLCSP	350	20,800.00	444.08	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	250	17,700.00	14.99	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	MF	MLCSP	350	20,800.00	516.07	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	350	20,800.00	186.97	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	350	20,800.00	177.17	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	350	20,800.00	104.92	GOOD	YES	NO	DCWD reserve fund
11-B	LF	MLCSP	300	19,100.00	60.43	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	600	40,100.00	31.84	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	600	40,100.00	47.85	GOOD	YES	NO	DCWD reserve fund
19-B	VHF	MLCSP	600	40,100.00	78.68	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	600	40,100.00	181.38	GOOD	YES	NO	DCWD reserve fund
19-B	VHF	MLCSP	600	40,100.00	16.18	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	600	40,100.00	229.36	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	500	33,200.00	237.10	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	500	33,200.00	298.45	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	600	40,100.00	93.18	GOOD	YES	NO	DCWD reserve fund
19-B	VHF	MLCSP	600	40,100.00	10.58	GOOD	YES	NO	DCWD reserve fund
19-B	MF	MLCSP	600	40,100.00	191.74	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	300	19,100.00	190.87	GOOD	YES	NO	DCWD reserve fund
16-B	LF	MLCSP	300	19,100.00	13.62	GOOD	YES	NO	DCWD reserve fund
15-B	LF	MLCSP	300	19,100.00	481.76	GOOD	YES	NO	DCWD reserve fund
16-B	LF	MLCSP	300	19,100.00	50.22	GOOD	YES	NO	DCWD reserve fund
16-B	LF	PVC	150	11,200.00	176.25	GOOD	YES	NO	DCWD reserve fund
16-B	LF	PVC	150	11,200.00	174.06	GOOD	YES	NO	DCWD reserve fund
16-B	MF	PVC	150	11,200.00	172.80	GOOD	YES	NO	DCWD reserve fund
PACIANO BANGOY	MF	PVC	150	11,200.00	25.58	GOOD	YES	NO	DCWD reserve fund
PACIANO BANGOY	LF	PVC	150	11,200.00	38.83	GOOD	YES	NO	DCWD reserve fund
PACIANO BANGOY	LF	PVC	150	11,200.00	43.03	GOOD	YES	NO	DCWD reserve fund
PACIANO BANGOY	LF	PVC	150	11,200.00	264.25	GOOD	YES	NO	DCWD reserve fund
16-B	MF	PVC	150	11,200.00	0.97	GOOD	YES	NO	DCWD reserve fund
PACIANO BANGOY	MF	PVC	150	11,200.00	171.17	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	MF	MLCSP	300	19,100.00	3.66	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
AGDAO PROPER	LF	MLCSP	300	19,100.00	111.52	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	300	19,100.00	264.51	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	LF	MLCSP	300	19,100.00	2.32	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	LF	MLCSP	400	23600	98.94	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	LF	MLCSP	400	23600	26.36	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	LF	MLCSP	400	23600	62.10	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	LF	MLCSP	400	23600	116.80	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	400	23600	59.97	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	LF	MLCSP	400	23600	259.39	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	LF	MLCSP	400	23600	256.88	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	LF	MLCSP	400	23600	28.95	GOOD	YES	NO	DCWD reserve fund
5-A	HF	MLCSP	300	19,100.00	115.18	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	37.85	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	107.71	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	140.58	GOOD	YES	NO	DCWD reserve fund
28-C	LF	PVC	150	11,200.00	41.08	GOOD	YES	NO	DCWD reserve fund
30-C	LF	MLCSP	400	23600	85.55	GOOD	YES	NO	DCWD reserve fund
30-C	LF	PVC	150	11,200.00	159.98	GOOD	YES	NO	DCWD reserve fund
14-B	LF	MLCSP	400	23600	71.45	GOOD	YES	NO	DCWD reserve fund
30-C	LF	MLCSP	400	23600	7.64	GOOD	YES	NO	DCWD reserve fund
14-B	MF	MLCSP	400	23600	59.98	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	HF	PVC	200	12,500.00	20.10	GOOD	YES	NO	DCWD reserve fund
40-D	HF	MLCSP	250	17,700.00	283.77	GOOD	YES	NO	DCWD reserve fund
2-A	HF	MLCSP	250	17,700.00	7.32	GOOD	YES	NO	DCWD reserve fund
39-D	LF	MLCSP	250	17,700.00	196.26	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	300	19,100.00	254.95	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	MF	MLCSP	400	23600	38.73	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	MF	PVC	150	11,200.00	15.86	GOOD	YES	NO	DCWD reserve fund
PACIANO BANGOY	MF	PVC	150	11,200.00	5.45	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	HF	MLCSP	400	23600	421.48	GOOD	YES	NO	DCWD reserve fund
MA-A	MF	MLCSP	750	48,500.00	37.27	GOOD	YES	NO	DCWD reserve fund
MA-A	HF	MLCSP	750	48,500.00	126.08	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MA-A	LF	MLCSP	750	48,500.00	16.15	GOOD	YES	NO	DCWD reserve fund
5-A	LF	MLCSP	750	48,500.00	196.61	GOOD	YES	NO	DCWD reserve fund
2-A	VHF	MLCSP	750	48,500.00	2.51	GOOD	YES	NO	DCWD reserve fund
2-A	HF	MLCSP	750	48,500.00	100.64	GOOD	YES	NO	DCWD reserve fund
BUCANA	VHF	MLCSP	750	48,500.00	145.29	GOOD	YES	NO	DCWD reserve fund
BUCANA	HF	MLCSP	750	48,500.00	162.06	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	HF	PVC	150	11,200.00	208.98	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	HF	MLCSP	350	20,800.00	23.71	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	350	20,800.00	206.38	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	350	20,800.00	339.14	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	MF	MLCSP	300	19,100.00	4.41	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	HF	MLCSP	300	19,100.00	8.71	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	VHF	PVC	150	11,200.00	48.42	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	PVC	150	11,200.00	244.32	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	250	17,700.00	349.87	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	HF	MLCSP	250	17,700.00	470.59	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	HF	MLCSP	350	20,800.00	6.12	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	HF	MLCSP	350	20,800.00	15.38	GOOD	YES	NO	DCWD reserve fund
A. ANGLIONGTO	HF	MLCSP	350	20,800.00	13.91	GOOD	YES	NO	DCWD reserve fund
A. ANGLIONGTO	MF	MLCSP	350	20,800.00	7.64	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	350	20,800.00	46.31	GOOD	YES	NO	DCWD reserve fund
MA-A	MF	MLCSP	350	20,800.00	178.52	GOOD	YES	NO	DCWD reserve fund
MA-A	MF	MLCSP	400	23600	40.19	GOOD	YES	NO	DCWD reserve fund
MA-A	MF	MLCSP	450	24,300.00	35.26	GOOD	YES	NO	DCWD reserve fund
MA-A	MF	MLCSP	500	33,200.00	22.76	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	600	40,100.00	105.56	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	600	40,100.00	214.27	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	600	40,100.00	137.98	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	600	40,100.00	132.34	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	300	19,100.00	319.52	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	300	19,100.00	222.17	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	300	19,100.00	118.72	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MA-A	LF	MLCSP	300	19,100.00	44.92	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	PVC	150	11,200.00	33.21	GOOD	YES	NO	DCWD reserve fund
2-A	LF	MLCSP	300	19,100.00	13.62	GOOD	YES	NO	DCWD reserve fund
SASA	LF	MLCSP	250	17,700.00	46.95	GOOD	YES	NO	DCWD reserve fund
PAMPANGA	HF	MLCSP	300	19,100.00	40.83	GOOD	YES	NO	DCWD reserve fund
SASA	HF	MLCSP	250	17,700.00	212.79	GOOD	YES	NO	DCWD reserve fund
SASA	HF	MLCSP	250	17,700.00	61.19	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	HF	MLCSP	600	40,100.00	21.48	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	LF	MLCSP	600	40,100.00	34.67	GOOD	YES	NO	DCWD reserve fund
31-D	LF	MLCSP	300	19,100.00	105.93	GOOD	YES	NO	DCWD reserve fund
31-D	LF	PVC	150	11,200.00	16.42	GOOD	YES	NO	DCWD reserve fund
35-D	HF	PVC	200	12,500.00	10.88	GOOD	YES	NO	DCWD reserve fund
MA-A	HF	MLCSP	800	52,800.00	124.31	GOOD	YES	NO	DCWD reserve fund
MATINA PANGI	MF	MLCSP	800	52,800.00	163.78	GOOD	YES	NO	DCWD reserve fund
MATINA PANGI	MF	MLCSP	800	52,800.00	644.38	GOOD	YES	NO	DCWD reserve fund
MATINA PANGI	HF	MLCSP	800	52,800.00	65.99	GOOD	YES	NO	DCWD reserve fund
MATINA PANGI	MF	MLCSP	800	52,800.00	158.75	GOOD	YES	NO	DCWD reserve fund
MATINA PANGI	HF	MLCSP	800	52,800.00	9.89	GOOD	YES	NO	DCWD reserve fund
MATINA PANGI	MF	MLCSP	800	52,800.00	186.78	GOOD	YES	NO	DCWD reserve fund
MATINA PANGI	LF	MLCSP	800	52,800.00	72.40	GOOD	YES	NO	DCWD reserve fund
18-B	LF	PVC	150	11,200.00	347.83	GOOD	YES	NO	DCWD reserve fund
39-D	LF	MLCSP	300	19,100.00	135.63	GOOD	YES	NO	DCWD reserve fund
38-D	LF	MLCSP	300	19,100.00	7.79	GOOD	YES	NO	DCWD reserve fund
39-D	LF	MLCSP	300	19,100.00	18.93	GOOD	YES	NO	DCWD reserve fund
26-C	LF	PVC	150	11,200.00	156.73	GOOD	YES	NO	DCWD reserve fund
23-C	LF	PVC	150	11,200.00	4.57	GOOD	YES	NO	DCWD reserve fund
26-C	LF	PVC	150	11,200.00	3.84	GOOD	YES	NO	DCWD reserve fund
23-C	LF	PVC	150	11,200.00	3.90	GOOD	YES	NO	DCWD reserve fund
32-D	LF	MLCSP	300	19,100.00	10.20	GOOD	YES	NO	DCWD reserve fund
31-D	LF	MLCSP	300	19,100.00	8.38	GOOD	YES	NO	DCWD reserve fund
31-D	LF	MLCSP	300	19,100.00	150.78	GOOD	YES	NO	DCWD reserve fund
32-D	LF	MLCSP	300	19,100.00	85.03	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
24-C	LF	MLCSP	300	19,100.00	18.13	GOOD	YES	NO	DCWD reserve fund
31-D	LF	MLCSP	300	19,100.00	3.56	GOOD	YES	NO	DCWD reserve fund
27-C	LF	PVC	200	12,500.00	18.97	GOOD	YES	NO	DCWD reserve fund
MA-A	LF	MLCSP	300	19,100.00	193.14	GOOD	YES	NO	DCWD reserve fund
PAMPANGA	LF	MLCSP	300	19,100.00	389.75	GOOD	YES	NO	DCWD reserve fund
PAMPANGA	MF	MLCSP	300	19,100.00	43.80	GOOD	YES	NO	DCWD reserve fund
SASA	LF	MLCSP	300	19,100.00	107.31	GOOD	YES	NO	DCWD reserve fund
12-B	HF	PVC	100	11,000.00	0.78	GOOD	YES	NO	DCWD reserve fund
TALOMO	HF	MLCSP	450	24,300.00	5.47	GOOD	YES	NO	DCWD reserve fund
TALOMO	HF	MLCSP	450	24,300.00	88.89	GOOD	YES	NO	DCWD reserve fund
TALOMO	HF	MLCSP	450	24,300.00	2.35	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	VHF	MLCSP	350	20,800.00	524.62	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	VHF	MLCSP	350	20,800.00	99.60	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	VHF	MLCSP	350	20,800.00	98.18	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	LF	MLCSP	300	19,100.00	665.27	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	HF	MLCSP	350	20,800.00	7.81	GOOD	YES	NO	DCWD reserve fund
TIGATTO	VHF	MLCSP	400	23600	64.00	GOOD	YES	NO	DCWD reserve fund
TIGATTO	HF	MLCSP	400	23600	458.47	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	LF	MLCSP	400	23600	0.36	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	300	19,100.00	14.41	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	250	17,700.00	7.69	GOOD	YES	NO	DCWD reserve fund
DUMOY	LF	MLCSP	250	17,700.00	15.00	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	HF	MLCSP	250	17,700.00	5.64	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	250	17,700.00	28.02	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	250	17,700.00	6.99	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	MF	MLCSP	250	17,700.00	8.63	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	MF	MLCSP	250	17,700.00	11.23	GOOD	YES	NO	DCWD reserve fund
PAMPANGA	HF	MLCSP	300	19,100.00	3.45	GOOD	YES	NO	DCWD reserve fund
LUBOGAN	LF	MLCSP	250	17,700.00	168.90	GOOD	YES	NO	DCWD reserve fund
LUBOGAN	HF	MLCSP	250	17,700.00	257.48	GOOD	YES	NO	DCWD reserve fund
LUBOGAN	HF	MLCSP	250	17,700.00	47.96	GOOD	YES	NO	DCWD reserve fund
LUBOGAN	HF	MLCSP	250	17,700.00	12.19	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
LUBOGAN	HF	MLCSP	250	17,700.00	137.93	GOOD	YES	NO	DCWD reserve fund
LUBOGAN	LF	MLCSP	250	17,700.00	282.38	GOOD	YES	NO	DCWD reserve fund
MALAGOS	LF	MLCSP	250	17,700.00	211.02	GOOD	YES	NO	DCWD reserve fund
MALAGOS	MF	MLCSP	250	17,700.00	136.91	GOOD	YES	NO	DCWD reserve fund
SASA	MF	MLCSP	250	17,700.00	28.84	GOOD	YES	NO	DCWD reserve fund
SASA	MF	MLCSP	250	17,700.00	24.48	GOOD	YES	NO	DCWD reserve fund
SASA	LF	MLCSP	250	17,700.00	96.01	GOOD	YES	NO	DCWD reserve fund
PANACAN	MF	MLCSP	250	17,700.00	152.17	GOOD	YES	NO	DCWD reserve fund
PANACAN	MF	MLCSP	250	17,700.00	3.35	GOOD	YES	NO	DCWD reserve fund
SASA	MF	MLCSP	250	17,700.00	1.65	GOOD	YES	NO	DCWD reserve fund
PANACAN	VHF	MLCSP	250	17,700.00	33.39	GOOD	YES	NO	DCWD reserve fund
PANACAN	MF	MLCSP	250	17,700.00	85.39	GOOD	YES	NO	DCWD reserve fund
PANACAN	HF	MLCSP	250	17,700.00	95.73	GOOD	YES	NO	DCWD reserve fund
PANACAN	HF	MLCSP	250	17,700.00	75.91	GOOD	YES	NO	DCWD reserve fund
PANACAN	LF	MLCSP	250	17,700.00	59.91	GOOD	YES	NO	DCWD reserve fund
CROSSING BAYABAS	LF	MLCSP	250	17,700.00	248.41	GOOD	YES	NO	DCWD reserve fund
CROSSING BAYABAS	LF	MLCSP	250	17,700.00	89.37	GOOD	YES	NO	DCWD reserve fund
CROSSING BAYABAS	LF	MLCSP	250	17,700.00	214.49	GOOD	YES	NO	DCWD reserve fund
CROSSING BAYABAS	LF	MLCSP	250	17,700.00	75.08	GOOD	YES	NO	DCWD reserve fund
CROSSING BAYABAS	LF	MLCSP	250	17,700.00	165.54	GOOD	YES	NO	DCWD reserve fund
CROSSING BAYABAS	LF	MLCSP	250	17,700.00	77.45	GOOD	YES	NO	DCWD reserve fund
LUBOGAN	LF	MLCSP	250	17,700.00	134.04	GOOD	YES	NO	DCWD reserve fund
CROSSING BAYABAS	LF	MLCSP	250	17,700.00	4.80	GOOD	YES	NO	DCWD reserve fund
LUBOGAN	HF	MLCSP	250	17,700.00	227.10	GOOD	YES	NO	DCWD reserve fund
LUBOGAN	LF	MLCSP	250	17,700.00	179.66	GOOD	YES	NO	DCWD reserve fund
LUBOGAN	LF	MLCSP	250	17,700.00	381.43	GOOD	YES	NO	DCWD reserve fund
LUBOGAN	LF	MLCSP	250	17,700.00	535.29	GOOD	YES	NO	DCWD reserve fund
CROSSING BAYABAS	MF	MLCSP	250	17,700.00	127.65	GOOD	YES	NO	DCWD reserve fund
TUGBOK	LF	MLCSP	500	33,200.00	184.44	GOOD	YES	NO	DCWD reserve fund
TUGBOK	HF	MLCSP	500	33,200.00	248.99	GOOD	YES	NO	DCWD reserve fund
TUGBOK	MF	MLCSP	250	17,700.00	79.53	GOOD	YES	NO	DCWD reserve fund
TUGBOK	HF	MLCSP	250	17,700.00	207.01	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MINTAL	HF	MLCSP	350	20,800.00	88.59	GOOD	YES	NO	DCWD reserve fund
MINTAL	VHF	MLCSP	350	20,800.00	24.58	GOOD	YES	NO	DCWD reserve fund
MINTAL	HF	MLCSP	350	20,800.00	22.63	GOOD	YES	NO	DCWD reserve fund
MINTAL	HF	MLCSP	350	20,800.00	159.72	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	MF	MLCSP	350	20,800.00	41.16	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	VHF	MLCSP	350	20,800.00	272.28	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	MF	MLCSP	350	20,800.00	100.91	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	LF	MLCSP	350	20,800.00	88.11	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	LF	MLCSP	350	20,800.00	258.33	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	LF	MLCSP	350	20,800.00	352.63	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	HF	MLCSP	350	20,800.00	14.04	GOOD	YES	NO	DCWD reserve fund
TUGBOK	HF	MLCSP	500	33,200.00	156.72	GOOD	YES	NO	DCWD reserve fund
TUGBOK	VHF	MLCSP	500	33,200.00	505.59	GOOD	YES	NO	DCWD reserve fund
TUGBOK	HF	MLCSP	500	33,200.00	308.15	GOOD	YES	NO	DCWD reserve fund
TUGBOK	LF	MLCSP	500	33,200.00	52.67	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	LF	MLCSP	350	20,800.00	34.73	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	HF	MLCSP	350	20,800.00	12.54	GOOD	YES	NO	DCWD reserve fund
MINTAL	HF	MLCSP	500	33,200.00	545.75	GOOD	YES	NO	DCWD reserve fund
MINTAL	MF	MLCSP	500	33,200.00	10.49	GOOD	YES	NO	DCWD reserve fund
STO. NIÑO	HF	MLCSP	350	20,800.00	163.39	GOOD	YES	NO	DCWD reserve fund
STO. NIÑO	MF	MLCSP	350	20,800.00	279.44	GOOD	YES	NO	DCWD reserve fund
MINTAL	HF	MLCSP	350	20,800.00	91.03	GOOD	YES	NO	DCWD reserve fund
MINTAL	HF	MLCSP	350	20,800.00	540.72	GOOD	YES	NO	DCWD reserve fund
MINTAL	HF	MLCSP	500	33,200.00	11.85	GOOD	YES	NO	DCWD reserve fund
TUGBOK	LF	MLCSP	500	33,200.00	256.82	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	LF	MLCSP	350	20,800.00	178.97	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	MF	MLCSP	350	20,800.00	118.21	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	LF	MLCSP	350	20,800.00	20.49	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	LF	MLCSP	350	20,800.00	201.72	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	HF	MLCSP	350	20,800.00	8.91	GOOD	YES	NO	DCWD reserve fund
TUGBOK	HF	MLCSP	250	17,700.00	79.26	GOOD	YES	NO	DCWD reserve fund
TUGBOK	HF	MLCSP	250	17,700.00	20.77	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
TUGBOK	HF	MLCSP	500	33,200.00	304.69	GOOD	YES	NO	DCWD reserve fund
TUGBOK	MF	MLCSP	500	33,200.00	77.19	GOOD	YES	NO	DCWD reserve fund
TUGBOK	VHF	MLCSP	500	33,200.00	214.48	GOOD	YES	NO	DCWD reserve fund
TUGBOK	VHF	PVC	150	11,200.00	36.45	GOOD	YES	NO	DCWD reserve fund
MINTAL	HF	PVC	200	12,500.00	101.31	GOOD	YES	NO	DCWD reserve fund
MINTAL	HF	PVC	200	12,500.00	310.22	GOOD	YES	NO	DCWD reserve fund
MINTAL	HF	PVC	200	12,500.00	192.23	GOOD	YES	NO	DCWD reserve fund
MINTAL	LF	PVC	200	12,500.00	332.13	GOOD	YES	NO	DCWD reserve fund
STO. NIÑO	MF	PVC	150	11,200.00	7.81	GOOD	YES	NO	DCWD reserve fund
TUGBOK	MF	PVC	150	11,200.00	5.07	GOOD	YES	NO	DCWD reserve fund
TUGBOK	LF	MLCSP	250	17,700.00	5.62	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	LF	MLCSP	450	24,300.00	3.69	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	LF	MLCSP	450	24,300.00	10.88	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	LF	MLCSP	450	24,300.00	12.89	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	LF	MLCSP	450	24,300.00	18.30	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	LF	MLCSP	450	24,300.00	28.48	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	LF	MLCSP	450	24,300.00	247.77	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	LF	MLCSP	450	24,300.00	23.11	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	LF	MLCSP	450	24,300.00	56.36	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	LF	MLCSP	450	24,300.00	61.90	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	LF	MLCSP	450	24,300.00	125.97	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	LF	MLCSP	450	24,300.00	62.79	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	300	19,100.00	190.14	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	300	19,100.00	30.74	GOOD	YES	NO	DCWD reserve fund
TIGATTO	VHF	MLCSP	400	23600	169.84	GOOD	YES	NO	DCWD reserve fund
TIGATTO	HF	MLCSP	400	23600	733.65	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	HF	MLCSP	1000	62,400.00	33.44	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	LF	MLCSP	800	52,800.00	0.06	GOOD	YES	NO	DCWD reserve fund
PANACAN	LF	MLCSP	250	17,700.00	125.58	GOOD	YES	NO	DCWD reserve fund
PANACAN	HF	MLCSP	250	17,700.00	35.82	GOOD	YES	NO	DCWD reserve fund
PANACAN	HF	MLCSP	250	17,700.00	44.03	GOOD	YES	NO	DCWD reserve fund
SASA	LF	MLCSP	300	19,100.00	79.92	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
6-A	LF	MLCSP	600	40,100.00	90.17	GOOD	YES	NO	DCWD reserve fund
5-A	LF	MLCSP	600	40,100.00	9.16	GOOD	YES	NO	DCWD reserve fund
6-A	MF	MLCSP	600	40,100.00	9.89	GOOD	YES	NO	DCWD reserve fund
PAMPANGA	HF	MLCSP	300	19,100.00	18.37	GOOD	YES	NO	DCWD reserve fund
SASA	HF	MLCSP	300	19,100.00	73.23	GOOD	YES	NO	DCWD reserve fund
SASA	HF	MLCSP	300	19,100.00	96.55	GOOD	YES	NO	DCWD reserve fund
PAMPANGA	MF	MLCSP	300	19,100.00	65.98	GOOD	YES	NO	DCWD reserve fund
PAMPANGA	LF	MLCSP	300	19,100.00	210.86	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	450	24,300.00	95.44	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	450	24,300.00	159.31	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	450	24,300.00	226.66	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	450	24,300.00	35.31	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	450	24,300.00	186.83	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	HF	MLCSP	450	24,300.00	62.16	GOOD	YES	NO	DCWD reserve fund
LOS AMIGOS	MF	MLCSP	350	20,800.00	51.37	GOOD	YES	NO	DCWD reserve fund
LOS AMIGOS	LF	MLCSP	350	20,800.00	1,244.28	GOOD	YES	NO	DCWD reserve fund
LOS AMIGOS	LF	MLCSP	350	20,800.00	179.24	GOOD	YES	NO	DCWD reserve fund
BIAO GUIANGA	HF	MLCSP	350	20,800.00	21.19	GOOD	YES	NO	DCWD reserve fund
RIVERSIDE	MF	MLCSP	350	20,800.00	839.64	GOOD	YES	NO	DCWD reserve fund
RIVERSIDE	LF	MLCSP	350	20,800.00	836.24	GOOD	YES	NO	DCWD reserve fund
BIAO GUIANGA	LF	MLCSP	350	20,800.00	1.33	GOOD	YES	NO	DCWD reserve fund
ULA	LF	MLCSP	350	20,800.00	1,517.23	GOOD	YES	NO	DCWD reserve fund
BIAO GUIANGA	LF	MLCSP	350	20,800.00	230.67	GOOD	YES	NO	DCWD reserve fund
ULA	MF	MLCSP	250	17,700.00	1,363.58	GOOD	YES	NO	DCWD reserve fund
ULA	LF	MLCSP	250	17,700.00	214.10	GOOD	YES	NO	DCWD reserve fund
ULA	HF	MLCSP	250	17,700.00	383.69	GOOD	YES	NO	DCWD reserve fund
TACUNAN	MF	MLCSP	250	17,700.00	148.72	GOOD	YES	NO	DCWD reserve fund
TACUNAN	LF	MLCSP	250	17,700.00	324.24	GOOD	YES	NO	DCWD reserve fund
TACUNAN	MF	MLCSP	250	17,700.00	239.96	GOOD	YES	NO	DCWD reserve fund
BIAO ESCUELA	MF	MLCSP	300	19,100.00	3.29	GOOD	YES	NO	DCWD reserve fund
BIAO GUIANGA	LF	MLCSP	300	19,100.00	785.43	GOOD	YES	NO	DCWD reserve fund
BIAO GUIANGA	HF	MLCSP	300	19,100.00	1,037.62	GOOD	YES	NO	DCWD reserve fund

Table LU-6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
BIAO ESCUELA	MF	MLCSP	300	19,100.00	139.87	GOOD	YES	NO	DCWD reserve fund
BIAO ESCUELA	MF	MLCSP	300	19,100.00	956.66	GOOD	YES	NO	DCWD reserve fund
BIAO ESCUELA	MF	MLCSP	300	19,100.00	18.93	GOOD	YES	NO	DCWD reserve fund
BIAO ESCUELA	MF	MLCSP	350	20,800.00	3.96	GOOD	YES	NO	DCWD reserve fund
BIAO ESCUELA	MF	MLCSP	350	20,800.00	19.93	GOOD	YES	NO	DCWD reserve fund
BIAO ESCUELA	HF	MLCSP	350	20,800.00	251.49	GOOD	YES	NO	DCWD reserve fund
MATINA PANGI	MF	MLCSP	250	17,700.00	223.69	GOOD	YES	NO	DCWD reserve fund
MATINA PANGI	MF	MLCSP	250	17,700.00	231.79	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	LF	MLCSP	250	17,700.00	315.15	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	LF	MLCSP	250	17,700.00	447.16	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	LF	MLCSP	350	20,800.00	691.03	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	LF	MLCSP	350	20,800.00	396.19	GOOD	YES	NO	DCWD reserve fund
11-B	LF	MLCSP	300	19,100.00	11.72	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	300	19,100.00	108.19	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	300	19,100.00	45.56	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	LF	MLCSP	350	20,800.00	286.06	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCCSP	600	40,100.00	57.15	GOOD	YES	NO	DCWD reserve fund
19-B	HF	MLCSP	600	40,100.00	26.82	GOOD	YES	NO	DCWD reserve fund
MINTAL	HF	MLCSP	500	33,200.00	34.60	GOOD	YES	NO	DCWD reserve fund
MINTAL	LF	MLCSP	500	33,200.00	11.83	GOOD	YES	NO	DCWD reserve fund
PANACAN	HF	MLCSP	300	19,100.00	0.85	GOOD	YES	NO	DCWD reserve fund
PANACAN	LF	MLCSP	300	19,100.00	67.51	GOOD	YES	NO	DCWD reserve fund
PANACAN	HF	MLCSP	300	19,100.00	23.39	GOOD	YES	NO	DCWD reserve fund
PANACAN	LF	MLCSP	300	19,100.00	279.20	GOOD	YES	NO	DCWD reserve fund
PANACAN	VHF	MLCSP	300	19,100.00	189.45	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	VHF	PVC	150	11,200.00	18.07	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	VHF	PVC	150	11,200.00	24.03	GOOD	YES	NO	DCWD reserve fund
TIGATTO	LF	MLCSP	400	23600	280.80	GOOD	YES	NO	DCWD reserve fund
MANDUG	VHF	MLCSP	300	19,100.00	71.39	GOOD	YES	NO	DCWD reserve fund
TIGATTO	VHF	MLCSP	400	23600	25.15	GOOD	YES	NO	DCWD reserve fund
TIGATTO	VHF	MLCSP	400	23600	52.58	GOOD	YES	NO	DCWD reserve fund
MANDUG	VHF	MLCSP	400	23600	90.74	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MANDUG	LF	MLCSP	400	23600	309.63	GOOD	YES	NO	DCWD reserve fund
MANDUG	VHF	MLCSP	400	23600	555.14	GOOD	YES	NO	DCWD reserve fund
MANDUG	LF	MLCSP	400	23600	92.98	GOOD	YES	NO	DCWD reserve fund
MANDUG	LF	MLCSP	400	23600	637.86	GOOD	YES	NO	DCWD reserve fund
MANDUG	LF	MLCSP	400	23600	35.83	GOOD	YES	NO	DCWD reserve fund
MANDUG	LF	PVC	200	12,500.00	92.57	GOOD	YES	NO	DCWD reserve fund
MANDUG	LF	PVC	200	12,500.00	108.23	GOOD	YES	NO	DCWD reserve fund
MANDUG	LF	MLCSP	400	23600	4.33	GOOD	YES	NO	DCWD reserve fund
MANDUG	LF	MLCSP	400	23600	2.43	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	HF	MLCSP	400	23600	93.70	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	400	23600	45.16	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	400	23600	76.34	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	HF	MLCSP	400	23600	215.61	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	400	23600	163.75	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	HF	MLCSP	400	23600	79.14	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	250	17,700.00	39.30	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	HF	MLCSP	600	40,100.00	83.62	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	600	40,100.00	64.71	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	600	40,100.00	75.18	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	HF	MLCSP	600	40,100.00	228.65	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	MF	MLCSP	600	40,100.00	158.54	GOOD	YES	NO	DCWD reserve fund
BAGO APLAYA	LF	MLCSP	600	40,100.00	76.23	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	MLCSP	250	17,700.00	184.63	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	VHF	MLCSP	250	17,700.00	467.45	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	MF	MLCSP	250	17,700.00	576.96	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	VHF	MLCSP	250	17,700.00	875.00	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	HF	MLCSP	250	17,700.00	45.78	GOOD	YES	NO	DCWD reserve fund
COMMUNAL	HF	MLCSP	350	20,800.00	4.28	GOOD	YES	NO	DCWD reserve fund
COMMUNAL	LF	MLCSP	350	20,800.00	13.89	GOOD	YES	NO	DCWD reserve fund
TUGBOK	LF	MLCSP	250	17,700.00	28.64	GOOD	YES	NO	DCWD reserve fund
20-B	LF	PVC	150	11,200.00	82.14	GOOD	YES	NO	DCWD reserve fund
20-B	LF	PVC	150	11,200.00	41.02	GOOD	YES	NO	DCWD reserve fund
10-A	LF	PVC	150	11,200.00	3.91	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
10-A	LF	PVC	150	11,200.00	58.32	GOOD	YES	NO	DCWD reserve fund
10-A	LF	MLCSP	600	40,100.00	1.33	GOOD	YES	NO	DCWD reserve fund
9-A	LF	MLCSP	600	40,100.00	279.87	GOOD	YES	NO	DCWD reserve fund
8-A	LF	MLCSP	600	40,100.00	3.16	GOOD	YES	NO	DCWD reserve fund
10-A	LF	MLCSP	600	40,100.00	5.93	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	LF	MLCSP	450	24,300.00	49.45	GOOD	YES	NO	DCWD reserve fund
CABANTIAN	HF	MLCSP	450	24,300.00	21.56	GOOD	YES	NO	DCWD reserve fund
TUGBOK	HF	MLCSP	500	33,200.00	786.72	GOOD	YES	NO	DCWD reserve fund
MINTAL	HF	MLCSP	500	33,200.00	103.31	GOOD	YES	NO	DCWD reserve fund
TUGBOK	LF	MLCSP	500	33,200.00	68.54	GOOD	YES	NO	DCWD reserve fund
PANACAN	HF	MLCSP	400	23600	61.10	GOOD	YES	NO	DCWD reserve fund
ILANG	VHF	MLCSP	400	23600	32.40	GOOD	YES	NO	DCWD reserve fund
ILANG	HF	MLCSP	400	23600	19.49	GOOD	YES	NO	DCWD reserve fund
TIBUNGCO	MF	MLCSP	400	23600	25.62	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	MF	MLCSP	350	20,800.00	6.88	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	MF	MLCSP	350	20,800.00	46.53	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	MF	MLCSP	350	20,800.00	47.91	GOOD	YES	NO	DCWD reserve fund
CATALUNAN GRANDE	LF	MLCSP	350	20,800.00	103.67	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	MLCSP	250	17,700.00	277.55	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	LF	MLCSP	250	17,700.00	14.61	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	HF	MLCSP	250	17,700.00	244.28	GOOD	YES	NO	DCWD reserve fund
TUGBOK	HF	MLCSP	250	17,700.00	177.45	GOOD	YES	NO	DCWD reserve fund
TUGBOK	MF	MLCSP	250	17,700.00	630.04	GOOD	YES	NO	DCWD reserve fund
TUGBOK	VHF	MLCSP	250	17,700.00	91.68	GOOD	YES	NO	DCWD reserve fund
CALINAN	HF	PVC	200	12,500.00	47.96	GOOD	YES	NO	DCWD reserve fund
CALINAN	VHF	PVC	200	12,500.00	16.51	GOOD	YES	NO	DCWD reserve fund
CALINAN	HF	PVC	200	12,500.00	79.38	GOOD	YES	NO	DCWD reserve fund
CALINAN	MF	PVC	200	12,500.00	169.11	GOOD	YES	NO	DCWD reserve fund
BANKAS HEIGHTS	LF	MLCSP	250	17,700.00	701.77	GOOD	YES	NO	DCWD reserve fund
BANKAS HEIGHTS	MF	MLCSP	250	17,700.00	21.49	GOOD	YES	NO	DCWD reserve fund
BANKAS HEIGHTS	HF	MLCSP	250	17,700.00	4.69	GOOD	YES	NO	DCWD reserve fund
TIGATTO	VHF	MLCSP	400	23600	368.62	GOOD	YES	NO	DCWD reserve fund
TIGATTO	MF	MLCSP	400	23600	478.61	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MINTAL	HF	MLCSP	250	17,700.00	414.87	GOOD	YES	NO	DCWD reserve fund
MINTAL	HF	MLCSP	250	17,700.00	440.61	GOOD	YES	NO	DCWD reserve fund
MINTAL	LF	MLCSP	250	17,700.00	100.79	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	300	19,100.00	54.26	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	300	19,100.00	59.75	GOOD	YES	NO	DCWD reserve fund
6-A	LF	MLCSP	300	19,100.00	4.05	GOOD	YES	NO	DCWD reserve fund
6-A	MF	MLCSP	300	19,100.00	83.45	GOOD	YES	NO	DCWD reserve fund
BIAO GUIANGA	LF	MLCSP	350	20,800.00	367.36	GOOD	YES	NO	DCWD reserve fund
BIAO GUIANGA	MF	MLCSP	350	20,800.00	1,037.20	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	450	24,300.00	6.06	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	750	48,500.00	150.92	GOOD	YES	NO	DCWD reserve fund
TALOMO	HF	MLCSP	750	48,500.00	277.64	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	750	48,500.00	111.56	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	750	48,500.00	3.04	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	350	20,800.00	39.38	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	350	20,800.00	569.71	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	250	17,700.00	16.21	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	350	20,800.00	5.75	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	350	20,800.00	437.34	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	250	17,700.00	328.00	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	250	17,700.00	0.61	GOOD	YES	NO	DCWD reserve fund
BIAO GUIANGA	HF	MLCSP	350	20,800.00	417.93	GOOD	YES	NO	DCWD reserve fund
BIAO ESCUELA	MF	MLCSP	350	20,800.00	139.93	GOOD	YES	NO	DCWD reserve fund
BIAO ESCUELA	MF	MLCSP	350	20,800.00	625.51	GOOD	YES	NO	DCWD reserve fund
BIAO ESCUELA	LF	MLCSP	350	20,800.00	80.82	GOOD	YES	NO	DCWD reserve fund
PANACAN	HF	MLCSP	300	19,100.00	29.37	GOOD	YES	NO	DCWD reserve fund
PANACAN	LF	MLCSP	300	19,100.00	24.42	GOOD	YES	NO	DCWD reserve fund
PANACAN	LF	MLCSP	300	19,100.00	32.49	GOOD	YES	NO	DCWD reserve fund
CATALUNAN PEQUEÑO	LF	MLCSP	350	20,800.00	3.69	GOOD	YES	NO	DCWD reserve fund
CATALUNAN PEQUEÑO	VHF	MLCSP	350	20,800.00	2.29	GOOD	YES	NO	DCWD reserve fund
MA-A	HF	MLCSP	800	52,800.00	120.09	GOOD	YES	NO	DCWD reserve fund
TIGATTO	VHF	MLCSP	800	52,800.00	83.03	GOOD	YES	NO	DCWD reserve fund
TIGATTO	HF	MLCSP	800	52,800.00	97.57	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
BUHANGIN	VHF	MLCSP	800	52,800.00	34.49	GOOD	YES	NO	DCWD reserve fund
MA-A	MF	MLCSP	800	52,800.00	87.21	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	700	44,200.00	353.39	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	700	44,200.00	92.24	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	700	44,200.00	224.70	GOOD	YES	NO	DCWD reserve fund
CATALUNAN PEQUEÑO	LF	MLCSP	250	17,700.00	3.02	GOOD	YES	NO	DCWD reserve fund
CATALUNAN PEQUEÑO	LF	MLCSP	350	20,800.00	4.83	GOOD	YES	NO	DCWD reserve fund
TALOMO	MF	MLCSP	350	20,800.00	977.52	GOOD	YES	NO	DCWD reserve fund
TALOMO	LF	MLCSP	350	20,800.00	280.51	GOOD	YES	NO	DCWD reserve fund
CATALUNAN PEQUEÑO	LF	MLCSP	350	20,800.00	612.10	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	400	23600	89.17	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	MF	MLCSP	400	23600	245.65	GOOD	YES	NO	DCWD reserve fund
PACIANO BANGOY	MF	PVC	150	11,200.00	71.18	GOOD	YES	NO	DCWD reserve fund
PACIANO BANGOY	MF	PVC	150	11,200.00	2.02	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	MF	MLCSP	400	23600	24.87	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	LF	MLCSP	400	23600	5.86	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	400	23600	11.28	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	400	23600	1.02	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	600	40,100.00	6.23	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	600	40,100.00	109.57	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	600	40,100.00	99.14	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	600	40,100.00	25.86	GOOD	YES	NO	DCWD reserve fund
19-B	LF	MLCSP	600	40,100.00	169.37	GOOD	YES	NO	DCWD reserve fund
19-B	HF	MLCSP	600	40,100.00	0.36	GOOD	YES	NO	DCWD reserve fund
BUHANGIN	MF	MLCSP	1000	62,400.00	30.90	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	MF	MLCSP	250	17,700.00	341.23	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	LF	MLCSP	250	17,700.00	44.03	GOOD	YES	NO	DCWD reserve fund
MATINA APLAYA	LF	MLCSP	250	17,700.00	222.86	GOOD	YES	NO	DCWD reserve fund
BUCANA	LF	MLCSP	250	17,700.00	434.23	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	LF	PVC	150	11,200.00	55.96	GOOD	YES	NO	DCWD reserve fund
PACIANO BANGOY	LF	PVC	150	11,200.00	8.86	GOOD	YES	NO	DCWD reserve fund
AGDAO PROPER	LF	PVC	150	11,200.00	37.93	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					LENGTH	SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST		EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
15-B	LF	PVC	150	11,200.00	19.13	GOOD	YES	NO	DCWD reserve fund
STO. NIÑO	LF	MLCSP	350	20,800.00	11.33	GOOD	YES	NO	DCWD reserve fund
CATALUNAN PEQUEÑO	LF	MLCSP	350	20,800.00	868.65	GOOD	YES	NO	DCWD reserve fund
STO. NIÑO	VHF	MLCSP	350	20,800.00	520.74	GOOD	YES	NO	DCWD reserve fund
LOS AMIGOS	VHF	MLCSP	250	17,700.00	8.80	GOOD	YES	NO	DCWD reserve fund
LOS AMIGOS	VHF	MLCSP	250	17,700.00	2.67	GOOD	YES	NO	DCWD reserve fund
LOS AMIGOS	HF	MLCSP	250	17,700.00	2.22	GOOD	YES	NO	DCWD reserve fund
LOS AMIGOS	MF	MLCSP	250	17,700.00	260.44	GOOD	YES	NO	DCWD reserve fund
LOS AMIGOS	VHF	MLCSP	250	17,700.00	2.08	GOOD	YES	NO	DCWD reserve fund
LOS AMIGOS	MF	MLCSP	250	17,700.00	553.20	GOOD	YES	NO	DCWD reserve fund
LOS AMIGOS	MF	MLCSP	250	17,700.00	359.81	GOOD	YES	NO	DCWD reserve fund
LOS AMIGOS	LF	MLCSP	250	17,700.00	16.73	GOOD	YES	NO	DCWD reserve fund
BAGO OSHIRO	LF	MLCSP	250	17,700.00	0.05	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	LF	MLCSP	250	17,700.00	0.05	GOOD	YES	NO	DCWD reserve fund
BAGO OSHIRO	LF	MLCSP	250	17,700.00	0.03	GOOD	YES	NO	DCWD reserve fund
BAGO GALLERA	HF	MLCSP	250	17,700.00	0.03	GOOD	YES	NO	DCWD reserve fund
39-D	LF	MLCSP	300	19,100.00	0.51	GOOD	YES	NO	DCWD reserve fund
39-D	MF	MLCSP	300	19,100.00	0.51	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	LF	MLCSP	300	19,100.00	0.37	GOOD	YES	NO	DCWD reserve fund
WILFREDO AQUINO	HF	MLCSP	300	19,100.00	0.37	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	VHF	PVC	150	11,200.00	0.41	GOOD	YES	NO	DCWD reserve fund
MATINA CROSSING	MF	PVC	150	11,200.00	0.41	GOOD	YES	NO	DCWD reserve fund
GOV. VICENTE DUTERTE	LF	MLCSP	400	23600	0.31	GOOD	YES	NO	DCWD reserve fund
GOV. VICENTE DUTERTE	HF	MLCSP	400	23600	0.31	GOOD	YES	NO	DCWD reserve fund
LAPU - LAPU	LF	MLCSP	400	23600	0.29	GOOD	YES	NO	DCWD reserve fund
LAPU - LAPU	LF	MLCSP	400	23600	0.29	GOOD	YES	NO	DCWD reserve fund
2-A	VHF	MLCSP	750	48,500.00	0.06	GOOD	YES	NO	DCWD reserve fund
2-A	HF	MLCSP	750	48,500.00	0.06	GOOD	YES	NO	DCWD reserve fund
TACUNAN	MF	MLCSP	250	17,700.00	1.87	GOOD	YES	NO	DCWD reserve fund
TACUNAN	HF	MLCSP	250	17,700.00	1.87	GOOD	YES	NO	DCWD reserve fund

Table LU– 6. Lifeline Utilities Level III Water System Exposure Database Table for Flood, Davao City

EXPOSURE					SENSITIVITY			ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBLITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
PANACAN	LF	MLCSP	300	19,100.00	1.22	GOOD	YES	NO	DCWD reserve fund
PANACAN	VHF	MLCSP	300	19,100.00	1.22	GOOD	YES	NO	DCWD reserve fund
MANDUG	VHF	MLCSP	400	23600	2.89	GOOD	YES	NO	DCWD reserve fund
MANDUG	HF	MLCSP	400	23600	2.89	GOOD	YES	NO	DCWD reserve fund
COMMUNAL	HF	MLCSP	350	20,800.00	26.77	GOOD	YES	NO	DCWD reserve fund
COMMUNAL	HF	MLCSP	350	20,800.00	26.77	GOOD	YES	NO	DCWD reserve fund
COMMUNAL	HF	MLCSP	350	20,800.00	33.32	GOOD	YES	NO	DCWD reserve fund
COMMUNAL		MLCSP	350	20,800.00	33.32	GOOD	YES	NO	DCWD reserve fund

Exposure Database for DCWD Production Wells

DCWD has a total of 66 wells susceptible to flood, of which, six (6) vertical turbine wells are highly susceptible to flood. These wells are found in Kilometer 7, Talomo Sump Bangkal, and Barangay Talomo, Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya, Catotal Subdivision near Block 22, Brgy. Bago Aplaya, Mangahan Bridge Alambre, Toril, Tugbok Quarry, Along Davao Bukidnon Road, Brgy. Tugbok, and Los Amigos. Each has a replacement cost of ₱6,500,000. Based on DCWD, these wells are in good condition. As to hazard resistant design, these wells also designed to withstand hazards. On the other hand, as to insurance coverage, there is none, however for the available government resources, the DCWD will allot 3% of their annual sales for the maintenance of the wells.

Table LU- 1A7. Lifeline Utilities Level III DCWD Production Wells Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
LOCATION	FLOOD	PUMP TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Km. 7, Talomo Sump Bangkal, Brgy. Talomo	HF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Benedictine Sisters Road, Brgy. Talomo	LF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
UUHSA, Brgy. Talomo	MF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Km. 8 Ulas, Brgy. Talomo	MF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Puan Junction, Brgy. Talomo	MF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund

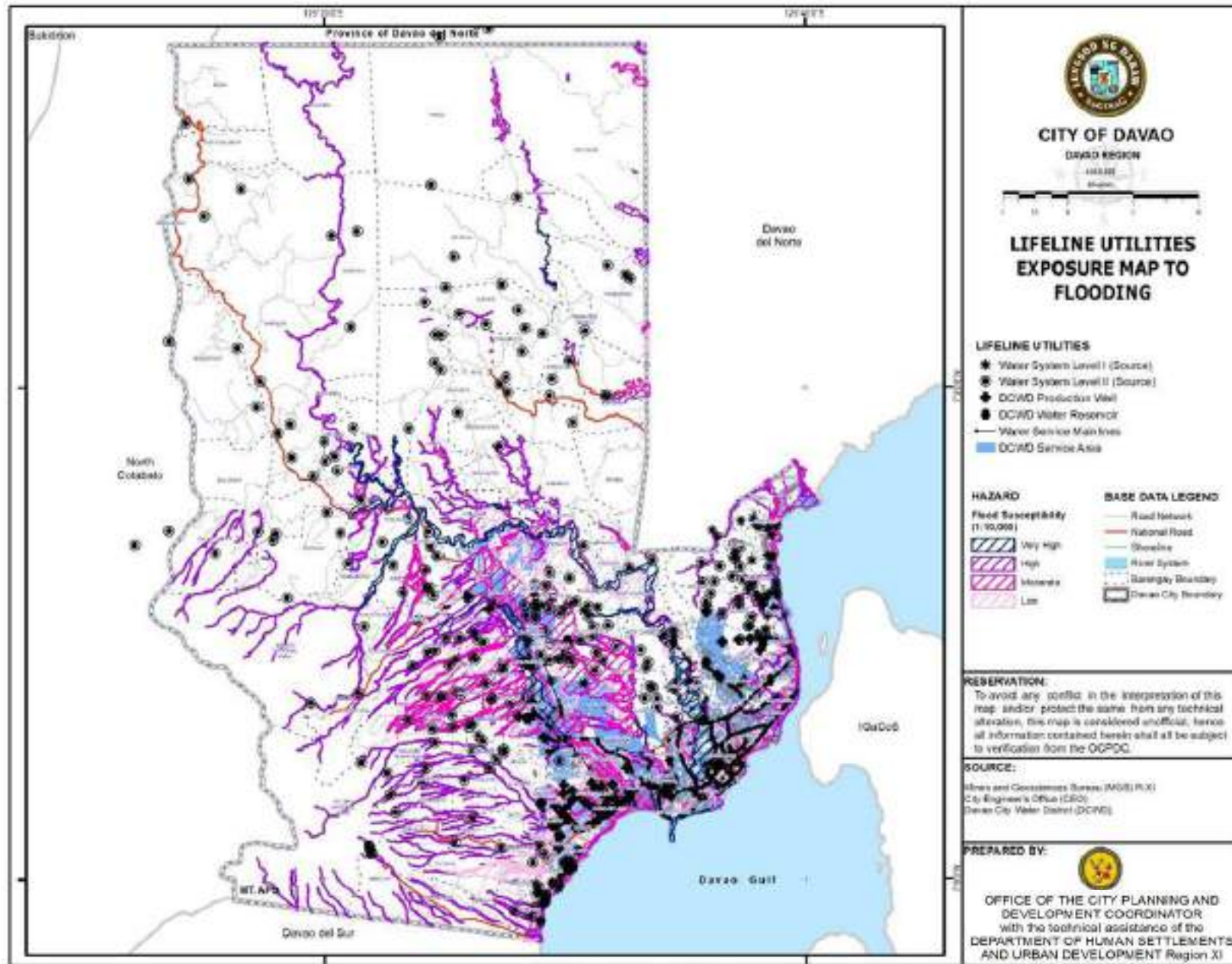
Table LU- 7. Lifeline Utilities Level III DCWD Production Wells Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
LOCATION	FLOOD	PUMP TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Lower Rapnaga, Puan, Brgy. Bago Aplaya	LF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Lower Rapnaga, Puan, Brgy. Bago Aplaya	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Lower Rapnaga, Puan, Brgy. Bago Aplaya	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Crossing Bago Aplaya, Brgy. Bago Aplaya	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Km. 10 Bago Aplaya fronting Ideal Subdivision, Brgy. Bago Aplaya	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	HF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Km. 11 Dumoy near the entrance to Dusnai, Brgy. Dumoy	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Bago Gallera Road near Gallera De Oro Subd., Brgy. Bago Gallera	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Km. 9, Puan along Davao Cotabato Road Brgy. Bago Aplaya	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Along Bago Gallera Road in front of Mega Homes, Brgy. Bago Gallera	LF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Catotal Subdivision near Block 22, Brgy. Bago Aplaya	HF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Gallera de Oro Subdivision near Block 8, Brgy. Bago Aplaya	MF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Along Libby Road, Purok 1, Brgy. Baliok	LF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Libby Road, near Davao New Town Relocation, Brgy. Bago Gallera	LF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Sitio Saka, Brgy. Bago Oshiro	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Sitio Nalum, Along Libby Road, Brgy. Bago Oshiro	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Susana Homes near Block 11, Brgy. Baliok	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Bacanaya Compound, Brgy. Catalanun Peque?o	LF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Purok 6, Brgy. Baliok	MF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Brgy. Baliok, Davao City		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Dacoville Subd., Brgy. Dumoy	LF		6,500,000.00	GOOD	YES	NO	DCWD fund
Rasay St., Brgy. Toril	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Purok Pagkakaisa, Brgy. Lubogan	LF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Mangahan Bridge Alambre, Toril	HF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Bangcas Heights Lubogan, Toril	MF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Purok 1 Communal, Brgy. Communal		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Cabantian Road, Brgy. Cabantian		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Nagkahiusa Village, Brgy. Indangan		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Malagamot Road, Brgy. Indangan		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Davao Molave Homes, Brgy. Indangan		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Purok 27, Malagamot, Brgy. Panacan		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund

Table LU- 7. Lifeline Utilities Level III DCWD Production Wells Exposure Database for Flood, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
LOCATION	FLOOD	PUMP TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Purok 6, Sta Cruz Bago Gallera Road fronting Spring Valley, Brgy. Bago Gallera	MF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Reldo Village, Acacia St., Brgy. Bago Gallera	MF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Along Apo Golf Road, Brgy. Bago Aplaya	MF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Along Libby Road infront of San Lorenzo Village, Brgy. Bago Gallera	MF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Entrance of Toscana Solariega, Brgy. Bago Gallera	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Toscana Solariega near Block 11, Brgy. Bago Gallera	LF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Libby Road, near Adciville Subdivision, Bago Gallera	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Farland Extension near Block 2, Brgy. Dumoy	MF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Along Iwha Road, Brgy. Baliok	LF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Along Iwha Road, Brgy. Baliok	LF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Along Bago Gallera Road, Purok 3 , Brgy. Bago Gallera	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
BAGASA Village, Libby Road, Brgy. Bago Gallera	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Entrance to Greenland Subdivision, along Davao Cotabato Road, Brgy. Dumoy	LF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Purok 24, Malagamot, Brgy. Panacan		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Purok 24, Malagamot, Brgy. Panacan		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Malagamot Road, Panacan		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Tibungco Relocation, Brgy. Tibungco		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Sitio Mahayahay, Brgy. Tugbok	LF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Sitio Mahayahay, Brgy. Tugbok	MF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Sitio Mahayahay, Brgy. Tugbok	MF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
New Loon, Brgy. Mintal		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Tugbok Quarry, Along Davao Bukidnon Road, Brgy. Tugbok	HF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Sitio Basak, Brgy. Mintal		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Purok 7, Near PCA, Brgy. Bago Oshiro		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
DCWD Property, Brgy. Catalunan Grande		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Malagos Barangay Road		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Barangay Wangan		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Davao - Bukidnon Road, Upper Riverside	MF	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Los Amigos	VHF	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund

Map 5.3 Lifeline Utilities, Water, Exposure Map to Flooding, Davao City



Exposure Database for Cell sites

Davao City has a total of 129 cell sites susceptible to flood. Out of the total number, four (4) cell sites are highly vulnerable to flood. These are located in Mc Arthur Highway, Brgy. 74-A, Matina Crossing; Magno Property, No. 64 V. Mapa St.; Brgy. 11-B, #88 Maya St.; Brgy. 76-A, Ecoland, Brgy. Bucana. These cell sites occupy an average of 300 square meters each, with replacement cost ranging from ₱12-P15 million. These cell sites are also made of steel and concrete. Hazard resistant design is also employed for each cell site. Moreover, all of the cell sites have no insurance coverage and available government resources.

Table LU- 8. Lifeline Utilities, Cell Sites, Exposure Database for Flood, Davao City

NAME OF CELL SITE	EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
	FLOOD SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
GLOBE TELECOM, INC.	Very High	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Very High	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Very High	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Very High	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Very High	Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS,	Very High	Centerpoint Mall, Brgy. Matina Crossing,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Very High	Peralta Property, Seminary Rd., Brgy Catalunan Grande Talomo District,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Very High	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Mc Arthur Hiway, Brgy. 74-A, Matina Crossing	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-8. Lifeline Utilities, Cell Sites, Exposure Database for Flood, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	FLOOD SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
DIGITEL MOBILE PHILIPPINES, INC.	High	Magno Prop., No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	#88 Maya St., Brgy. 76A, Ecoland, Brgy. Bucana	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Crossing Puan, McArthur Highway, Brgy. Bago Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	PLDT Village, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	PLDT Village, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Ortis Road, Ulas, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Ortis road, Ulas, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Upper Rapnaga, Bago Gallera Talumo Dist.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Purok 16, Sitio Durian, Brgy. Bago Gallera	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Upper Rapnaga, Bago Gallera Talumo Dist.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Sandawa, McArthur Hi-Way, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU- 8. Lifeline Utilities, Cell Sites, Exposure Database for Flood, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	FLOOD SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Moderate	Sandawa, McArthur Hi-Way, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Moderate	Km 12.5, Talomo District, Brgy. Catalunan Pequeño, Davao City, Davao del Sur	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Mac Arthur Highway, Dumoy,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Macapili Subd., Dumoy	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Brgy. Baliok,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Bgy. Baliok	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Along National Highway, Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Along National Highway, Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Barangay Bago Aplaya, Talomo District, Davao City Golf Country Club	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Doña Luisa Subdivision, Phase 2, Brgy. Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Telstar St., GSIS Subdivision, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU- 8. Lifeline Utilities, Cell Sites, Exposure Database for Flood, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	FLOOD SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Low	Barangay Bago Aplaya, Talomo District, Davao City Golf Country Club	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Doña Luisa Subdivision, Phase 2, Brgy. Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Telstar St., GSIS Subdivision, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	SM City Davao Annex Building, Brgy. Bucana	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	SM City Davao Annex Building, Brgy. Bucana,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Vega Property, Cariosa St.cor Balitaw St.,Lanzona Subd.,Matina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Carinosa St., cor. Balitaw St., Lanzona Subd., Matina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Matina Aplaya (near Lanzano Subd.)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Matina Aplaya (near Lanzano Subd.)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	JMS Bldg., #88 Maya Street, Barangay 76A, Ecoland,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU- 8. Lifeline Utilities, Cell Sites, Exposure Database for Flood, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	FLOOD SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Low	University Ave., Juna Subd., Martina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGTEL MOBILE PHILIPPINES, INC.	Low	Abarquez Prop., University Ave., Juna Subd., Martina,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Sto. Niño (Catalunan Pequeño),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Km. 3, Mc Arthur Highway,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Brgy. Bago Gallera Talomo District 1	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGTEL MOBILE PHILIPPINES, INC.	Low	Golden Hardware Bldg.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Golden Hardware Bldg., Km. 5 McArthur Highway, Matina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGTEL MOBILE PHILIPPINES, INC.	Low	NCC Mall Maa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Mac Arthur Highway, Bangkal,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	JVALL Bldg., McArthur Hi-way, (Maa Crossing)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Magallanes St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Luna Bldg., San Pedro corner Quimpo Blvd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	NCCC Mall, Maa,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU- 8. Lifeline Utilities, Cell Sites, Exposure Database for Flood, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	FLOOD SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Low	Matina Hi-way cor. Maa Road	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Luna Bldg., San Pedro cor. Quimpo Blvd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Ponciano Reyes St. (crooked Rd.)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Magno Bldg., Ponciano Reyes St. (crooked rd.),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Bonifacio St., cor M.L. Quezon Blvd	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Seminary Road Catalunan Grande, Talomo Catalunan Grande, Davao City, Davao del Sur	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Seminary Road Catalunan Grande, Talomo	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	109 Piapi, Quezon Blvd,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Santiago's Lot, Brgy. Sasa Buhangin,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Erlinda Reyes Bldg., 19-Piapi Quezon Blvd.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	5/F Gaisano Ilustre St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Ilustre St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	J.S. Gaisano Mall, Ilustre St., cor. Gen. Luna St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	General Malvar St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	D. Ponce St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU- 8. Lifeline Utilities, Cell Sites, Exposure Database for Flood, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	FLOOD SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Low	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Chippens Bldg., 368 Padre Gomez St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Chippens Bldg., 368 Padre Gomez St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Davao Doctors Hospital, Malvar St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Legaspi St. Cor. Bonifacio St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Guardsman AGT Bldg., Nacilla Street, Brgy. Ma-a,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Baguio (Pob.),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Km.12, National Highway, Barangay Catalunan Pequeno,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	PLDT Ponciano, PLDT Bldg., Ponciano St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Km. 12, national Highway, Brgy. Catalunan Pequeno,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Regency Inn, Villa Abrille St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Gov. Sales St., Brgy. 27	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Jose Co Bldg., Gov. Sales St., Brgy. 27,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	NCC Mall Uyanguren	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU- 8. Lifeline Utilities, Cell Sites, Exposure Database for Flood, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	FLOOD SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Low	NCC Mall Unaguren	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGTEL MOBILE PHILIPPINES, INC.	Low	Rizal Memorial College, Lopez Jaena St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	PBCOM Bldg., Monteverde cor. Bangoy St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Rizal Memorial College Cmpd., Lopez Jaena St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Torres St., Brgy. 9-A (Pob.)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	PLDT Post fronting Chimes Store, Sales St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Km 12.5, Talomo Dist Catalunan Pequeño,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Holy Cross College, Sta. Ana Ave. Cor Guerero	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	J.P Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Infront of Luisa Avenue Square Bldg., B. Jacinto Ext. St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	San Pedro Hospital Guzman St., Brgy. Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	San Pedro Hospital, Guzman St., T4Brgy. Gov. Vicente Duterte,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	San Pedro Hospital, Guzman St., Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

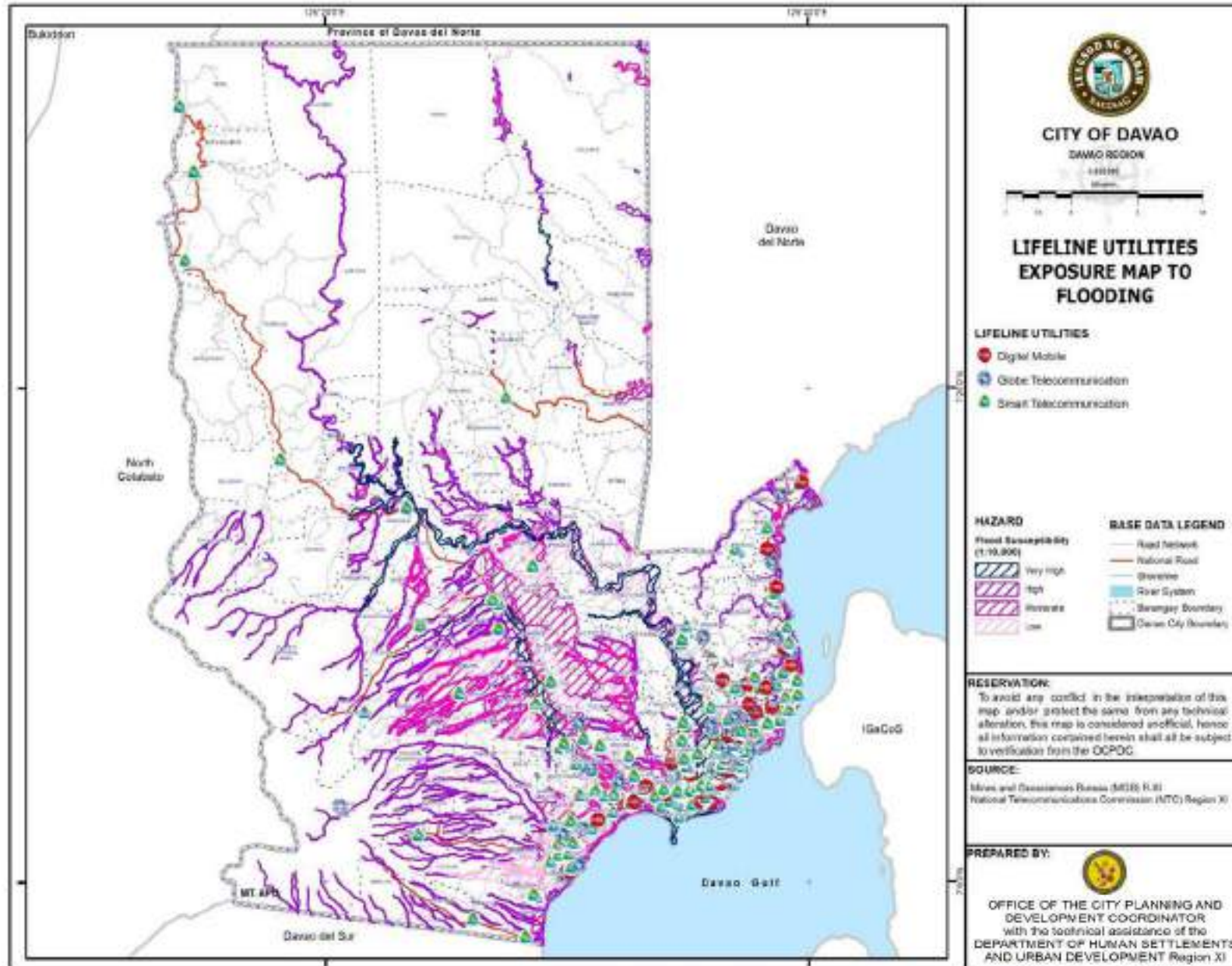
Table LU- 8. Lifeline Utilities, Cell Sites, Exposure Database for Flood, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	FLOOD SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
DIGITEL MOBILE PHILIPPINES, INC.	Low	Lapu Lapu corner Bangoy Sts., Agdao,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Lapu-lapu St., cor. Bangoy Agdao,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Landco Bldg., JP Laurel St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Purok 44, Maranon Compound, Brgy. Maa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Sitio Toril, Catalunan Grande, Talomo District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Corner Palma Gil & Cervantes St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Fr Selga St., Malapo Hill	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Billboard on Synchar Hotel, J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	J.P. Laurel Avenue, Bajada,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	University of Southern Philippines, Trade School Drive	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Circumferencial Road, Barangay 19-B	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Elenita Heights, Catalunan Grande, Talomo	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Opal St., Obrero	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	San Roque Alley, Garcia Heights, Bajada,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Brgy. 20-B Poblacion West,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU- 8. Lifeline Utilities, Cell Sites, Exposure Database for Flood, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	FLOOD SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
GLOBE TELECOM, INC.	Low	Brgy. 20-B Poblacion West,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Abreeza Mall, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Abreeza Mall JP Laurel St., Barangay 20-B (Pob.)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Abreeza Mall JP Laurel St. Acacia,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	JP Laurel St., Barangay 20-B (Pob.),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	J.P. Laurel Ave. Brgy. 20-B Poblacion West, Bajada	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	J.P. Laurel Ave., Brgy. 20-B Poblacion West, Bajada	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	J.P. Laurel Ave., Brgy. 20-B Poblacion West, Bajada	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Facundo, Purok 46, Alvarez Compound, Kapundok, Maa,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Facundo Purok 46 Maa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Rodriguez Prop., Buhangin Rd. cor. Landislaw Rd.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Map 5.4 Lifeline Utilities, Cell Sites, Exposure Map to Flooding, Davao City



Landslide

Exposure Database

A total of eight (8) road networks have high landslide susceptibility. The major road is the Davao Bukidnon Road which has the highest exposed length up to 15.84 kilometers, having a replacement cost of 40,000,000. Aside from the Davao Bukidnon Road, portions of Calinan-Baguio-Cadalian road (0.8466 kilometers), Carlos P. Garcia Highway (4.9353 kilometers), Eden Tagurano Road (0.1042 kilometers), Fatima-Malabog Road (8.8631 kilometers), and Inawayan-Baracatan Road (1.8346 kilometers), Mabuhay Pañalum-Paquibato Road (0.4214 kilometers) and Toril Bayabas-Eden Road (0.8748 kilometers) are highly susceptible to landslide. The highest replacement cost would be the stretch of road in Carlos P. Garcia Highway.

Table LU-9. Lifeline Utilities, Roads, Exposure Database for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Road Name	Hazard Susceptibility	Exposed Length (Kilometers)	Replacement Cost per Linear Kilometer	Surface Type	Existing Condition	Hazard Resistant	Insurance Coverage	Available Government Resources
2nd Avenue	L	0.2056	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
5th Ave.	L	0.2043	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Agdao Flyover	L	0.4734	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Bonifacio Rotonda	L	0.0839	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Buhangin Road	L	1.5150	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Calinan-Baguio-Cadalian Road	H	0.8466	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Calinan-Baguio-Cadalian Road	L	16.6594	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	H	4.9353	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	M	0.6098	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-9. Lifeline Utilities, Roads, Exposure Database for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Road Name	Hazard Susceptibility	Exposed Length (Kilometers)	Replacement Cost per Linear Kilometer	Surface Type	Existing Condition	Hazard Resistant	Insurance Coverage	Available Government Resources
Carlos P. Garcia Highway	L	12.7329	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Claro M. Recto St.	L	1.2152	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Dacudao Avenue	L	1.6653	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	VH	0.1525	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	VH	0.0305	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	VH	0.1078	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	VH	0.1419	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	VH	0.0376	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	VH	0.1442	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	VH	0.0636	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	H	15.1655	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	M	17.5150	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	L	31.0101	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	L	20.4034	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Don Julian Rodriguez Ave. (Maa Road)	L	4.9536	28,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Dumanlas Rd.	L	0.3559	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-9. Lifeline Utilities, Roads, Exposure Database for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Road Name	Hazard Susceptibility	Exposed Length (Kilometers)	Replacement Cost per Linear Kilometer	Surface Type	Existing Condition	Hazard Resistant	Insurance Coverage	Available Government Resources
Eden-Tagurano Road	H	0.1042	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Eden-Tagurano Road	M	0.3792	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Eden-Tagurano Road	L	1.0984	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Fatima-Malabog Road	H	8.8631	54,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Fatima-Malabog Road	M	8.7231	54,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Fatima-Malabog Road	L	0.3998	54,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Florentino Torres St	L	1.6838	65,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Friendship Rd.	L	0.1742	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Inawayan-Baracatan Road	H	1.8346	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Inawayan-Baracatan Road	M	5.2520	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Inawayan-Baracatan Road	L	6.0943	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
J.P. Cabaguio Avenue	L	1.4184	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	L	6.1138	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Leon Garcia St.	L	0.6511	49,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Libby Road	L	6.8076	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Maa Radio Station St.	L	0.4738	28,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-9. Lifeline Utilities, Roads, Exposure Database for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Road Name	Hazard Susceptibility	Exposed Length (Kilometers)	Replacement Cost per Linear Kilometer	Surface Type	Existing Condition	Hazard Resistant	Insurance Coverage	Available Government Resources
Mabuhay-Pañalum-Paquibato Road	H	0.4214	44,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mabuhay-Pañalum-Paquibato Road	M	1.4726	44,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mabuhay-Pañalum-Paquibato Road	L	5.0892	44,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Manggahan St.	L	1.9850	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	L	21.4158	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Old Airport Road	L	1.6949	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Pakiputan Wharf Road	L	0.5062	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Pichon St.	L	0.9460	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quezon Boulevard	L	4.2215	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	L	4.4443	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	L	2.0325	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	L	3.1795	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Ramon Magsaysay Ave.	L	1.3741	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Sta. Ana Ave.	L	1.2910	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Toril-Bayabas-Eden Road	H	0.8748	30,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Toril-Bayabas-Eden Road	M	4.3880	30,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Toril-Bayabas-Eden Road	L	7.3193	30,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Exposure Database for Bridges

Baracatan Bridge and Tagurano Bridge have high landslide susceptibility. The exposed length of Baracatan Bridge is 22.20 meters, while Tagurano Bridge is 12.46 meters. Both Bridges are Bailey bridge. All existing bridges have an estimated replacement cost of Php 1, 200,000.

Baracatan Bridge and Tagurano Bridge have high landslide susceptibility. The exposed length of Baracatan Bridge is 22.20 meters, while Tagurano Bridge is 12.46 meters. Both Bridges are Bailey bridge. All existing bridges have an estimated replacement cost of Php 1, 200,000.

Table LU-10. Lifeline Utilities, Bridges, Exposure Data base for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Road Name	Hazard Susceptibility	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Agdao Flyover	L	382.98	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Angalan Br. I	L	12.10	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Angalan Br. II	L	11.92	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

Table LU-10. Lifeline Utilities, Bridges, Exposure Data base for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Road Name	Hazard Susceptibility	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Angalan Br. III	L	48.88	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Angalan Br. IV	L	15.90	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies. by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Angalan Br. V	L	18.00	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Angalan Br. VI	L	45.00	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

Table LU-10. Lifeline Utilities, Bridges, Exposure Data base for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Road Name	Hazard Susceptibility	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Bago Br.	L	31.21	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Baracatan Br.	H	22.20	1,200,000	Bailey	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Bato Br.	L	20.70	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Bolton Br. 1	L	185.30	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

Table LU-10 Lifeline Utilities, Bridges, Exposure Data base for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Road Name	Hazard Susceptibility	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Bolton Br. 2	L	196.88	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Buhangin Flyover	L	488.07	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Buhangin Underpass	L	23.83	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Bunawan Br. 1	L	49.76	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

Table LU-10. Lifeline Utilities, Bridges, Exposure Data base for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Road Name	Hazard Susceptibility	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Bunawan Br. 2	L	47.79	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Crossing Malabog Br.	M	41.02	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Davao River Br.	L	141.11	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Libby Br.	L	24.69	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

Table LU-10. Lifeline Utilities, Bridges, Exposure Data base for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Road Name	Hazard Susceptibility	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Lipadas Br. I	L	37.80	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Matina Br.	L	38.66	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Generoso Br. 1	L	89.94	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Generoso Br. 2	L	87.60	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

Table LU-10. Lifeline Utilities, Bridges, Exposure Data base for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Road Name	Hazard Susceptibility	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Lipadas Br. I	L	37.80	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Matina Br.	L	38.66	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Generoso Br. 1	L	89.94	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Generoso Br. 2	L	87.60	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

Table LU-10. Lifeline Utilities, Bridges, Exposure Data base for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Road Name	Hazard Susceptibility	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Ilang Br.	L	25.70	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Nalum Br.	L	23.54	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Pagan Pequeño	L	89.93	1,200,000	Steel	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Panacan Br.	L	23.53	1,200,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

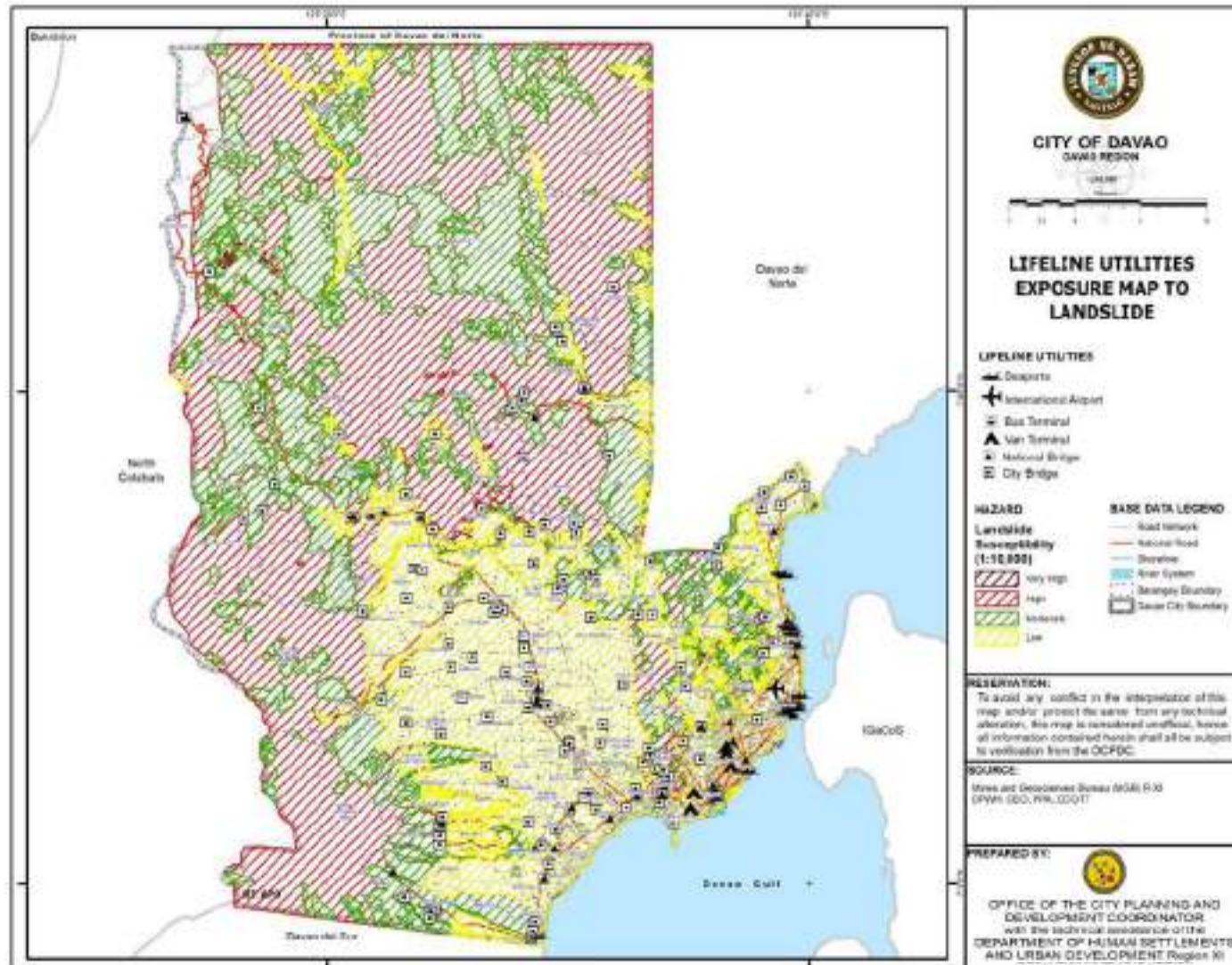
Table LU-10. Lifeline Utilities, Bridges, Exposure Data base for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Road Name	Hazard Susceptibility	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Pañalum Br.	L	96.80	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Pangi Br.	L	121.69	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Piedad Br.	L	47.82	1,200,000	Steel	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.
Sasa Br.	L	18.43	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.

Table LU-10 Lifeline Utilities, Bridges, Exposure Data base for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Road Name	Hazard Susceptibility	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Suawan Br.	L	45.00	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefiting its local constituents but the latter may not be able to pay the additional taxes.
Tagurano Br.	H	12.46	1,200,000	Bailey	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefiting its local constituents but the latter may not be able to pay the additional taxes.
Talomo Br. 1	L	48.10	2,053,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefiting its local constituents but the latter may not be able to pay the additional taxes.
Talomo Br. 2	L	48.11	2,053,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefiting its local constituents but the latter may not be able to pay the additional taxes.
Tamugan Br.	L	104.96	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefiting its local constituents but the latter may not be able to pay the additional taxes.

Map 5.5 Lifeline Utilities, Bridges, Exposure Map to Landslide, Davao City



Exposure Database for Power Substations

Tibungco substation is the only substation which is moderately susceptible to landslide. The remaining substations have low landslide susceptibility. The replacement cost for the substation is 118 million. It is mainly made of concrete and steel materials. It can be noted that all of the power substations have hazard resistant design.

Tibungco substation is the only substation which is moderately susceptible to landslide. The remaining substations have low landslide susceptibility. The replacement cost for the substation is 118 million. It is mainly made of concrete and steel materials. It can be noted that all of the power substations have hazard resistant design.

Table LU– 11. Lifeline Utilities, Power Substations, Exposure Database Table for Landslide, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Power Plant	Landslide Susceptibility	Area Occupied (sq.m)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Tibungco Substation	Moderate	2,626.00	118 Million	a) Perimeter Fence: CHB Fence with top Guard Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: P.U. Panel walls and roof.	a) Operational	b) Earthquake Resistance	a) Industrial All Risk Insurance	NONE
Toril Substation	Low	1,125	125 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Dumoy Substation	Low	1,322	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated.	a) Operational	b) Earthquake Resistance d) Flood Resistance	a) Industrial All Risk Insurance	NONE
Puan Substation	Low	803	85 Million	a) Perimeter Fence : Concrete Fence b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Calinan Substation	Low	1,000.00	140 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; with Roof deck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

Table LU– 11. Lifeline Utilities, Power Substations, Exposure Database Table for Landslide, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Power Plant	Landslide Susceptibility	Area Occupied (sq.m)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Tugbok Substation	Low	1,809.00	130 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside	a) Operational	a) Typhoon Resistance	a) Industrial All Risk Insurance	NONE
Bangkal Substation ¹	Low	1,142.00	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated.	a) Operational	e) Oil Spill Resistance	a) Industrial All Risk Insurance	NONE
Matina Substation	Low	1,000.00	120 Million	a) Perimeter Fence : Concrete Fence (3.0m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded With-in past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Ecoland Substation	Low	1,547.00	120 Million	a) Perimeter Fence: Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated.	a) Operational	b) Earthquake Resistance d) Flood Resistance	a) Industrial All Risk Insurance	NONE
Maa Substation	Low	1,308.00	145 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; with Roof deck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Tibungco Substation	Moderate	2,626.00	118 Million	c) Equipment Support : All Galvanized Steel Structures	b) Last upgraded 10 yrs. ago.	d) Flood Resistance	b) Comprehensive general Liability	NONE

Table LU– 11. Lifeline Utilities, Power Substations, Exposure Database Table for Landslide, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Power Plant	Landslide Susceptibility	Area Occupied (sq.m)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Toril Substation	Low	1,125	125 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Dumoy Substation	Low	1,322	118 Million	a) Perimeter Fence: Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs. ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Tibungco Substation	Moderate	2,626.00	118 Million	a) Perimeter Fence :CHB Fence with top Guard Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: P.U. Panel walls and roof. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs. ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Toril Substation	Low	1,125	125 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated.	a) Operational b) Newly Upgraded a) Operational	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance b) Earthquake Resistance d) Flood Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability a) Industrial All Risk Insurance	NONE
Dumoy Substation	Low	1,322	118 Million	c) Equipment Support : All Galvanized Steel Structures	b) Last upgraded 10 yrs ago.	e) Oil Spill Resistance	b) Comprehensive general Liability	

Table LU– 11. Lifeline Utilities, Power Substations, Exposure Database Table for Landslide, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Power Plant	Landslide Susceptibility	Area Occupied (sq.m)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Puan Substation	Low	803	85 Million	a) Perimeter Fence : Concrete Fence b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Calinan Substation	Low	1,000.00	140 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT)	a) Operational	a) Typhoon Resistance	a) Industrial All Risk Insurance	NONE
Tugbok Substation	Low	1,809.00	130 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside b) Control Building: Repainted Metal Sheet Cladding Wall and Concrete Floor; Repainted Roofing Sheet. c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Bangkal Substation'	Low	1,142.00	85 Million	a) Perimeter Fence: Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs. ago.	e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Matina Substation	Low	1,000.00	120 Million	a) Perimeter Fence : Concrete Fence (3.0m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

Table LU– 11. Lifeline Utilities, Power Substations, Exposure Database Table for Landslide, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Power Plant	Landslide Susceptibility	Area Occupied (sq.m)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Ecoland Substation	Low	1,547.00	120 Million	a) Perimeter Fence: Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs. ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Maa Substation	Low	1,308.00	145 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; with Roof deck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
P.Reyes Substation	Low	825.86	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : Concrete Pole and Steel Beams	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Gaisano Substation	Low	454	85 Million	a) Perimeter Fence: Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational	b) Earthquake Resistance d) Flood Resistance	a) Industrial All Risk Insurance	NONE

Table LU-11. Lifeline Utilities, Power Substations, Exposure Database Table for Landslide, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Power Plant	Landslide Susceptibility	Area Occupied (sq.m)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Sta Ana Substation	Low	607	135 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) & Bended Metal Sheets b) Control Building: Concrete Wall and Floor ; with Roof deck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Victoria Substation	Low	595	120 Million	a) Perimeter Fence : Cydone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Bajada Substation	Low		200 Million	a) Perimeter Fence : Cydone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
ERA Substation	Low	11,926.00	200 Million	a) Perimeter Fence : Cydone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

Table LU-11. Lifeline Utilities, Power Substations, Exposure Database Table for Landslide, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Power Plant	Landslide Susceptibility	Area Occupied (sq.m)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Buhangin Substation	Low	1,712.00	130 Million	a) Perimeter Fence : Concrete High Wall Fence (6.0m HT) b) Control Building: P.U. Panel walls, concrete floors and steel frames ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
R.Castillo Substation	Low	852	125 Million	a) Perimeter Fence : Concrete High Wall Fence (3.5m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Pampanga Substation	Low	1,031.00	118 Million	a) Perimeter Fence: Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized	a) Operational b) Last upgraded 10 yrs. ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Panacan Substation	Low	858	85 Million	a) Perimeter Fence: Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: Concrete wall and Floor, PU Panel Roof. c) Equipment Support :Concrete Pole and	a) Operational b) Last upgraded 10 yrs. ago.	Recommended for relocation or Reconstruction	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

Table LU-11. Lifeline Utilities, Power Substations, Exposure Database Table for Landslide, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Power Plant	Landslide Susceptibility	Area Occupied (sq.m)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Don Ramon Substation	Low	15,540.00	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel Structures	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Bunawan Substation	Low	1,085.00	110 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside b) Control Building: Concrete wall and floor, ; Repainted Roofing Sheet. c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

Table LU-12. Lifeline Utilities, Level I Water Supply, Exposure Database for Landslide, Davao City

BARANGAY	TYPE	REPLACEMENT COST	SENSITIVITY			ADAPTIVE CAPACITY	
			SUSCEPTIIBITY	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
DALIAO	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
DALIAO	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
DALIAO	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
DALIAO	SPRING	41,586.32	M	Fair	None	None	YES. For funding proposal
DALIAO	SPRING	41,586.32	M	Fair	None	None	YES. For funding proposal
DALIAO	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
DALIAO	SPRING	41,586.32	M	Fair	None	None	YES. For funding proposal
DALIAO	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
DALIAO	SPRING	41,586.32	M	Fair	None	None	YES. For funding proposal
DALIAO	SPRING	41,586.32		Fair	None	None	YES. For funding proposal
GATUNGAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
GATUNGAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
ILANG	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
ILANG	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
ILANG	SPRING	41,586.32	M	Fair	None	None	YES. For funding proposal
ILANG	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
ILANG	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
ILANG	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
LIZADA	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
LIZADA	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
LIZADA	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
LIZADA	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
LIZADA	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
LIZADA	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
LIZADA	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
LIZADA	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
LIZADA	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
LUBOGAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
MAHAYAG	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
MAHAYAG	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
MAHAYAG	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
MAHAYAG	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
MANDUG	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal

Table LU-12. Lifeline Utilities, Level I Water Supply, Exposure Database for Landslide, Davao City

BARANGAY	TYPE	REPLACEMENT COST	SENSITIVITY			ADAPTIVE CAPACITY	
			SUSCEPTIIBITY	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
MANDUG	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
MANDUG	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
MUDIANG	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
PANACAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
PANACAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
PANACAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
RIVERSIDE	DEEPWELL	5,500,000	L	Fair	Yes	None but there is 1 month warranty if water pump is installed by supplier.	YES. For funding proposal
SAN ISIDRO	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
SAN ISIDRO	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
SIRAWAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
SIRAWAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
SIRAWAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
SIRAWAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
SIRAWAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
SIRAWAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
SIRAWAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
SIRAWAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
SIRAWAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
SIRAWAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
SIRAWAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
SIRAWAN	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
TALANDANG	DEEPWELL	5,500,000	L	Fair	Yes	None but there is 1 month warranty if water pump is installed by supplier.	YES. For funding proposal
TALANDANG	DEEPWELL	5,500,000	L	Fair	Yes	None but there is 1 month warranty if water pump is installed by supplier.	YES. For funding proposal

Table LU-12. Lifeline Utilities, Level I Water Supply, Exposure Database for Landslide, Davao City

BARANGAY	TYPE	REPLACEMENT COST	SENSITIVITY			ADAPTIVE CAPACITY	
			SUSCEPTIBIITY	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
TALOMO RIVER	DEEPWELL	5,500,000	L	Fair	Yes	None but there is 1 month warranty if water pump is installed by supplier.	YES. For funding proposal
TIBUNGCO	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
TIBUNGCO	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
TIBUNGCO	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
TIBUNGCO	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
TIBUNGCO	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
TIBUNGCO	SPRING	41,586.32	L	Fair	None	None	YES. For funding proposal
ULA	DEEPWELL	5,500,000	L	Fair	Yes	None but there is 1 month warranty if water pump is installed by supplier.	YES. For funding proposal
ULA	DEEPWELL	5,500,000	L	Fair	Yes	None but there is 1 month warranty if water pump is installed by supplier.	YES. For funding proposal
WANGAN	DEEPWELL	5,500,000	L	Fair	Yes	None but there is 1 month warranty if water pump is installed by supplier.	YES. For funding proposal

Exposure Database for Level II Water Supply System

A total of 57 spring sources and 8 wells are highly susceptible to landslide. These sources are located in Acacia, Bantol, Camansi, Carmen, Dalag Lumot, Gatungan, Gumalang, Gumitan, Lampianao, Lumiad, Magsaysay, Malabog, Malamba, Mapula, Marilog, Megkawayan, Mt. Apo National Park, Mudiang, New Carmen, Panalum, Pandaitan, Paquibato, Paraise Embac, Salaysay, Saloy, Sibulan, Suawan, Tambobong, Tapak, Tungkalan.

Table LU-13. Lifeline Utilities, Level I Water Supply, Exposure Database for Landslide, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Toril	BINUGAO	M	2HP	46,600	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Toril	SIRAWAN	M	SPRING	41,586.32	FAIR	NONE	None	YES. For funding proposal
Toril	SIBULAN	H	SPRING	41,586.32	FAIR	NONE	None	YES. For funding proposal
Toril	SIBULAN	H	SPRING	41,586.32	FAIR	NONE	None	YES. For funding proposal
Toril	SIBULAN	H	SPRING	41,586.32	FAIR	NONE	None	YES. For funding proposal
Toril	SIBULAN	H	SPRING	41,586.32	FAIR	NONE	None	YES. For funding proposal
Toril	BAYABAS	M	SPRING	41,586.32	FAIR	NONE	None	YES. For funding proposal
Toril	MT. APO NATIONAL PARK	H	SPRING	41,586.32	FAIR	NONE	None	YES. For funding proposal
Toril	MT. APO NATIONAL PARK	H	SPRING	41,586.32	FAIR	NONE	None	YES. For funding proposal
Toril	MT. APO NATIONAL PARK	H	SPRING	41,586.32	FAIR	NONE	None	YES. For funding proposal
Talomo	MAGTUOD	M	3HP	60,500.00	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Baguio	MT. APO NATIONAL PARK	H	SPRING	41,586.32	FAIR	NONE	None	YES. For funding proposal
Talomo	MAGTUOD	M	3HP	60,500.00	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Baguio	CARMEN	H	SPRING	41,586.32	FAIR	NONE	None	YES. For funding proposal
Talomo	MAGTUOD	M	2HP	46200	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal

Table LU-13. Lifeline Utilities, Level I Water Supply, Exposure Database for Landslide, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	MAGTUOD	M	2HP	46200	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	NEW CARMEN	H	2HP	46200	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	NEW CARMEN	H	3HP	60500	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	NEW CARMEN	M	3HP	60500	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Bunawan	MUDIANG	H	2HP	46200	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Bunawan	MUDIANG	M	2HP	46200	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Buhangin	CALLAWA	M	18GS15	46200	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Marilog	DALAG LUMOT	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Calinan	LAMPIANA	H	2HP	46200	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Marilog	SUAWAN	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	SALAYSAY	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	SUAWAN	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Baguio	GUMALANG	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	SALAYSAY	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	SUAWAN	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal

Table LU-13. Lifeline Utilities ,Level II Water System, Exposure Database for Landslide, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Marilog	MARILOG	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Bunawan	MUDIANG	M	2HP	46200	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Buhangin	ACACIA	M	256S18	46200	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Bunawan	MUDIANG	M	2HP	46200	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Buhangin	ACACIA	M	33GS20	60500	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Marilog	SUAWAN	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	MALAMBA	M	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	MALAMBA	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	MARILOG	M	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	MALAMBA	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Calinan	MEGKAWAYAN	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	BANTOL	M	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	MARILOG	M	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	MALABOG	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	BANTOL	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	MARILOG	M	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	MALABOG	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Calinan	SALOY	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	MAGSAYSAY	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	PAÑALUM	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Buhangin	ACACIA	M	18GS20	46200	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal

Table LU-13. Lifeline Utilities, Level II Water System, Exposure Database for Landslide, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Buhangin	ACACIA	M	3HP	60500	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Buhangin	ACACIA	M	3HP	60500	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Bunawan	TIBUNGCO	M	2HP	46200	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	TALANDANG	M	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	MALABOG	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	MALABOG	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	MARILOG	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	PAÑALUM	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	PAQUIBATO	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	MALABOG	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	MALABOG	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	PAÑALUM	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	PAQUIBATO	M	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	MAGSAYSAY	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	MALABOG	M	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	MALABOG	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	PAQUIBATO	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	PARADISE EMBAC	H	3HP	60500	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Paquibato	LUMIAD	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	GUMITAN	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	LUMIAD	M	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	LUMIAD	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	LUMIAD	M	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal

Table LU-13. Lifeline Utilities, Level II Water System, Exposure Database for Landslide, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Paquibato	LUMIAD	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	LUMIAD	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	LUMIAD	M	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	PANDAITAN	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	PANDAITAN	H	2HP	46200	FAIR	NONE	None, but there is 1 month warranty if the water pump is installed by the supplier	YES. For funding proposal
Paquibato	PANDAITAN	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	MAPULA	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	MARILOG	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	GUMITAN	M	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	MARILOG	M	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	SALAPAWAN	M	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Marilog	MARILOG	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal
Paquibato	TAPAK	H	SPRING	41586.32	FAIR	NONE	None	YES. For funding proposal

Exposure Database for Level III Water Supply System

Barangays 19-B, Buhangin, Catalunan Grande, Langub, Ma-a, Magtuod, Matina Crossing, Matina Pangi, Panacan, Talomo, and Tigatto are among the areas which portions of mainline pipes are highly susceptible to landslide. Buhangin has the longest length of mainlines highly susceptible, with a total length of 1,021 meters.

Barangays 19-B, Buhangin, Catalunan Grande, Langub, Ma-a, Magtuod, Matina Crossing, Matina Pangi, Panacan, Talomo, and Tigatto are among the areas which portions of mainline pipes are highly susceptible to landslide. Buhangin has the longest length of mainlines highly susceptible, with a total length of 1,021 meters.

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

ADMINISTRATIVE DIVISION	BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
		SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Calinan	CALINAN	L	PVC	150	11,200.00	30.35	GOOD	YES	NONE	DCWD reserve fund
Calinan	CALINAN	L	PVC	200	12,500.00	177.15	GOOD	YES	NONE	DCWD reserve fund
Calinan	WANGAN	L	PVC	200	12,500.00	26.05	GOOD	YES	NONE	DCWD reserve fund
Calinan	CALINAN	L	PVC	200	12,500.00	22.81	GOOD	YES	NONE	DCWD reserve fund
Calinan	WANGAN	L	MLCSP	250	17,700.00	64.33	GOOD	YES	NONE	DCWD reserve fund
Baguio	MALAGOS	L	MLCSP	250	17,700.00	9.87	GOOD	YES	NONE	DCWD reserve fund
Calinan	RIVERSIDE	L	MLCSP	250	17,700.00	47.65	GOOD	YES	NONE	DCWD reserve fund
Calinan	RIVERSIDE	L	PVC	150	11,200.00	22.74	GOOD	YES	NONE	DCWD reserve fund
Calinan	CALINAN	L	PVC	200	12,500.00	87.38	GOOD	YES	NONE	DCWD reserve fund
Poblacion	5-A	L	PVC	150	11,200.00	41.07	GOOD	YES	NONE	DCWD reserve fund
Poblacion	5-A	L	MLCSP	300	19,100.00	44.51	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	300	19,100.00	5.99	GOOD	YES	NONE	DCWD reserve fund
Poblacion	6-A	L	MLCSP	300	19,100.00	93.54	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	PVC	150	11,200.00	160.52	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	600	40,100.00	32.69	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	PVC	150	11,200.00	162.51	GOOD	YES	NONE	DCWD reserve fund
Poblacion	12-B	L	PVC	150	11,200.00	365.93	GOOD	YES	NONE	DCWD reserve fund
Poblacion	11-B	L	PVC	150	11,200.00	164.29	GOOD	YES	NONE	DCWD reserve fund
Poblacion	39-D	L	MLCSP	300	19,100.00	156.23	GOOD	YES	NONE	DCWD reserve fund
Poblacion	37-D	L	MLCSP	300	19,100.00	76.08	GOOD	YES	NONE	DCWD reserve fund
Poblacion	32-D	L	MLCSP	300	19,100.00	236.99	GOOD	YES	NONE	DCWD reserve fund
Poblacion	24-C	L	MLCSP	300	19,100.00	2.96	GOOD	YES	NONE	DCWD reserve fund
Poblacion	24-C	L	PVC	150	11,200.00	187.67	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Poblacion	32-D	L	MLCSP	300	19,100.00	222.24	GOOD	YES	NONE	DCWD reserve fund
Poblacion	30-C	L	MLCSP	300	19,100.00	10.29	GOOD	YES	NONE	DCWD reserve fund
Poblacion	11-B	L	MLCSP	300	19,100.00	117.30	GOOD	YES	NONE	DCWD reserve fund
Poblacion	28-C	L	PVC	150	11,200.00	165.94	GOOD	YES	NONE	DCWD reserve fund
Poblacion	28-C	L	PVC	150	11,200.00	164.76	GOOD	YES	NONE	DCWD reserve fund
Poblacion	30-C	L	PVC	150	11,200.00	117.93	GOOD	YES	NONE	DCWD reserve fund
Poblacion	28-C	L	PVC	150	11,200.00	6.71	GOOD	YES	NONE	DCWD reserve fund
Poblacion	32-D	L	MLCSP	300	19,100.00	67.83	GOOD	YES	NONE	DCWD reserve fund
Poblacion	32-D	L	MLCSP	400	23,600.00	31.07	GOOD	YES	NONE	DCWD reserve fund
Poblacion	30-C	L	MLCSP	400	23,600.00	500.92	GOOD	YES	NONE	DCWD reserve fund
Poblacion	12-B	L	MLCSP	400	23,600.00	40.79	GOOD	YES	NONE	DCWD reserve fund
Poblacion	30-C	L	PVC	150	11,200.00	34.82	GOOD	YES	NONE	DCWD reserve fund
Poblacion	11-B	L	MLCSP	300	19,100.00	91.64	GOOD	YES	NONE	DCWD reserve fund
Poblacion	15-B	L	MLCSP	400	23,600.00	8.27	GOOD	YES	NONE	DCWD reserve fund
Poblacion	14-B	L	MLCSP	400	23,600.00	63.08	GOOD	YES	NONE	DCWD reserve fund
Poblacion	30-C	L	MLCSP	400	23,600.00	500.92	GOOD	YES	NONE	DCWD reserve fund
Poblacion	18-B	L	MLCSP	300	19,100.00	194.44	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	300	19,100.00	2.43	GOOD	YES	NONE	DCWD reserve fund
Poblacion	18-B	L	MLCSP	300	19,100.00	3.62	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	300	19,100.00	115.53	GOOD	YES	NONE	DCWD reserve fund
Poblacion	12-B	L	PVC	150	11,200.00	58.01	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	PVC	150	11,200.00	37.77	GOOD	YES	NONE	DCWD reserve fund
Poblacion	18-B	L	MLCSP	300	19,100.00	13.35	GOOD	YES	NONE	DCWD reserve fund
Poblacion	13-B	L	MLCSP	300	19,100.00	42.75	GOOD	YES	NONE	DCWD reserve fund
Agdao	PACIANO BANGOY	L	PVC	150	11,200.00	18.93	GOOD	YES	NONE	DCWD reserve fund
Poblacion	18-B	L	PVC	150	11,200.00	34.32	GOOD	YES	NONE	DCWD reserve fund
Poblacion	18-B	L	PVC	150	11,200.00	10.91	GOOD	YES	NONE	DCWD reserve fund
Poblacion	32-D	L	MLCSP	300	19,100.00	26.31	GOOD	YES	NONE	DCWD reserve fund
Poblacion	30-C	L	MLCSP	300	19,100.00	12.67	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Poblacion	28-C	L	PVC	150	11,200.00	8.52	GOOD	YES	NONE	DCWD reserve fund
Poblacion	28-C	L	PVC	150	11,200.00	110.26	GOOD	YES	NONE	DCWD reserve fund
Poblacion	28-C	L	PVC	150	11,200.00	59.34	GOOD	YES	NONE	DCWD reserve fund
Poblacion	28-C	L	PVC	150	11,200.00	15.83	GOOD	YES	NONE	DCWD reserve fund
Poblacion	28-C	L	PVC	150	11,200.00	54.80	GOOD	YES	NONE	DCWD reserve fund
Poblacion	26-C	L	PVC	150	11,200.00	6.50	GOOD	YES	NONE	DCWD reserve fund
Poblacion	28-C	L	PVC	150	11,200.00	59.36	GOOD	YES	NONE	DCWD reserve fund
Poblacion	30-C	L	PVC	150	11,200.00	114.89	GOOD	YES	NONE	DCWD reserve fund
Poblacion	14-B	L	PVC	150	11,200.00	0.45	GOOD	YES	NONE	DCWD reserve fund
Poblacion	14-B	L	PVC	150	11,200.00	100.83	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	2.87	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	123.65	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	119.84	GOOD	YES	NONE	DCWD reserve fund
Poblacion	15-B	L	MLCSP	400	23,600.00	160.75	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	11.50	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	MLCSP	400	23,600.00	175.51	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	PVC	150	11,200.00	57.96	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	PVC	150	11,200.00	131.04	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	PVC	150	11,200.00	25.00	GOOD	YES	NONE	DCWD reserve fund
Poblacion	15-B	L	PVC	150	11,200.00	39.81	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	49.80	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	51.94	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	111.40	GOOD	YES	NONE	DCWD reserve fund
Agdao	PACIANO BANGOY	L	PVC	150	11,200.00	2.57	GOOD	YES	NONE	DCWD reserve fund
Poblacion	18-B	L	PVC	150	11,200.00	213.68	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	300	19,100.00	52.05	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	300	19,100.00	34.25	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	58.49	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	255.23	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Poblacion	28-C	L	PVC	150	11,200.00	8.52	GOOD	YES	NONE	DCWD reserve fund
Poblacion	28-C	L	PVC	150	11,200.00	110.26	GOOD	YES	NONE	DCWD reserve fund
Poblacion	28-C	L	PVC	150	11,200.00	59.34	GOOD	YES	NONE	DCWD reserve fund
Poblacion	28-C	L	PVC	150	11,200.00	54.80	GOOD	YES	NONE	DCWD reserve fund
Poblacion	26-C	L	PVC	150	11,200.00	6.50	GOOD	YES	NONE	DCWD reserve fund
Poblacion	28-C	L	PVC	150	11,200.00	59.36	GOOD	YES	NONE	DCWD reserve fund
Poblacion	30-C	L	PVC	150	11,200.00	114.89	GOOD	YES	NONE	DCWD reserve fund
Poblacion	14-B	L	PVC	150	11,200.00	0.45	GOOD	YES	NONE	DCWD reserve fund
Poblacion	14-B	L	PVC	150	11,200.00	100.83	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	2.87	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	123.65	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	119.84	GOOD	YES	NONE	DCWD reserve fund
Poblacion	15-B	L	MLCSP	400	23,600.00	160.75	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	11.50	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	MLCSP	400	23,600.00	175.51	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	PVC	150	11,200.00	57.96	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	PVC	150	11,200.00	131.04	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	PVC	150	11,200.00	25.00	GOOD	YES	NONE	DCWD reserve fund
Poblacion	15-B	L	PVC	150	11,200.00	39.81	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	49.80	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	51.94	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	111.40	GOOD	YES	NONE	DCWD reserve fund
Agdao	PACIANO BANGOY	L	PVC	150	11,200.00	2.57	GOOD	YES	NONE	DCWD reserve fund
Poblacion	18-B	L	PVC	150	11,200.00	213.68	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	300	19,100.00	52.05	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	300	19,100.00	34.25	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	58.49	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	255.23	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	54.75	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	69.38	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	67.38	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	72.51	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	8.42	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	67.51	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	69.38	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	246.01	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	2.79	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	73.68	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	8.29	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	300	19,100.00	7.81	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	69.00	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	600	40,100.00	33.04	GOOD	YES	NONE	DCWD reserve fund
Poblacion	11-B	L	MLCSP	300	19,100.00	65.48	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	8.09	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	600	40,100.00	16.56	GOOD	YES	NONE	DCWD reserve fund
Poblacion	9-A	L	MLCSP	600	40,100.00	44.64	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	300	19,100.00	224.13	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	600	40,100.00	49.02	GOOD	YES	NONE	DCWD reserve fund
Poblacion	9-A	L	MLCSP	600	40,100.00	3.21	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	MLCSP	300	19,100.00	30.07	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	300	19,100.00	39.23	GOOD	YES	NONE	DCWD reserve fund
Poblacion	11-B	L	MLCSP	300	19,100.00	50.70	GOOD	YES	NONE	DCWD reserve fund
Poblacion	2-A	L	MLCSP	300	19,100.00	113.84	GOOD	YES	NONE	DCWD reserve fund
Poblacion	6-A	L	MLCSP	300	19,100.00	95.72	GOOD	YES	NONE	DCWD reserve fund
Poblacion	5-A	L	MLCSP	300	19,100.00	133.79	GOOD	YES	NONE	DCWD reserve fund
Poblacion	32-D	L	MLCSP	300	19,100.00	201.85	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	64.28	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	165.53	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Poblacion	19-B	L	MLCSP	300	19,100.00	135.68	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	400	23,600.00	14.20	GOOD	YES	NONE	DCWD reserve fund
Poblacion	5-A	L	PVC	150	11,200.00	171.57	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	300	19,100.00	96.96	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	600	40,100.00	80.77	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	600	40,100.00	55.96	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	110.12	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	MLCSP	400	23,600.00	17.76	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	MLCSP	400	23,600.00	63.34	GOOD	YES	NONE	DCWD reserve fund
Poblacion	5-A	L	MLCSP	300	19,100.00	107.30	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	158.17	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	669.08	GOOD	YES	NONE	DCWD reserve fund
Talomo	DUMOY	L	MLCSP	400	23,600.00	387.05	GOOD	YES	NONE	DCWD reserve fund
Talomo	DUMOY	L	MLCSP	400	23,600.00	66.22	GOOD	YES	NONE	DCWD reserve fund
Talomo	DUMOY	L	MLCSP	400	23,600.00	116.44	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	300	19,100.00	196.79	GOOD	YES	NONE	DCWD reserve fund
Talomo	DUMOY	L	MLCSP	300	19,100.00	529.87	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	300	19,100.00	69.16	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	229.30	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	250	17,700.00	3.93	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	PVC	150	11,200.00	53.11	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	PVC	150	11,200.00	15.54	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	PVC	150	11,200.00	85.92	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	800	52,800.00	414.12	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	900	56,500.00	214.09	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	900	56,500.00	102.07	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	PVC	150	11,200.00	7.27	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	236.93	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	900	56,500.00	36.87	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	TALOMO	L	MLCSP	900	56,500.00	96.56	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	PVC	150	11,200.00	221.03	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	61.88	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	278.85	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	146.85	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	209.23	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	96.58	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	38.24	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	154.20	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	149.77	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	700	44,200.00	101.51	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	750	48,500.00	177.49	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	301.96	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	PVC	150	11,200.00	86.26	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	PVC	150	11,200.00	120.89	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	PVC	150	11,200.00	80.28	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	PVC	150	11,200.00	102.64	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	174.49	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	109.92	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	265.80	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	326.59	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	9.95	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	250	17,700.00	166.16	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	132.25	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	250	17,700.00	62.30	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	250	17,700.00	61.15	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	600	40,100.00	571.17	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	500	33,200.00	134.63	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	900	56,500.00	95.28	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	TALOMO	L	PVC	150	11,200.00	113.38	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	900	56,500.00	165.62	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	900	56,500.00	93.94	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	900	56,500.00	128.39	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	125.17	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	124.31	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	69.95	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	MLCSP	400	23,600.00	90.43	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	554.62	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	250	17,700.00	243.45	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	400	23,600.00	407.29	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	700	44,200.00	235.84	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	301.54	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	500	33,200.00	140.03	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	534.66	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	300	19,100.00	236.16	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	12.39	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	700	44,200.00	21.82	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	750	48,500.00	18.45	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	300	19,100.00	38.97	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	300	19,100.00	379.01	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	46.64	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	17.74	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	202.05	GOOD	YES	NONE	DCWD reserve fund
Poblacion	39-D	L	MLCSP	300	19,100.00	23.90	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	95.18	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	300	19,100.00	6.70	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	300	19,100.00	105.93	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	274.50	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	BUCANA	L	PVC	150	11,200.00	79.00	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	12.02	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	14.21	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	95.76	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	37.24	GOOD	YES	NONE	DCWD reserve fund
Poblacion	7-A	L	MLCSP	600	40,100.00	59.90	GOOD	YES	NONE	DCWD reserve fund
Poblacion	2-A	L	MLCSP	350	20,800.00	214.03	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	80.03	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	1.01	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	78.94	GOOD	YES	NONE	DCWD reserve fund
Poblacion	18-B	L	PVC	150	11,200.00	175.92	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	MLCSP	400	23,600.00	9.02	GOOD	YES	NONE	DCWD reserve fund
Poblacion	15-B	L	MLCSP	400	23,600.00	339.50	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	62.93	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	71.10	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	67.73	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	456.04	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	424.58	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	700	44,200.00	97.50	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	700	44,200.00	7.40	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	750	48,500.00	249.82	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	424.59	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	PVC	150	11,200.00	229.10	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	8.13	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	PVC	150	11,200.00	137.90	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	350	20,800.00	13.06	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	300	19,100.00	626.19	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	300	19,100.00	385.14	GOOD	YES	NONE	DCWD reserve fund
Poblacion	17-B	L	MLCSP	300	19,100.00	13.23	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Poblacion	16-B	L	MLCSP	300	19,100.00	37.68	GOOD	YES	NONE	DCWD reserve fund
Poblacion	13-B	L	MLCSP	300	19,100.00	2.10	GOOD	YES	NONE	DCWD reserve fund
Poblacion	13-B	L	MLCSP	300	19,100.00	49.44	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	101.35	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	71.97	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	70.12	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	123.94	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BAGO OSHIRO	L	MLCSP	250	17,700.00	50.04	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	10.03	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	70.95	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	75.38	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	74.97	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	62.80	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	74.07	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	65.52	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	76.59	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	96.92	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	200.67	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	62.98	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	169.54	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	56.27	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	64.45	GOOD	YES	NONE	DCWD reserve fund
Talomo	BALIOK	L	MLCSP	250	17,700.00	439.62	GOOD	YES	NONE	DCWD reserve fund
Talomo	BALIOK	L	MLCSP	250	17,700.00	10.75	GOOD	YES	NONE	DCWD reserve fund
Talomo	BALIOK	L	MLCSP	300	19,100.00	14.00	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	69.02	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	116.06	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	72.60	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	750	48,500.00	4.59	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	221.24	GOOD	YES	NONE	DCWD reserve fund
Poblacion	11-B	L	PVC	150	11,200.00	13.05	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	PVC	150	11,200.00	142.32	GOOD	YES	NONE	DCWD reserve fund
Poblacion	11-B	L	MLCSP	300	19,100.00	54.95	GOOD	YES	NONE	DCWD reserve fund
Poblacion	11-B	L	MLCSP	300	19,100.00	64.27	GOOD	YES	NONE	DCWD reserve fund
Poblacion	11-B	L	MLCSP	300	19,100.00	51.47	GOOD	YES	NONE	DCWD reserve fund
Poblacion	7-A	L	MLCSP	600	40,100.00	57.59	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	20.09	GOOD	YES	NONE	DCWD reserve fund
Poblacion	9-A	L	MLCSP	600	40,100.00	11.89	GOOD	YES	NONE	DCWD reserve fund
Poblacion	7-A	L	MLCSP	600	40,100.00	47.21	GOOD	YES	NONE	DCWD reserve fund
Poblacion	7-A	L	MLCSP	600	40,100.00	58.15	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	PVC	150	11,200.00	47.41	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	PVC	150	11,200.00	111.52	GOOD	YES	NONE	DCWD reserve fund
Poblacion	9-A	L	PVC	150	11,200.00	78.36	GOOD	YES	NONE	DCWD reserve fund
Poblacion	9-A	L	PVC	150	11,200.00	46.61	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	PVC	150	11,200.00	2.36	GOOD	YES	NONE	DCWD reserve fund
Poblacion	9-A	L	PVC	150	11,200.00	190.27	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	PVC	150	11,200.00	9.56	GOOD	YES	NONE	DCWD reserve fund
Poblacion	9-A	L	PVC	150	11,200.00	183.82	GOOD	YES	NONE	DCWD reserve fund
Poblacion	7-A	L	MLCSP	600	40,100.00	150.53	GOOD	YES	NONE	DCWD reserve fund
Poblacion	7-A	L	MLCSP	500	33,200.00	140.13	GOOD	YES	NONE	DCWD reserve fund
Poblacion	7-A	L	MLCSP	600	40,100.00	7.69	GOOD	YES	NONE	DCWD reserve fund
Poblacion	6-A	L	MLCSP	600	40,100.00	80.98	GOOD	YES	NONE	DCWD reserve fund
Poblacion	7-A	L	MLCSP	500	33,200.00	3.52	GOOD	YES	NONE	DCWD reserve fund
Poblacion	4-A	L	MLCSP	500	33,200.00	182.25	GOOD	YES	NONE	DCWD reserve fund
Poblacion	6-A	L	MLCSP	350	20,800.00	1.74	GOOD	YES	NONE	DCWD reserve fund
Poblacion	5-A	L	MLCSP	350	20,800.00	11.53	GOOD	YES	NONE	DCWD reserve fund
Poblacion	2-A	L	MLCSP	350	20,800.00	100.23	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	900	56,500.00	78.13	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	TALOMO	L	MLCSP	800	52,800.00	294.59	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	750	48,500.00	79.51	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	234.02	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	47.99	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	14.63	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	38.75	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	87.81	GOOD	YES	NONE	DCWD reserve fund
Poblacion	2-A	L	MLCSP	300	19,100.00	39.19	GOOD	YES	NONE	DCWD reserve fund
Poblacion	2-A	L	MLCSP	350	20,800.00	173.02	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	900	56,500.00	73.84	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	28.56	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	PVC	150	11,200.00	109.47	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	249.79	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	H	MLCSP	600	40,100.00	23.31	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	102.46	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	22.67	GOOD	YES	NONE	DCWD reserve fund
Poblacion	28-C	L	PVC	150	11,200.00	0.83	GOOD	YES	NONE	DCWD reserve fund
Poblacion	24-C	L	PVC	150	11,200.00	84.43	GOOD	YES	NONE	DCWD reserve fund
Poblacion	30-C	L	MLCSP	400	23,600.00	65.86	GOOD	YES	NONE	DCWD reserve fund
Poblacion	32-D	L	MLCSP	300	19,100.00	47.65	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	34.89	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	MLCSP	300	19,100.00	70.38	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	300	19,100.00	33.13	GOOD	YES	NONE	DCWD reserve fund
Poblacion	11-B	L	PVC	150	11,200.00	12.97	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	PVC	150	11,200.00	142.86	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	600	40,100.00	274.30	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	660.23	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	341.35	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	300	19,100.00	92.43	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	BAGO APLAYA	L	MLCSP	300	19,100.00	453.44	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	694.00	GOOD	YES	NONE	DCWD reserve fund
Poblacion	26-C	L	PVC	150	11,200.00	3.71	GOOD	YES	NONE	DCWD reserve fund
Poblacion	27-C	L	PVC	150	11,200.00	155.64	GOOD	YES	NONE	DCWD reserve fund
Poblacion	27-C	L	PVC	150	11,200.00	150.89	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	10.44	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	56.38	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	51.40	GOOD	YES	NONE	DCWD reserve fund
Agdao	LEON GARCIA SR.	L	PVC	150	11,200.00	9.75	GOOD	YES	NONE	DCWD reserve fund
Poblacion	32-D	L	MLCSP	300	19,100.00	118.33	GOOD	YES	NONE	DCWD reserve fund
Poblacion	32-D	L	MLCSP	300	19,100.00	86.96	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	600	40,100.00	148.22	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	600	40,100.00	610.30	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	177.11	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	169.10	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	PVC	150	11,200.00	6.83	GOOD	YES	NONE	DCWD reserve fund
Agdao	TOMAS MONTEVERDE	L	PVC	150	11,200.00	46.10	GOOD	YES	NONE	DCWD reserve fund
Poblacion	20-B	L	PVC	150	11,200.00	52.02	GOOD	YES	NONE	DCWD reserve fund
Agdao	PACIANO BANGOY	L	PVC	150	11,200.00	12.10	GOOD	YES	NONE	DCWD reserve fund
Poblacion	20-B	L	PVC	150	11,200.00	41.11	GOOD	YES	NONE	DCWD reserve fund
Agdao	PACIANO BANGOY	L	PVC	150	11,200.00	1.20	GOOD	YES	NONE	DCWD reserve fund
Poblacion	18-B	L	PVC	150	11,200.00	48.43	GOOD	YES	NONE	DCWD reserve fund
Poblacion	20-B	L	PVC	150	11,200.00	1.49	GOOD	YES	NONE	DCWD reserve fund
Agdao	PACIANO BANGOY	L	PVC	150	11,200.00	5.98	GOOD	YES	NONE	DCWD reserve fund
Poblacion	18-B	L	PVC	150	11,200.00	170.17	GOOD	YES	NONE	DCWD reserve fund
Poblacion	18-B	L	PVC	150	11,200.00	278.99	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	PVC	150	11,200.00	2.77	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	37.07	GOOD	YES	NONE	DCWD reserve fund
Poblacion	2-A	L	MLCSP	300	19,100.00	127.25	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Poblacion	39-D	L	MLCSP	300	19,100.00	5.37	GOOD	YES	NONE	DCWD reserve fund
Talomo	DUMOY	L	MLCSP	600	40,100.00	461.42	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	600	40,100.00	513.65	GOOD	YES	NONE	DCWD reserve fund
Poblacion	31-D	L	MLCSP	300	19,100.00	9.14	GOOD	YES	NONE	DCWD reserve fund
Poblacion	37-D	L	MLCSP	300	19,100.00	63.83	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	517.10	GOOD	YES	NONE	DCWD reserve fund
Poblacion	9-A	L	PVC	150	11,200.00	26.58	GOOD	YES	NONE	DCWD reserve fund
Poblacion	7-A	L	PVC	150	11,200.00	6.79	GOOD	YES	NONE	DCWD reserve fund
Poblacion	9-A	L	PVC	150	11,200.00	156.68	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	600	40,100.00	24.82	GOOD	YES	NONE	DCWD reserve fund
Poblacion	9-A	L	MLCSP	600	40,100.00	258.69	GOOD	YES	NONE	DCWD reserve fund
Poblacion	7-A	L	MLCSP	600	40,100.00	32.72	GOOD	YES	NONE	DCWD reserve fund
Poblacion	7-A	L	MLCSP	600	40,100.00	131.91	GOOD	YES	NONE	DCWD reserve fund
Poblacion	7-A	L	MLCSP	600	40,100.00	78.89	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	300	19,100.00	470.48	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	300	19,100.00	364.08	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	142.84	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	600	40,100.00	1,007.28	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	250	17,700.00	85.41	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	300	19,100.00	154.59	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	500	33,200.00	65.78	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	400	23,600.00	96.40	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	400	23,600.00	47.27	GOOD	YES	NONE	DCWD reserve fund
Talomo	DUMOY	L	MLCSP	250	17,700.00	269.22	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	457.25	GOOD	YES	NONE	DCWD reserve fund
Poblacion	6-A	L	MLCSP	600	40,100.00	101.25	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	900	56,500.00	119.84	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	900	56,500.00	55.82	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	300	19,100.00	56.73	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Poblacion	8-A	L	MLCSP	300	19,100.00	276.02	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	124.24	GOOD	YES	NONE	DCWD reserve fund
Talomo	DUMOY	L	MLCSP	500	33,200.00	541.27	GOOD	YES	NONE	DCWD reserve fund
Talomo	DUMOY	L	MLCSP	500	33,200.00	516.11	GOOD	YES	NONE	DCWD reserve fund
Talomo	DUMOY	L	MLCSP	250	17,700.00	27.30	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	770.18	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	39.52	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	42.46	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	146.78	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	31.66	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	91.74	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	450	24,300.00	8.64	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	450	24,300.00	39.25	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	600	40,100.00	4.63	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	600	40,100.00	41.60	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	400	23,600.00	143.05	GOOD	YES	NONE	DCWD reserve fund
Poblacion	5-A	L	PVC	150	11,200.00	45.76	GOOD	YES	NONE	DCWD reserve fund
Poblacion	5-A	L	PVC	150	11,200.00	115.79	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	360.06	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	61.17	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	13.10	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	1.49	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	358.81	GOOD	YES	NONE	DCWD reserve fund
Poblacion	5-A	L	PVC	150	11,200.00	54.49	GOOD	YES	NONE	DCWD reserve fund
Poblacion	5-A	L	PVC	150	11,200.00	64.49	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	400	23,600.00	167.70	GOOD	YES	NONE	DCWD reserve fund
Talomo	BALIOK	L	MLCSP	250	17,700.00	510.75	GOOD	YES	NONE	DCWD reserve fund
Talomo	BALIOK	L	MLCSP	250	17,700.00	67.82	GOOD	YES	NONE	DCWD reserve fund
Talomo	BALIOK	L	MLCSP	250	17,700.00	317.43	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	BALIOK	L	MLCSP	300	19,100.00	865.65	GOOD	YES	NONE	DCWD reserve fund
Talomo	BALIOK	L	MLCSP	300	19,100.00	398.28	GOOD	YES	NONE	DCWD reserve fund
Talomo	DUMOY	L	MLCSP	400	23,600.00	588.61	GOOD	YES	NONE	DCWD reserve fund
Talomo	BALIOK	L	MLCSP	400	23,600.00	15.06	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	350	20,800.00	837.76	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	450	24,300.00	1,033.58	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	700	44,200.00	13.77	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	700	44,200.00	219.87	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	700	44,200.00	7.87	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	10.74	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	400	23,600.00	493.70	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	400	23,600.00	82.77	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	471.07	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	450	24,300.00	423.27	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	52.93	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	300	19,100.00	207.43	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BAGO OSHIRO	L	MLCSP	250	17,700.00	607.45	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	253.52	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BAGO OSHIRO	L	MLCSP	250	17,700.00	14.98	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BAGO OSHIRO	L	MLCSP	250	17,700.00	13.64	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BAGO OSHIRO	L	MLCSP	250	17,700.00	6.33	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	10.28	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	12.77	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	295.74	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	PVC	150	11,200.00	63.07	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	750	48,500.00	22.87	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	434.31	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	250	17,700.00	25.07	GOOD	YES	NONE	DCWD reserve fund
Poblacion	7-A	L	MLCSP	600	40,100.00	74.86	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Poblacion	5-A	L	PVC	150	11,200.00	17.24	GOOD	YES	NONE	DCWD reserve fund
Poblacion	5-A	L	PVC	150	11,200.00	21.39	GOOD	YES	NONE	DCWD reserve fund
Poblacion	31-D	L	MLCSP	300	19,100.00	33.02	GOOD	YES	NONE	DCWD reserve fund
Poblacion	37-D	L	MLCSP	300	19,100.00	104.48	GOOD	YES	NONE	DCWD reserve fund
Poblacion	31-D	L	MLCSP	300	19,100.00	12.87	GOOD	YES	NONE	DCWD reserve fund
Poblacion	37-D	L	MLCSP	300	19,100.00	97.71	GOOD	YES	NONE	DCWD reserve fund
Poblacion	38-D	L	MLCSP	300	19,100.00	13.57	GOOD	YES	NONE	DCWD reserve fund
Poblacion	37-D	L	MLCSP	300	19,100.00	227.02	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	MLCSP	300	19,100.00	239.57	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	MLCSP	400	23,600.00	53.67	GOOD	YES	NONE	DCWD reserve fund
Agdao	GOV. VICENTE DUTERTE	L	MLCSP	400	23,600.00	116.45	GOOD	YES	NONE	DCWD reserve fund
Agdao	GOV. VICENTE DUTERTE	L	MLCSP	400	23,600.00	20.82	GOOD	YES	NONE	DCWD reserve fund
Agdao	GOV. VICENTE DUTERTE	L	MLCSP	400	23,600.00	66.75	GOOD	YES	NONE	DCWD reserve fund
Agdao	GOV. VICENTE DUTERTE	L	MLCSP	400	23,600.00	124.74	GOOD	YES	NONE	DCWD reserve fund
Agdao	UBALDE	L	MLCSP	400	23,600.00	173.79	GOOD	YES	NONE	DCWD reserve fund
Agdao	UBALDE	L	MLCSP	400	23,600.00	21.83	GOOD	YES	NONE	DCWD reserve fund
Agdao	GOV. VICENTE DUTERTE	L	MLCSP	400	23,600.00	368.65	GOOD	YES	NONE	DCWD reserve fund
Agdao	SAN ANTONIO	L	MLCSP	400	23,600.00	196.92	GOOD	YES	NONE	DCWD reserve fund
Agdao	UBALDE	L	MLCSP	400	23,600.00	9.54	GOOD	YES	NONE	DCWD reserve fund
Agdao	LAPU - LAPU	L	MLCSP	400	23,600.00	180.35	GOOD	YES	NONE	DCWD reserve fund
Agdao	LAPU - LAPU	L	MLCSP	400	23,600.00	490.41	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	37.02	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	39.11	GOOD	YES	NONE	DCWD reserve fund
Poblacion	32-D	L	MLCSP	500	33,200.00	19.37	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	MLCSP	500	33,200.00	173.65	GOOD	YES	NONE	DCWD reserve fund
Poblacion	4-A	L	MLCSP	500	33,200.00	147.97	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	PVC	150	11,200.00	169.02	GOOD	YES	NONE	DCWD reserve fund
Poblacion	4-A	L	PVC	150	11,200.00	2.89	GOOD	YES	NONE	DCWD reserve fund
Poblacion	4-A	L	MLCSP	500	33,200.00	263.63	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Poblacion	4-A	L	MLCSP	500	33,200.00	36.32	GOOD	YES	NONE	DCWD reserve fund
Agdao	UBALDE	L	MLCSP	400	23,600.00	56.80	GOOD	YES	NONE	DCWD reserve fund
Agdao	LAPU - LAPU	L	MLCSP	400	23,600.00	162.28	GOOD	YES	NONE	DCWD reserve fund
Agdao	CENTRO	L	MLCSP	400	23,600.00	93.79	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	265.56	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	108.04	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	38.19	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	67.42	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	PVC	100	11,000.00	11.77	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	750	48,500.00	277.72	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	228.64	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	750	48,500.00	134.23	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	16.87	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	32.12	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	11.21	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	21.56	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	143.01	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	42.88	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	224.73	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	69.27	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	40.60	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	300	19,100.00	72.23	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	300	19,100.00	76.88	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	166.62	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	66.40	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	73.05	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	38.45	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	42.39	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	43.58	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	52.77	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	300	19,100.00	115.43	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	PVC	150	11,200.00	72.06	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	250	17,700.00	274.45	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	PVC	200	12,500.00	460.10	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	PVC	200	12,500.00	275.13	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	PVC	200	12,500.00	706.36	GOOD	YES	NONE	DCWD reserve fund
Buhangin	V. HIZON	L	MLCSP	250	17,700.00	130.50	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	250	17,700.00	45.55	GOOD	YES	NONE	DCWD reserve fund
Buhangin	V. HIZON	L	MLCSP	300	19,100.00	15.35	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	300	19,100.00	118.53	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	300	19,100.00	45.71	GOOD	YES	NONE	DCWD reserve fund
Buhangin	V. HIZON	L	MLCSP	250	17,700.00	2.88	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	250	17,700.00	12.43	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	75.16	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	250	17,700.00	223.75	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	PVC	200	12,500.00	96.35	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	PVC	200	12,500.00	14.44	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	428.74	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	PVC	200	12,500.00	15.76	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	PVC	200	12,500.00	178.68	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	PVC	200	12,500.00	55.47	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	PVC	200	12,500.00	15.42	GOOD	YES	NONE	DCWD reserve fund
Buhangin	V. HIZON	L	MLCSP	250	17,700.00	386.97	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	250	17,700.00	23.61	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	250	17,700.00	23.06	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	300	19,100.00	336.36	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	300	19,100.00	255.78	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	300	19,100.00	12.92	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	MA-A	L	MLCSP	300	19,100.00	262.23	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	300	19,100.00	15.65	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	300	19,100.00	94.79	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	507.32	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	350	20,800.00	485.34	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	M	MLCSP	800	52,800.00	0.72	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	800	52,800.00	194.54	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	800	52,800.00	26.39	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	236.51	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	300	19,100.00	154.83	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	99.08	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	76.99	GOOD	YES	NONE	DCWD reserve fund
Buhangin	V. HIZON	L	MLCSP	250	17,700.00	664.01	GOOD	YES	NONE	DCWD reserve fund
Buhangin	V. HIZON	L	MLCSP	250	17,700.00	107.30	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	350	20,800.00	49.02	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	187.81	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	11.68	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	10.11	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	21.77	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	246.53	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	201.51	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	17.59	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	10.17	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	99.62	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	62.98	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	16.28	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	214.23	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	99.12	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	308.81	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	24.83	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	61.45	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	84.51	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	350	20,800.00	58.31	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	400	23,600.00	115.82	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	391.99	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	350	20,800.00	55.93	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	319.60	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	703.27	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	434.02	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	175.88	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	532.47	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	108.44	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	600	40,100.00	12.80	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	H	MLCSP	600	40,100.00	338.29	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	600	40,100.00	32.47	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	PVC	200	12,500.00	149.99	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	PVC	200	12,500.00	155.39	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	134.73	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	8.73	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	245.25	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	11.20	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	185.02	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	148.12	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	150.66	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	597.82	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	108.70	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	15.21	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	114.80	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	58.28	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	125.40	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	350	20,800.00	502.30	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	350	20,800.00	1,206.78	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	350	20,800.00	282.05	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	350	20,800.00	1,304.14	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	350	20,800.00	555.53	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	350	20,800.00	444.08	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	250	17,700.00	14.99	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	350	20,800.00	703.04	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	350	20,800.00	282.09	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	PVC	150	11,200.00	44.83	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	450	24,300.00	17.42	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	800	52,800.00	140.55	GOOD	YES	NONE	DCWD reserve fund
Poblacion	11-B	L	MLCSP	300	19,100.00	60.43	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	600	40,100.00	15.34	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	H	MLCSP	600	40,100.00	15.04	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	21.38	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	31.84	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	47.85	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	260.30	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	245.54	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	500	33,200.00	237.10	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	500	33,200.00	298.45	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	93.18	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	202.41	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	190.87	GOOD	YES	NONE	DCWD reserve fund
Buhangin	V. HIZON	L	MLCSP	300	19,100.00	576.33	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	300	19,100.00	73.97	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Buhangin	V. HIZON	L	MLCSP	300	19,100.00	10.52	GOOD	YES	NONE	DCWD reserve fund
Poblacion	16-B	L	MLCSP	300	19,100.00	13.62	GOOD	YES	NONE	DCWD reserve fund
Poblacion	15-B	L	MLCSP	300	19,100.00	481.76	GOOD	YES	NONE	DCWD reserve fund
Poblacion	16-B	L	MLCSP	300	19,100.00	50.22	GOOD	YES	NONE	DCWD reserve fund
Poblacion	16-B	L	PVC	150	11,200.00	176.25	GOOD	YES	NONE	DCWD reserve fund
Poblacion	16-B	L	PVC	150	11,200.00	174.06	GOOD	YES	NONE	DCWD reserve fund
Poblacion	16-B	L	PVC	150	11,200.00	172.80	GOOD	YES	NONE	DCWD reserve fund
Agdao	PACIANO BANGOY	L	PVC	150	11,200.00	25.58	GOOD	YES	NONE	DCWD reserve fund
Agdao	PACIANO BANGOY	L	PVC	150	11,200.00	82.20	GOOD	YES	NONE	DCWD reserve fund
Agdao	PACIANO BANGOY	L	PVC	150	11,200.00	264.25	GOOD	YES	NONE	DCWD reserve fund
Poblacion	16-B	L	PVC	150	11,200.00	0.97	GOOD	YES	NONE	DCWD reserve fund
Agdao	PACIANO BANGOY	L	PVC	150	11,200.00	171.17	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	3.66	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	MLCSP	300	19,100.00	111.52	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	250	17,700.00	498.54	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	400	23,600.00	16.33	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	400	23,600.00	7.10	GOOD	YES	NONE	DCWD reserve fund
Agdao	RAFAEL CASTILLO	L	MLCSP	400	23,600.00	203.98	GOOD	YES	NONE	DCWD reserve fund
Agdao	RAFAEL CASTILLO	L	MLCSP	400	23,600.00	134.22	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	400	23,600.00	84.33	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	400	23,600.00	58.37	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	1.98	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	264.51	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	300	19,100.00	2.32	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	138.94	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	26.36	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	62.10	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	116.80	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	400	23,600.00	59.97	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	259.39	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	256.88	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	28.95	GOOD	YES	NONE	DCWD reserve fund
Poblacion	5-A	L	MLCSP	300	19,100.00	115.18	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	37.85	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	M	PVC	150	11,200.00	158.36	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA PANGI	H	PVC	150	11,200.00	546.53	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA PANGI	M	PVC	150	11,200.00	378.56	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	107.71	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	140.58	GOOD	YES	NONE	DCWD reserve fund
Agdao	SAN ANTONIO	L	MLCSP	400	23,600.00	227.24	GOOD	YES	NONE	DCWD reserve fund
Agdao	RAFAEL CASTILLO	L	MLCSP	400	23,600.00	157.10	GOOD	YES	NONE	DCWD reserve fund
Poblacion	28-C	L	PVC	150	11,200.00	41.08	GOOD	YES	NONE	DCWD reserve fund
Poblacion	30-C	L	MLCSP	400	23,600.00	85.55	GOOD	YES	NONE	DCWD reserve fund
Poblacion	30-C	L	PVC	150	11,200.00	159.98	GOOD	YES	NONE	DCWD reserve fund
Poblacion	14-B	L	MLCSP	400	23,600.00	71.45	GOOD	YES	NONE	DCWD reserve fund
Poblacion	30-C	L	MLCSP	400	23,600.00	7.64	GOOD	YES	NONE	DCWD reserve fund
Poblacion	14-B	L	MLCSP	400	23,600.00	59.98	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	PVC	200	12,500.00	20.10	GOOD	YES	NONE	DCWD reserve fund
Poblacion	40-D	L	MLCSP	250	17,700.00	283.77	GOOD	YES	NONE	DCWD reserve fund
Poblacion	2-A	L	MLCSP	250	17,700.00	7.32	GOOD	YES	NONE	DCWD reserve fund
Poblacion	39-D	L	MLCSP	250	17,700.00	196.26	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	300	19,100.00	254.95	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	38.73	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	PVC	150	11,200.00	15.86	GOOD	YES	NONE	DCWD reserve fund
Agdao	PACIANO BANGOY	L	PVC	150	11,200.00	5.45	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	MLCSP	400	23,600.00	421.48	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	750	48,500.00	163.35	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	750	48,500.00	16.15	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Poblacion	5-A	L	MLCSP	750	48,500.00	196.61	GOOD	YES	NONE	DCWD reserve fund
Poblacion	2-A	L	MLCSP	750	48,500.00	103.21	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	MLCSP	750	48,500.00	307.67	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	208.98	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	350	20,800.00	23.71	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	350	20,800.00	545.52	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	300	19,100.00	4.41	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	300	19,100.00	8.71	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	PVC	150	11,200.00	294.00	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	349.87	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	470.59	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	350	20,800.00	24.96	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	350	20,800.00	24.78	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	555.33	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	350	20,800.00	456.48	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	400	23,600.00	7.72	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	350	20,800.00	34.15	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	350	20,800.00	64.21	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	350	20,800.00	96.58	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	350	20,800.00	224.84	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	400	23,600.00	40.19	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	450	24,300.00	35.26	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	500	33,200.00	22.76	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	600	40,100.00	319.83	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	600	40,100.00	137.98	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	600	40,100.00	132.34	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	300	19,100.00	40.78	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	300	19,100.00	453.51	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	300	19,100.00	336.29	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	MA-A	L	MLCSP	300	19,100.00	13.96	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	300	19,100.00	222.17	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	300	19,100.00	118.72	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	300	19,100.00	95.71	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	PVC	150	11,200.00	33.21	GOOD	YES	NONE	DCWD reserve fund
Poblacion	2-A	L	MLCSP	300	19,100.00	13.62	GOOD	YES	NONE	DCWD reserve fund
Buhangin	COMMUNAL	L	MLCSP	300	19,100.00	21.84	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	300	19,100.00	242.34	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	321.08	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	354.30	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	452.50	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	192.95	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	300	19,100.00	221.34	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	300	19,100.00	115.62	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	300	19,100.00	106.80	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	300	19,100.00	146.96	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	300	19,100.00	36.59	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	317.51	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	H	MLCSP	600	40,100.00	41.27	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	600	40,100.00	31.65	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	H	MLCSP	600	40,100.00	60.97	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	600	40,100.00	36.84	GOOD	YES	NONE	DCWD reserve fund
Poblacion	31-D	L	MLCSP	300	19,100.00	105.93	GOOD	YES	NONE	DCWD reserve fund
Poblacion	31-D	L	PVC	150	11,200.00	16.42	GOOD	YES	NONE	DCWD reserve fund
Poblacion	35-D	L	PVC	200	12,500.00	10.88	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	H	MLCSP	800	52,800.00	1,153.29	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	M	MLCSP	800	52,800.00	294.93	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	800	52,800.00	124.31	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA PANGI	H	MLCSP	800	52,800.00	62.67	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	MATINA PANGI	M	MLCSP	800	52,800.00	804.92	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA PANGI	L	MLCSP	800	52,800.00	874.16	GOOD	YES	NONE	DCWD reserve fund
Talomo	LANGUB	H	MLCSP	800	52,800.00	551.65	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA PANGI	L	MLCSP	800	52,800.00	168.64	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA PANGI	H	MLCSP	800	52,800.00	144.78	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA PANGI	L	MLCSP	800	52,800.00	314.97	GOOD	YES	NONE	DCWD reserve fund
Poblacion	18-B	L	PVC	150	11,200.00	347.83	GOOD	YES	NONE	DCWD reserve fund
Poblacion	39-D	L	MLCSP	300	19,100.00	135.63	GOOD	YES	NONE	DCWD reserve fund
Poblacion	38-D	L	MLCSP	300	19,100.00	7.79	GOOD	YES	NONE	DCWD reserve fund
Poblacion	39-D	L	MLCSP	300	19,100.00	18.93	GOOD	YES	NONE	DCWD reserve fund
Poblacion	26-C	L	PVC	150	11,200.00	156.73	GOOD	YES	NONE	DCWD reserve fund
Poblacion	23-C	L	PVC	150	11,200.00	4.57	GOOD	YES	NONE	DCWD reserve fund
Poblacion	26-C	L	PVC	150	11,200.00	3.84	GOOD	YES	NONE	DCWD reserve fund
Poblacion	23-C	L	PVC	150	11,200.00	3.90	GOOD	YES	NONE	DCWD reserve fund
Poblacion	32-D	L	MLCSP	300	19,100.00	10.20	GOOD	YES	NONE	DCWD reserve fund
Poblacion	31-D	L	MLCSP	300	19,100.00	8.38	GOOD	YES	NONE	DCWD reserve fund
Poblacion	31-D	L	MLCSP	300	19,100.00	150.78	GOOD	YES	NONE	DCWD reserve fund
Poblacion	32-D	L	MLCSP	300	19,100.00	85.03	GOOD	YES	NONE	DCWD reserve fund
Poblacion	24-C	L	MLCSP	300	19,100.00	18.13	GOOD	YES	NONE	DCWD reserve fund
Poblacion	31-D	L	MLCSP	300	19,100.00	3.56	GOOD	YES	NONE	DCWD reserve fund
Poblacion	27-C	L	PVC	200	12,500.00	18.97	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	300	19,100.00	193.14	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	300	19,100.00	305.14	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	H	MLCSP	800	52,800.00	33.58	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	800	52,800.00	300.36	GOOD	YES	NONE	DCWD reserve fund
Talomo	MAGTUOD	H	MLCSP	800	52,800.00	97.35	GOOD	YES	NONE	DCWD reserve fund
Talomo	MAGTUOD	M	MLCSP	800	52,800.00	22.24	GOOD	YES	NONE	DCWD reserve fund
Talomo	MAGTUOD	L	MLCSP	800	52,800.00	283.37	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	H	MLCSP	800	52,800.00	20.23	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	TALOMO	L	MLCSP	800	52,800.00	102.92	GOOD	YES	NONE	DCWD reserve fund
Buhangin	V. HIZON	L	MLCSP	300	19,100.00	87.05	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	300	19,100.00	102.22	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	300	19,100.00	27.33	GOOD	YES	NONE	DCWD reserve fund
Buhangin	V. HIZON	L	MLCSP	300	19,100.00	32.50	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	300	19,100.00	415.50	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	300	19,100.00	128.74	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	300	19,100.00	184.46	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	300	19,100.00	196.05	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	178.33	GOOD	YES	NONE	DCWD reserve fund
Poblacion	12-B	L	PVC	100	11,000.00	0.78	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	450	24,300.00	5.47	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	450	24,300.00	88.89	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	450	24,300.00	2.35	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	350	20,800.00	625.57	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	MLCSP	350	20,800.00	98.18	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	MLCSP	300	19,100.00	665.27	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	350	20,800.00	7.81	GOOD	YES	NONE	DCWD reserve fund
Buhangin	TIGATTO	L	MLCSP	400	23,600.00	831.97	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	67.93	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	300	19,100.00	14.41	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	250	17,700.00	7.69	GOOD	YES	NONE	DCWD reserve fund
Talomo	DUMOY	L	MLCSP	250	17,700.00	15.00	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	250	17,700.00	5.64	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	250	17,700.00	28.02	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	6.99	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	8.63	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	11.23	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	300	19,100.00	3.45	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Buhangin	PAMPANGA	L	MLCSP	300	19,100.00	6.96	GOOD	YES	NONE	DCWD reserve fund
Buhangin	V. HIZON	L	MLCSP	250	17,700.00	2.68	GOOD	YES	NONE	DCWD reserve fund
Buhangin	V. HIZON	L	MLCSP	250	17,700.00	8.89	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	350	20,800.00	0.78	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	0.91	GOOD	YES	NONE	DCWD reserve fund
Toril	LUBOGAN	L	MLCSP	250	17,700.00	426.38	GOOD	YES	NONE	DCWD reserve fund
Toril	LUBOGAN	L	MLCSP	250	17,700.00	47.96	GOOD	YES	NONE	DCWD reserve fund
Toril	LUBOGAN	L	MLCSP	250	17,700.00	12.19	GOOD	YES	NONE	DCWD reserve fund
Toril	LUBOGAN	L	MLCSP	250	17,700.00	137.93	GOOD	YES	NONE	DCWD reserve fund
Toril	LUBOGAN	L	MLCSP	250	17,700.00	282.38	GOOD	YES	NONE	DCWD reserve fund
Baguio	MALAGOS	L	MLCSP	250	17,700.00	219.84	GOOD	YES	NONE	DCWD reserve fund
Baguio	MALAGOS	L	MLCSP	250	17,700.00	136.91	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	L	MLCSP	250	17,700.00	43.61	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	L	MLCSP	250	17,700.00	182.18	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	31.74	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	24.48	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	96.01	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	L	MLCSP	250	17,700.00	907.37	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	1.65	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	L	MLCSP	250	17,700.00	505.50	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	H	MLCSP	350	20,800.00	67.56	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	L	MLCSP	350	20,800.00	245.97	GOOD	YES	NONE	DCWD reserve fund
Bunawan	TIBUNGCO	L	MLCSP	400	23,600.00	171.17	GOOD	YES	NONE	DCWD reserve fund
Bunawan	TIBUNGCO	M	MLCSP	350	20,800.00	268.19	GOOD	YES	NONE	DCWD reserve fund
Bunawan	TIBUNGCO	L	MLCSP	350	20,800.00	710.96	GOOD	YES	NONE	DCWD reserve fund
Toril	CROSSING BAYABAS	L	MLCSP	250	17,700.00	248.41	GOOD	YES	NONE	DCWD reserve fund
Toril	CROSSING BAYABAS	L	MLCSP	250	17,700.00	89.37	GOOD	YES	NONE	DCWD reserve fund
Toril	CROSSING BAYABAS	L	MLCSP	250	17,700.00	214.49	GOOD	YES	NONE	DCWD reserve fund
Toril	CROSSING BAYABAS	L	MLCSP	250	17,700.00	75.08	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Toril	CROSSING BAYABAS	L	MLCSP	250	17,700.00	165.54	GOOD	YES	NONE	DCWD reserve fund
Toril	CROSSING BAYABAS	L	MLCSP	250	17,700.00	77.45	GOOD	YES	NONE	DCWD reserve fund
Toril	LUBOGAN	L	MLCSP	250	17,700.00	134.04	GOOD	YES	NONE	DCWD reserve fund
Toril	CROSSING BAYABAS	L	MLCSP	250	17,700.00	4.80	GOOD	YES	NONE	DCWD reserve fund
Toril	LUBOGAN	L	MLCSP	250	17,700.00	227.10	GOOD	YES	NONE	DCWD reserve fund
Toril	LUBOGAN	L	MLCSP	250	17,700.00	561.09	GOOD	YES	NONE	DCWD reserve fund
Toril	LUBOGAN	L	MLCSP	250	17,700.00	535.29	GOOD	YES	NONE	DCWD reserve fund
Toril	CROSSING BAYABAS	L	MLCSP	250	17,700.00	127.65	GOOD	YES	NONE	DCWD reserve fund
Tugbok	TUGBOK	L	MLCSP	500	33,200.00	433.44	GOOD	YES	NONE	DCWD reserve fund
Tugbok	TUGBOK	L	MLCSP	250	17,700.00	286.54	GOOD	YES	NONE	DCWD reserve fund
Tugbok	MINTAL	L	MLCSP	350	20,800.00	88.59	GOOD	YES	NONE	DCWD reserve fund
Tugbok	MINTAL	L	MLCSP	350	20,800.00	206.93	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	885.89	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	482.58	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	1,109.93	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	159.58	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	258.33	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	352.63	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	14.04	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	87.88	GOOD	YES	NONE	DCWD reserve fund
Tugbok	TUGBOK	L	MLCSP	500	33,200.00	156.72	GOOD	YES	NONE	DCWD reserve fund
Tugbok	TUGBOK	L	MLCSP	500	33,200.00	866.82	GOOD	YES	NONE	DCWD reserve fund
Tugbok	MINTAL	L	PVC	200	12,500.00	667.99	GOOD	YES	NONE	DCWD reserve fund
Tugbok	MINTAL	L	MLCSP	250	17,700.00	14.05	GOOD	YES	NONE	DCWD reserve fund
Tugbok	MINTAL	L	PVC	200	12,500.00	192.23	GOOD	YES	NONE	DCWD reserve fund
Tugbok	MINTAL	L	PVC	200	12,500.00	332.13	GOOD	YES	NONE	DCWD reserve fund
Tugbok	STO. NIÑO	L	PVC	150	11,200.00	2.27	GOOD	YES	NONE	DCWD reserve fund
Tugbok	STO. NIÑO	L	PVC	200	12,500.00	12.59	GOOD	YES	NONE	DCWD reserve fund
Tugbok	STO. NIÑO	L	PVC	150	11,200.00	7.81	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Tugbok	TUGBOK	L	PVC	150	11,200.00	5.07	GOOD	YES	NONE	DCWD reserve fund
Tugbok	TUGBOK	L	MLCSP	250	17,700.00	5.62	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	350	20,800.00	61.75	GOOD	YES	NONE	DCWD reserve fund
Buhangin	COMMUNAL	L	MLCSP	350	20,800.00	10.65	GOOD	YES	NONE	DCWD reserve fund
Buhangin	COMMUNAL	L	MLCSP	350	20,800.00	18.19	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	350	20,800.00	49.19	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	350	20,800.00	169.11	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	250	17,700.00	64.50	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	250	17,700.00	16.86	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	11.71	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	81.39	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	350	20,800.00	361.26	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	300	19,100.00	243.11	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	250	17,700.00	41.34	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	250	17,700.00	85.19	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	M	MLCSP	450	24,300.00	354.52	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	395.23	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	M	MLCSP	450	24,300.00	10.65	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	M	MLCSP	450	24,300.00	10.88	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	M	MLCSP	450	24,300.00	150.43	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	M	MLCSP	450	24,300.00	90.51	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	217.31	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	57.90	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	18.30	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	28.48	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	47.77	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	79.06	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	56.36	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	86.62	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	78.33	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	62.79	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	M	MLCSP	450	24,300.00	53.14	GOOD	YES	NONE	DCWD reserve fund
Buhangin	TIGATTO	L	MLCSP	450	24,300.00	70.79	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	M	MLCSP	450	24,300.00	42.79	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	25.15	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	300	19,100.00	90.14	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	300	19,100.00	30.74	GOOD	YES	NONE	DCWD reserve fund
Buhangin	TIGATTO	L	MLCSP	400	23,600.00	1076.29	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	H	MLCSP	1000	62,400.00	13.10	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	1000	62,400.00	33.44	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	H	MLCSP	1000	62,400.00	19.25	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	1000	62,400.00	5.90	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	800	52,800.00	1.44	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	1000	62,400.00	1,371.27	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	700	44,200.00	199.95	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	350	20,800.00	8.59	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	L	MLCSP	250	17,700.00	1,093.70	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	300	19,100.00	79.92	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	194.49	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	162.96	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	9.98	GOOD	YES	NONE	DCWD reserve fund
Poblacion	6-A	L	MLCSP	600	40,100.00	90.17	GOOD	YES	NONE	DCWD reserve fund
Poblacion	5-A	L	MLCSP	600	40,100.00	9.16	GOOD	YES	NONE	DCWD reserve fund
Poblacion	6-A	L	MLCSP	600	40,100.00	9.89	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	300	19,100.00	18.37	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	300	19,100.00	169.79	GOOD	YES	NONE	DCWD reserve fund
Buhangin	PAMPANGA	L	MLCSP	300	19,100.00	276.83	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	450	24,300.00	254.75	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

ADMINISTRATIVE DIVISION	BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
		SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	BAGO GALLERA	L	MLCSP	450	24,300.00	226.66	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	450	24,300.00	222.14	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	450	24,300.00	62.16	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	43.61	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	86.74	GOOD	YES	NONE	DCWD reserve fund
Buhangin	TIGATTO	L	MLCSP	450	24,300.00	25.44	GOOD	YES	NONE	DCWD reserve fund
Tugbok	LOS AMIGOS	L	MLCSP	350	20,800.00	1,475.26	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BIAO GUIANGA	L	MLCSP	350	20,800.00	21.19	GOOD	YES	NONE	DCWD reserve fund
Calinan	RIVERSIDE	L	MLCSP	350	20,800.00	1,675.88	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BIAO GUIANGA	L	MLCSP	350	20,800.00	1.33	GOOD	YES	NONE	DCWD reserve fund
Tugbok	ULA	L	MLCSP	350	20,800.00	1,517.23	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BIAO GUIANGA	L	MLCSP	350	20,800.00	230.67	GOOD	YES	NONE	DCWD reserve fund
Tugbok	ULA	L	MLCSP	250	17,700.00	1,363.58	GOOD	YES	NONE	DCWD reserve fund
Tugbok	ULA	L	MLCSP	250	17,700.00	598.81	GOOD	YES	NONE	DCWD reserve fund
Tugbok	TACUNAN	L	MLCSP	250	17,700.00	714.88	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BIAO ESCUELA	L	MLCSP	300	19,100.00	3.29	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BIAO GUIANGA	L	MLCSP	300	19,100.00	1,823.05	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BIAO ESCUELA	L	MLCSP	300	19,100.00	1,096.53	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BIAO ESCUELA	L	MLCSP	300	19,100.00	18.93	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BIAO ESCUELA	L	MLCSP	350	20,800.00	3.96	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BIAO ESCUELA	L	MLCSP	350	20,800.00	19.93	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BIAO ESCUELA	L	MLCSP	350	20,800.00	251.49	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	L	MLCSP	250	17,700.00	180.38	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	L	MLCSP	250	17,700.00	0.71	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA PANGI	L	MLCSP	250	17,700.00	455.49	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	H	MLCSP	250	17,700.00	474.80	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	M	MLCSP	250	17,700.00	479.85	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	250	17,700.00	2,278.38	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	691.03	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	396.19	GOOD	YES	NONE	DCWD reserve fund
Poblacion	11-B	L	MLCSP	300	19,100.00	11.72	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	300	19,100.00	108.19	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	300	19,100.00	45.56	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	332.21	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	74.48	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	57.15	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	26.82	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	50.42	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	350	20,800.00	194.88	GOOD	YES	NONE	DCWD reserve fund
Buhangin	V. HIZON	L	MLCSP	350	20,800.00	578.54	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	350	20,800.00	205.79	GOOD	YES	NONE	DCWD reserve fund
Tugbok	MINTAL	L	MLCSP	500	33,200.00	34.60	GOOD	YES	NONE	DCWD reserve fund
Tugbok	MINTAL	L	MLCSP	500	33,200.00	11.83	GOOD	YES	NONE	DCWD reserve fund
Buhangin	TIGATTO	L	MLCSP	450	24,300.00	98.51	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	16.08	GOOD	YES	NONE	DCWD reserve fund
Buhangin	TIGATTO	L	MLCSP	450	24,300.00	20.08	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	L	MLCSP	300	19,100.00	371.63	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	L	MLCSP	300	19,100.00	670.83	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	18.07	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	PVC	150	11,200.00	24.03	GOOD	YES	NONE	DCWD reserve fund
Buhangin	TIGATTO	L	MLCSP	400	23,600.00	979.68	GOOD	YES	NONE	DCWD reserve fund
Buhangin	MANDUG	L	MLCSP	300	19,100.00	71.39	GOOD	YES	NONE	DCWD reserve fund
Buhangin	TIGATTO	L	MLCSP	400	23,600.00	46.11	GOOD	YES	NONE	DCWD reserve fund
Buhangin	TIGATTO	L	MLCSP	400	23,600.00	933.96	GOOD	YES	NONE	DCWD reserve fund
Buhangin	TIGATTO	L	MLCSP	400	23,600.00	569.71	GOOD	YES	NONE	DCWD reserve fund
Buhangin	MANDUG	L	MLCSP	400	23,600.00	403.25	GOOD	YES	NONE	DCWD reserve fund
Buhangin	MANDUG	L	MLCSP	400	23,600.00	1,005.97	GOOD	YES	NONE	DCWD reserve fund
Buhangin	MANDUG	L	MLCSP	400	23,600.00	673.69	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Buhangin	MANDUG	L	PVC	200	12,500.00	92.57	GOOD	YES	NONE	DCWD reserve fund
Buhangin	MANDUG	L	PVC	200	12,500.00	108.23	GOOD	YES	NONE	DCWD reserve fund
Buhangin	MANDUG	L	MLCSP	400	23,600.00	4.33	GOOD	YES	NONE	DCWD reserve fund
Buhangin	MANDUG	L	MLCSP	400	23,600.00	2.43	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	400	23,600.00	215.20	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	400	23,600.00	458.49	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	250	17,700.00	39.30	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	600	40,100.00	223.51	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO APLAYA	L	MLCSP	600	40,100.00	463.42	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	MLCSP	250	17,700.00	184.63	GOOD	YES	NONE	DCWD reserve fund
Talomo	BAGO GALLERA	L	MLCSP	250	17,700.00	467.45	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	MLCSP	250	17,700.00	565.75	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	MLCSP	250	17,700.00	908.49	GOOD	YES	NONE	DCWD reserve fund
Buhangin	COMMUNAL	L	MLCSP	350	20,800.00	60.14	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	350	20,800.00	271.77	GOOD	YES	NONE	DCWD reserve fund
Buhangin	COMMUNAL	L	MLCSP	350	20,800.00	152.96	GOOD	YES	NONE	DCWD reserve fund
Tugbok	TUGBOK	L	MLCSP	250	17,700.00	28.64	GOOD	YES	NONE	DCWD reserve fund
Poblacion	20-B	L	PVC	150	11,200.00	82.14	GOOD	YES	NONE	DCWD reserve fund
Poblacion	20-B	L	PVC	150	11,200.00	41.02	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	PVC	150	11,200.00	3.91	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	PVC	150	11,200.00	58.32	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	H	PVC	150	11,200.00	1.97	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	H	PVC	150	11,200.00	282.18	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	MLCSP	600	40,100.00	1.33	GOOD	YES	NONE	DCWD reserve fund
Poblacion	9-A	L	MLCSP	600	40,100.00	279.87	GOOD	YES	NONE	DCWD reserve fund
Poblacion	8-A	L	MLCSP	600	40,100.00	3.16	GOOD	YES	NONE	DCWD reserve fund
Poblacion	10-A	L	MLCSP	600	40,100.00	5.93	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	49.45	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	M	MLCSP	450	24,300.00	0.89	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Buhangin	CABANTIAN	L	MLCSP	450	24,300.00	21.56	GOOD	YES	NONE	DCWD reserve fund
Tugbok	TUGBOK	L	MLCSP	500	33,200.00	786.72	GOOD	YES	NONE	DCWD reserve fund
Tugbok	MINTAL	L	MLCSP	500	33,200.00	103.31	GOOD	YES	NONE	DCWD reserve fund
Tugbok	TUGBOK	L	MLCSP	500	33,200.00	68.54	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	L	MLCSP	400	23,600.00	650.51	GOOD	YES	NONE	DCWD reserve fund
Bunawan	ILANG	L	MLCSP	400	23,600.00	1,814.79	GOOD	YES	NONE	DCWD reserve fund
Bunawan	TIBUNGCO	L	MLCSP	400	23,600.00	559.79	GOOD	YES	NONE	DCWD reserve fund
Bunawan	ILANG	L	MLCSP	400	23,600.00	1,057.19	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	7.05	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	46.53	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	47.91	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	103.67	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	350	20,800.00	305.74	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	300	19,100.00	117.22	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	300	19,100.00	5.84	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	H	MLCSP	250	17,700.00	649.36	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	250	17,700.00	462.83	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA PANGI	H	MLCSP	250	17,700.00	94.92	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	250	17,700.00	333.02	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	H	MLCSP	250	17,700.00	29.34	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	250	17,700.00	854.81	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	L	MLCSP	250	17,700.00	390.95	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	250	17,700.00	10.38	GOOD	YES	NONE	DCWD reserve fund
Tugbok	TUGBOK	L	MLCSP	250	17,700.00	177.45	GOOD	YES	NONE	DCWD reserve fund
Tugbok	TUGBOK	L	MLCSP	250	17,700.00	721.72	GOOD	YES	NONE	DCWD reserve fund
Buhangin	COMMUNAL	L	MLCSP	350	20,800.00	620.17	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA PANGI	H	PVC	150	11,200.00	174.12	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA PANGI	M	PVC	150	11,200.00	402.42	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA PANGI	H	PVC	150	11,200.00	8.16	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

ADMINISTRATIVE DIVISION	BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
		SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD ESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	CATALUNAN GRANDE	L	MLCSP	300	19,100.00	2.77	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	300	19,100.00	59.07	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	300	19,100.00	43.06	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN GRANDE	L	MLCSP	300	19,100.00	4.88	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	H	PVC	150	11,200.00	644.74	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	M	PVC	150	11,200.00	333.65	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA CROSSING	H	PVC	150	11,200.00	346.67	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	300	19,100.00	214.66	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	300	19,100.00	110.85	GOOD	YES	NONE	DCWD reserve fund
Calinan	CALINAN	L	PVC	200	12,500.00	64.47	GOOD	YES	NONE	DCWD reserve fund
Calinan	CALINAN	L	PVC	200	12,500.00	248.50	GOOD	YES	NONE	DCWD reserve fund
Toril	BANKAS HEIGHTS	L	MLCSP	250	17,700.00	723.26	GOOD	YES	NONE	DCWD reserve fund
Toril	BANKAS HEIGHTS	L	MLCSP	250	17,700.00	4.69	GOOD	YES	NONE	DCWD reserve fund
Buhangin	TIGATTO	H	MLCSP	400	23,600.00	18.87	GOOD	YES	NONE	DCWD reserve fund
Buhangin	TIGATTO	L	MLCSP	400	23,600.00	2,270.35	GOOD	YES	NONE	DCWD reserve fund
Tugbok	MINTAL	L	MLCSP	250	17,700.00	855.48	GOOD	YES	NONE	DCWD reserve fund
Tugbok	MINTAL	L	MLCSP	250	17,700.00	772.18	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	54.26	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	300	19,100.00	59.75	GOOD	YES	NONE	DCWD reserve fund
Poblacion	6-A	L	MLCSP	300	19,100.00	4.05	GOOD	YES	NONE	DCWD reserve fund
Poblacion	6-A	L	MLCSP	300	19,100.00	83.45	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BIAO GUIANGA	L	MLCSP	350	20,800.00	1,404.57	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	450	24,300.00	6.06	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	750	48,500.00	428.56	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	750	48,500.00	114.61	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	350	20,800.00	39.38	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	350	20,800.00	569.71	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	250	17,700.00	16.21	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	350	20,800.00	5.75	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Talomo	TALOMO	L	MLCSP	350	20,800.00	437.34	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	250	17,700.00	328.00	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	250	17,700.00	0.61	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BIAO GUIANGA	L	MLCSP	350	20,800.00	417.93	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BIAO ESCUELA	L	MLCSP	350	20,800.00	765.44	GOOD	YES	NONE	DCWD reserve fund
Tugbok	BIAO ESCUELA	L	MLCSP	350	20,800.00	80.82	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	H	MLCSP	300	19,100.00	125.15	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	M	MLCSP	300	19,100.00	398.24	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	L	MLCSP	300	19,100.00	143.47	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	L	MLCSP	300	19,100.00	336.19	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	L	MLCSP	250	17,700.00	0.24	GOOD	YES	NONE	DCWD reserve fund
Bunawan	PANACAN	L	MLCSP	250	17,700.00	8.67	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN PEQUEÑO	L	MLCSP	350	20,800.00	3.69	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN PEQUEÑO	L	MLCSP	350	20,800.00	2.29	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	H	MLCSP	800	52,800.00	36.20	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	M	MLCSP	800	52,800.00	50.01	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	800	52,800.00	466.70	GOOD	YES	NONE	DCWD reserve fund
Buhangin	TIGATTO	L	MLCSP	800	52,800.00	427.36	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	H	MLCSP	800	52,800.00	148.86	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	800	52,800.00	120.83	GOOD	YES	NONE	DCWD reserve fund
Talomo	MA-A	L	MLCSP	800	52,800.00	87.21	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	700	44,200.00	353.39	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	700	44,200.00	316.94	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN PEQUEÑO	L	MLCSP	250	17,700.00	3.02	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN PEQUEÑO	L	MLCSP	350	20,800.00	4.83	GOOD	YES	NONE	DCWD reserve fund
Talomo	TALOMO	L	MLCSP	350	20,800.00	1,258.03	GOOD	YES	NONE	DCWD reserve fund
Talomo	CATALUNAN PEQUEÑO	L	MLCSP	350	20,800.00	612.10	GOOD	YES	NONE	DCWD reserve fund
Agdao	WILFREDO AQUINO	L	MLCSP	400	23,600.00	12.17	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	400	23,600.00	89.17	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Buhangin	BUHANGIN	L	MLCSP	400	23,600.00	245.65	GOOD	YES	NONE	DCWD reserve fund
Agdao	PACIANO BANGOY	L	PVC	150	11,200.00	71.18	GOOD	YES	NONE	DCWD reserve fund
Agdao	PACIANO BANGOY	L	PVC	150	11,200.00	2.02	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	MLCSP	400	23,600.00	24.87	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	MLCSP	400	23,600.00	5.86	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	400	23,600.00	11.28	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	400	23,600.00	1.02	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	6.23	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	109.57	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	99.14	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	25.86	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	169.37	GOOD	YES	NONE	DCWD reserve fund
Poblacion	19-B	L	MLCSP	600	40,100.00	0.36	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	M	MLCSP	350	20,800.00	207.79	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	350	20,800.00	379.50	GOOD	YES	NONE	DCWD reserve fund
Buhangin	CABANTIAN	L	MLCSP	350	20,800.00	18.42	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	20.09	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	350	20,800.00	551.27	GOOD	YES	NONE	DCWD reserve fund
Buhangin	COMMUNAL	L	MLCSP	350	20,800.00	10.73	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	4.55	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	2.52	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	9.95	GOOD	YES	NONE	DCWD reserve fund
Agdao	SAN ANTONIO	L	MLCSP	400	23,600.00	3.88	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	11.01	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	0.82	GOOD	YES	NONE	DCWD reserve fund
Buhangin	SASA	L	MLCSP	250	17,700.00	0.17	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	350	20,800.00	5.15	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	350	20,800.00	57.50	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	H	MLCSP	1000	62,400.00	300.11	GOOD	YES	NONE	DCWD reserve fund

Table LU-14. Lifeline Utilities, Level III Water System, Exposure Database for Landslide, Davao City

EXPOSURE							SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Buhangin	BUHANGIN	L	MLCSP	1000	62,400.00	95.60	GOOD	YES	NONE	DCWD reserve fund
Buhangin	BUHANGIN	L	MLCSP	1000	62,400.00	201.17	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	300	19,100.00	348.93	GOOD	YES	NONE	DCWD reserve fund
Agdao	LAPU - LAPU	L	MLCSP	300	19,100.00	5.08	GOOD	YES	NONE	DCWD reserve fund
Buhangin	V. HIZON	L	MLCSP	300	19,100.00	162.74	GOOD	YES	NONE	DCWD reserve fund
Buhangin	A. ANGLIONGTO	L	MLCSP	300	19,100.00	23.08	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	MLCSP	250	17,700.00	341.23	GOOD	YES	NONE	DCWD reserve fund
Talomo	MATINA APLAYA	L	MLCSP	250	17,700.00	266.89	GOOD	YES	NONE	DCWD reserve fund
Talomo	BUCANA	L	MLCSP	250	17,700.00	434.23	GOOD	YES	NONE	DCWD reserve fund
Bunawan	TIBUNGCO	L	MLCSP	400	23,600.00	10.06	GOOD	YES	NONE	DCWD reserve fund
Bunawan	TIBUNGCO	L	MLCSP	350	20,800.00	429.92	GOOD	YES	NONE	DCWD reserve fund
Bunawan	TIBUNGCO	L	MLCSP	350	20,800.00	283.61	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	PVC	150	11,200.00	55.96	GOOD	YES	NONE	DCWD reserve fund
Agdao	PACIANO BANGOY	L	PVC	150	11,200.00	8.86	GOOD	YES	NONE	DCWD reserve fund
Agdao	AGDAO PROPER	L	PVC	150	11,200.00	37.93	GOOD	YES	NONE	DCWD reserve fund
Poblacion	15-B	L	PVC	150	11,200.00	19.13	GOOD	YES	NONE	DCWD reserve fund

Lifeline Utilities DCWD Wells Exposure Database

Only one submersible pipe is exposed to high landslide susceptibility. This lone well is found in Purok 24, Malagamot, Barangay Panacan. It has a replacement cost of Php 6, 500,000. It is in good condition with hazard resistant design. It has no insurance coverage, however, it has DCWD fund.

Only one submersible pipe is exposed to high landslide susceptibility. This lone well is found in Purok 24, Malagamot, Barangay Panacan. It has a replacement cost of Php 6, 500,000. It is in good condition with hazard resistant design. It has no insurance coverage, however, it has DCWD fund.

Table LU-15. Lifeline Utilities, DCWD Production Wells, Exposure Database for Landslide, Davao City

Well name	EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
	LOCATION	SUSCEPTIBILITY	PUMP TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
PW 1	Km. 7, Talomo Sump Bangkal, Brgy. Talomo	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 2	Benedictine Sisters Road, Brgy. Talomo	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 3	UUHSA, Brgy. Talomo	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 4	Km. 8 Ulas, Brgy. Talomo	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 5	Puan Junction, Brgy. Talomo	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 6	Lower Rapnaga, Puan, Brgy. Bago Aplaya	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 7	Lower Rapnaga, Puan, Brgy. Bago Aplaya	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 8	Lower Rapnaga, Puan, Brgy. Bago Aplaya	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 9	Crossing Bago Aplaya, Brgy. Bago Aplaya	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 10	Km. 10 Bago Aplaya fronting Ideal Subdivision, Brgy. Bago Aplaya	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 11	Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 12	Km. 11 Dumoy near the entrance to Dusnai, Brgy. Dumoy	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 13	Bago Gallera Road near Gallera De Oro Subd., Brgy. Bago Gallera	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 14	Km. 9, Puan along Davao Cotabato Road Brgy. Bago Aplaya	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 15	Along Bago Gallera Road in front of Mega Homes, Brgy. Bago Gallera	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 16	Catotal Subdivision near Block 22, Brgy. Bago Aplaya	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 17	Gallera de Oro Subdivision near Block 8, Brgy. Bago Aplaya	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund

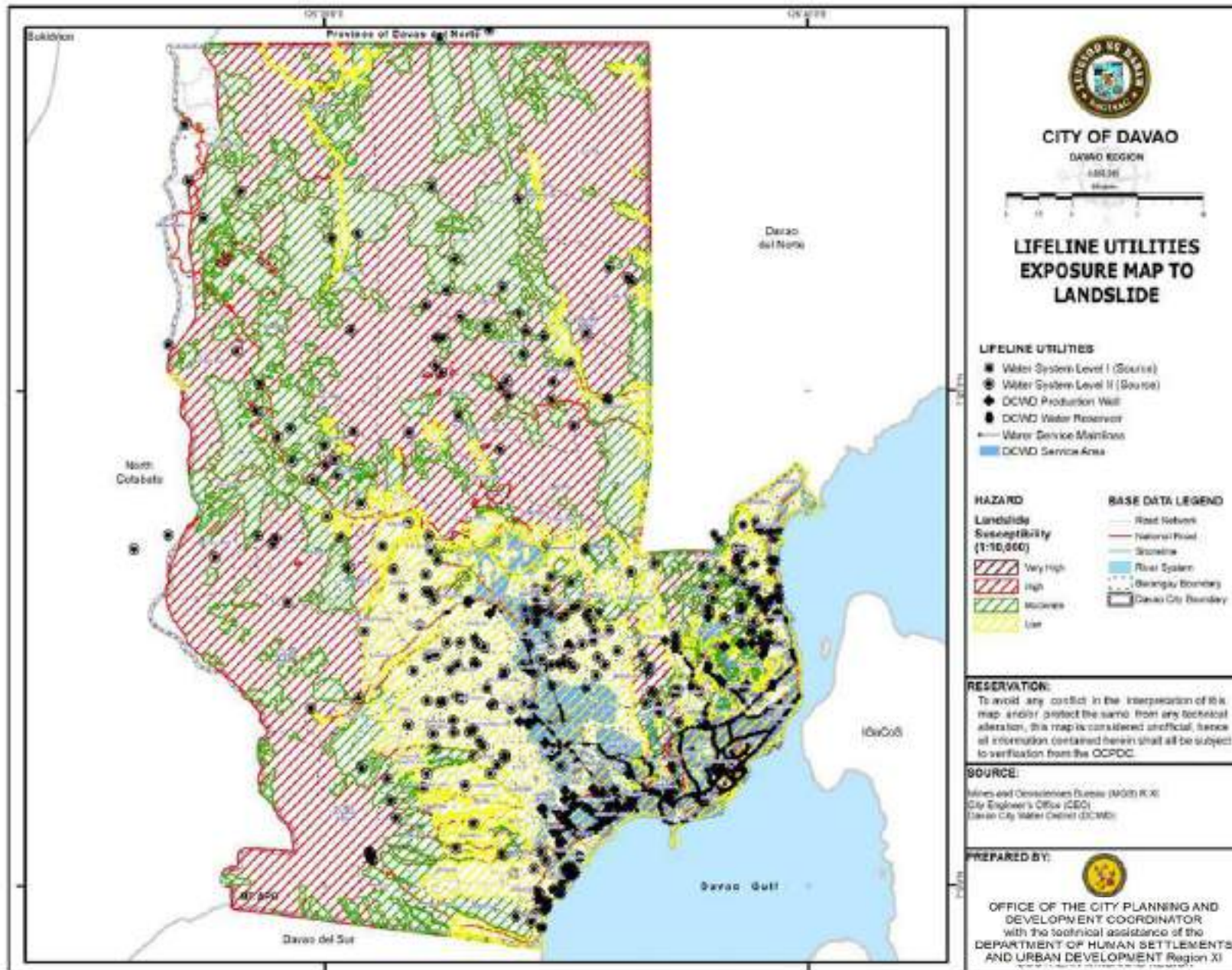
Table LU-15. Lifeline Utilities, DCWD Production Wells, Exposure Database for Landslide, Davao City

Well name	EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
	LOCATION	SUSCEPTIBILITY	PUMP TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
PW 18	Purok 6, Sta Cruz Bago Gallera Road fronting Spring Valley, Brgy. Bago Gallera	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 19	Reldo Village, Acacia St., Brgy. Bago Gallera	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 20	Along Apo Golf Road, Brgy. Bago Aplaya	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 21	Along Libby Road in front of San Lorenzo Village, Brgy. Bago Gallera	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 22	Entrance of Toscana Solariega, Brgy. Bago Gallera	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 23	Toscana Solariega near Block 11, Brgy. Bago Gallera	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 24	Libby Road, near Adciville Subdivision, Bago Gallera	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 25	Farland Extension near Block 2, Brgy. Dumoy	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 26	Along Iwha Road, Brgy. Baliok	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 27	Along Iwha Road, Brgy. Baliok	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 28	Along Bago Gallera Road, Purok 3 , Brgy. Bago Gallera	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 29	BAGASA Village, Libby Road, Brgy. Bago Gallera	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 30	Entrance to Greenland Subdivision, along Davao Cotabato Road, Brgy. Dumoy	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 31	Along Libby Road, Purok 5, Brgy. Bago Gallera	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 32	Along Libby Road, Purok 1, Brgy. Baliok	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 33	Libby Road, near Davao New Town Relocation, Brgy. Bago Gallera	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 34	Sitio Saka, Brgy. Bago Oshiro	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 35	Sitio Nalum, Along Libby Road, Brgy. Bago Oshiro	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 36	Susana Homes near Block 11, Brgy. Baliok	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 27	Along Iwha Road, Brgy. Baliok	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 38	Bacanaya Compound, Brgy. Catalunan Pequeño	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
PW 39	Purok 6, Brgy. Baliok	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund

Table LU-15. Lifeline Utilities, DCWD Production Wells, Exposure Database for Landslide, Davao City

Well name	EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
	LOCATION	SUSCEPTIBILITY	PUMP TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
PW 40	Brgy. Baliok, Davao City	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
DACOVILLE PW NO. 1	Dacoville Subd., Brgy. Dumoy	L		6,500,000.00	GOOD	YES	NO	DCWD fund
TRL 1	Rasay St., Brgy. Toril	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
TRL 2	Purok Pagkakaisa, Brgy. Lubogan	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
LBG 1	Mangahan Bridge Alambre, Toril	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
LBG 2	Bangcas Heights Lubogan, Toril	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
CAB 1	Purok 1 Communal, Brgy. Communal	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
CAB 2	Cabantian Road, Brgy. Cabantian	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
INDANGAN PW 1	Nagkahiusa Village, Brgy. Indangan	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
MOLAVE	Davao Molave Homes, Brgy. Indangan	M	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
PNC 1	Purok 27, Malagamot, Brgy. Panacan	M	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
PNC 2	Purok 24, Malagamot, Brgy. Panacan	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
PNC 3	Purok 24, Malagamot, Brgy. Panacan	H	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
PNC 4	Malagamot Road, Panacan	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
TIBUNGCO	Tibungco Relocation, Brgy. Tibungco	M	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
TGK 1	Sitio Mahayahay, Brgy. Tugbok	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
TGK 2	Sitio Mahayahay, Brgy. Tugbok	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
TGK 3	Sitio Mahayahay, Brgy. Tugbok	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
TGK 4	New Loon, Brgy. Mintal	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
TGK 5	Tugbok Quarry, Along Davao Bukidnon Road, Brgy. Tugbok	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
TGK6	Sitio Basak, Brgy. Mintal	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
TGK7	Purok 7, Near PCA, Brgy. Bago Oshiro	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
TGK8	DCWD Property, Brgy. Catalunan Grande	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
CLN 1	Malagos Barangay Road	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
CLN 2	Barangay Wangan	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
RVR 1	Davao - Bukidnon Road, Upper Riverside	L	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
RVR 2	Los Amigos	L	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund

Map 5.8 Lifeline Utilities, Water, Exposure Map for Landslide, Davao City



Exposure Database of Cell Site Towers

A total of 13 cell site towers are highly susceptible to landslide. Two (2) Digital Mobile towers, three (3) Globe Telecom, and eight (8) Smart Communication Towers. The Digital Towers are located in Diversion Road, Bangkal and Matina RS. The Globe Telecom Towers are located in Lloures Building, McArthur Highway, Shrine Hills Matina, and Lot 19, Blk 17, Bacaca Road. On the other hand, the Smart Communication Towers are located at Telstar St. GSIS Subdivision, Shrine Hills Matina, 796 Tigatto, Buhangin, Barangay Panorama, Diversion Road Barangay Catitipan, Communal Road, Buhangin District, Water Tank, Palos Verdes Golf, and Barangay Malabog, Paquibato District.

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
GLOBE TELECOM, INC.	High	Lloueras Bldg., McArthur Highway, Talomo (Pob.),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Telstar St., GSIS Subdivision, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Diversion Road, Bangkal,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	Matina Shrine, Matina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Shrine Hill, Matina,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Matina RS,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	lot 19 blk 17 Bacaca road El Rio Vista Buhangin (Pob.),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	796 Tigatto, Buhangin	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Brgy. Panorama,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Diversion Road, Brgy. Catitipan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	High	Communal Road, Buhangin District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Water Tank, Palos Verdes Golf Course & Subd., Mandug,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Brgy. Malabog, Paquibato District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Eden Nature Park, Brgy. Eden, Toril District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Shrine Hill Matina RS	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Maa Rd., Sitio Bugac, Brgy. Maa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Maa Rd., Sitio Bugac, Brgy. Maa,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Maa Rd., Sitio Bugac, Brgy. Maa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Brgy. Sirib, Calinan District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Brgy. Mandug,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Carnoustie St., Palos Verdes Compound Golf Club, Mandug	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Moderate	Buhisan St., Brgy. Tibungco,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Sitio Lumondao,, Brgy. Marilog Proper, Marilog District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Inawayan Proper, Davao-Digos Highway	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Low	Purok 8 Baracatan, Toril	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Purok 2, Sirawan, Toril District	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Brgy. Sirawan, Toril,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Brgy. Daliao, Toril,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Lorenzo Manuel St., San Vicente Daliao, Toril, Davao City,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Brgy. Daliao, Toril	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Corner National Highway-Lim Street	Roof	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Ferriols Compound, Brgy. Toril	Roof	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Sto. Cristo St., cor. Rasay St., Toril,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Lot 6, Blk 38 Crossing Barrio Bayabas,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Macelod, Toril	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
GLOBE TELECOM, INC.	Low	Sitio Pagkakaisa, Lower Lubugan, Brgy. Lubugan, Toril District	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Mac Arthur Highway, Dumoy,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Macapili Subd., Dumoy	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Aquilino Fortuna, Barrio Bato, Toril	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Barrio Bato, Toril	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Brgy. Baliok,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Bgy. Baliok	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Along National Highway, Brgy. Bago Aplaya, Talomo District	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Commandante Property, Along National Highway, Brgy. Bago Aplaya, Talomo District,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Barangay Bago Aplaya, Talomo District, Davao City Golf Country Club	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
GLOBE TELECOM, INC.	Low	Bonguyan Compound Matina Aplaya,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Doña Luisa Subdivision, Phase 2, Brgy. Matina Aplaya	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	Roof	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Telstar St., GSIS Subdivision, McArthur Hi-way, Matina	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	SM City Davao Annex Building, Brgy. Bucana	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	SM City Davao Annex Building, Brgy. Bucana,	Roof	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Crossing Puan, McArthur Highway	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Bago Aplaya, Talomo	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	SM Davao, Ecoland,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Low	PLDT Village, Bo. Talomo,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Vega Property, Cariñosa St. cor Balitaw St., Lanzona Subd., Matina,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Carinosa St., cor. Balitaw St., Lanzona Subd., Matina	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	PLDT Village, Bo. Talomo	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Matina Aplaya (near Lanzano Subd.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Ortis Road, Brgy. Ulas	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Ortis road, Brgy. Uas,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	JMS Bldg., #88 Maya Street, Barangay 76A, Ecoland,	Roof	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	University Ave., Juna Subd., Martina	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Abarquez Prop., University Ave., Juna Subd., Martina,	Roof	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Acacia St., near Ecoland Subd.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Low	Acacia St., near Ecoland Subd.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Upper Rapnaga, Bago Gallera Talumo Dist.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Alzati's Lot, Matina Aplaya,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Matina Aplaya	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Sto. Niño (Catalunan Pequeño),	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Purok 16, Sitio Durian,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Sto. Nino, Brgy. Bago Gallera	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Upper Rapnaga, Bago Gallera Talumo Dist.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Mc Arthur Hiway, Brgy. 74-A, Matina,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Km. 3, Mc Arthur Highway,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Brgy. Bago Gallera Talomo District 1	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Bago Gallera, Talomo District,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
DIGITEL MOBILE PHILIPPINES, INC.	Low	Golden Hardware Bldg.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Golden Hardware Bldg., Km. 5 McArthur Highway,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	NCC Mall Maa	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Centerpoint Mall, Brgy. Matina Crossing,	Roof	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Mac Arthur Highway, Bangkal,	Roof	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Magno Prop., No. 64 V. Mapa St.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	No. 64 V. Mapa St.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	JVALL Bldg., McArthur Highway, (Maa Crossing)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Sandawa, McArthur Highway, Matina,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Sandawa, McArthur Highway, Matina	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Magallanes St.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Luna Bldg., San Pedro corner Quimpo Blvd.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	NCCC Mall, Maa,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Low	Matina Hi-way cor. MAA Rd.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	#88 Maya St., Brgy. 76A, Ecoland,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Diversion Road, Bangkal	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Luna Bldg., San Pedro cor. Quimpo Blvd.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Ponciano Reyes St. (crooked Rd.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Magno Bldg., Ponciano Reyes St. (crooked rd.),	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Bonifacio St., cor M.L. Quezon Blvd	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Seminary Road Catalunan Grande, Talomo Catalunan Grande, Davao City, Davao del Sur	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Seminary Road Catalunan Grande, Talomo	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	109 Piapi, Quezon Blvd,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Santiago's Lot, Brgy. Sasa Buhangin,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Low	Erlinda Reyes Bldg., 19-Piapi Quezon Blvd.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	5/F Gaisano Ilustre St.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Ilustre St.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	J.S. Gaisano Mall, Ilustre St., cor. Gen. Luna St.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Covington Property, Purok 7, Sto. Niño Subd., Brgy. Maa,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Seminary Rd., Brgy. Catalunan Grande, Talomo District	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Seminary Rd., Brgy. Catalunan Grande Talomo District	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	General Malvar St.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	D. Ponce St.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Marco Polo Hotel	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Chippens Bldg., 368 Padre Gomez St.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Chippens Bldg., 368 Padre Gomez St.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Low	Davao Doctors Hospital, Malvar St.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Legaspi St. Cor. Bonifacio St.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Guardsman, AGT Bldg., Nacilla Street, Brgy. Ma-a	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Guardsman AGT Bldg., Nacilla Street, Brgy. Ma-a,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Marco Polo Hotel	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Baguio (Pob.),	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Km.12, National Highway, Barangay Catalunan Pequeno,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	PLDT Ponciano, PLDT Bldg., Ponciano St.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Km. 12, national Highway, Brgy. Catalunan Pequeno,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Regency Inn, Villa Abrille St.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Gov. Sales St., Brgy. 27	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	PLDT Maa	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Jose Co Bldg., Gov. Sales St., Brgy. 27,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	NCC Mall Uyanguren	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	NCC Mall Unaguren	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Rizal Memorial College, Lopez Jaena St.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	PBCOM Bldg., Monte-verde cor. Bangoy St.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Rizal Memorial College Cmpd., Lopez Jaena St.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Torres St., Brgy. 9-A (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	PLDT Post fronting Chimes Store, Sales St.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	PLDT Maa,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Km 12.5, Talomo Dist Catalunan Pequeño,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Km 12.5, Talomo Dist Catalunan Pequeño, Davao City, Davao del Sur	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Holy Cross College, Sta. Ana Ave. Cor Guerero	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Low	J.P. Laurel Ave., Bajada	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	J.P Laurel Ave., Bajada	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Infront of Luisa Avenue Square Bldg., B. Jacinto Ext. St.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Evergreen Street, Brgy. Sto. Niño Mintal, Tugbok District,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Evergreen St., Brgy. Sto. Niño, Mintal Tugbok District	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	San Pedro Hospital Guzman St., Brgy. Gov. Vicente Duterte	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	San Pedro Hospital, Guzman St., Brgy. Gov. Vicente Duterte,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	San Pedro Hospital, Guzman St., Gov. Vicente Duterte	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Lapu Lapu corner Bangoy Sts., Agdao,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Lapu-lapu St., cor. Bangoy Agdao,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Low	Landco Bldg., JP Laurel St.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Purok 44, Maranon Compound, Brgy. Maa	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Sitio Toril, Catalunan Grande, Talomo District	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Corner Palma Gil & Cervantes St.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Banco Filipino Bldg., Lapu-lapu St., cor. Dacudao Ave.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Wescon Suites Cmpd., R. Castillo, Agdao	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Fr Selga St., Malapo Hill	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Peralta Property, Seminary Rd., Brgy Catalunan Grande Talomo District,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Billboard on Synchar Hotel, J.P. Laurel Ave., Bajada	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	J.P. Laurel Avenue, Bajada,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

Name of Cell Site	EXPOSURE			SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY		
	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
DIGITEL MOBILE PHILIPPINES, INC.	Low	Llanes Prop 1, Cabaguio Ave., Agdao,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Cabaguio Ave., Agdao	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	University of Southern Philippines, Trade School Drive	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Circumferencial Road, Barangay 19-B	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Lagare Property, Asuzena St., Brgy. Mintal, Tugbok District,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Davao Mintal (Lagare Property) Asucena St., Brgy. Mintal, Tugbok District	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Opal St., Obrero,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	R. Castillo St., Otero Compound, Lapu-Lapu	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	San Francisco cor. Champaca St., Mintal,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Elenita Heights, Catalunan Grande, Talomo	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Opal St., Obrero	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

Name of Cell Site	EXPOSURE			SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY		
	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Low	San Roque Alley, Garcia Heights, Bajada,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Brgy. 20-B Poblacion West,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Brgy. 20-B Poblacion West,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Abreeza Mall, JP Laurel Ave.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Abreeza Mall JP Laurel St., Barangay 20-B (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Abreeza Mall JP Laurel St. Acacia,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	JP Laurel St., Barangay 20-B (Pob.),	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	J.P. Laurel Ave. Brgy. 20-B Poblacion West, Bajada	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	J.P. Laurel Ave., Brgy. 20-B Poblacion West, Bajada	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	J.P. Laurel Ave., Brgy. 20-B Poblacion West, Bajada	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	San Francisco St. corner Champaca St., Mintal	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Facundo, Purok 46, Alvarez Compound, Kapundok, Maa,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Low	Facundo Purok 46 Maa	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Catalunan Grande, Talomo	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Catalunan Grande, Talomo	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Leonor Property, Camia St., Ubalde Subd., Brgy. Ubalde	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Camia St., Ubalde Subd., Brgy. Ubalde	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	J.P. Laurel COR. Buhangin Road, (near flyover)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	J.P. Laurel Avenue, Lanang	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	J.P. Laurel Avenue, Lanang	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	J.P. Laurel Avenue, Lanang,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	J.P. Laurel Ave., GMA Compound, Buhangin (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Rooftop SM Lanang, JP Laurel Avenue	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Low	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	SM Lanang, Km. 6 Lanang	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	SM Lanang, Km 6, Lanang,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	SM Lanang Former Lanang Golf and Country Club, J.P. Laurel Ave., Lanang District, Brgy. San Antonio	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Rizal Medical Center Compound, JP Laurel cor. Dumanlas Ave.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Rodriguez Prop., Buhangin Rd. cor. Landislawa Rd.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Lanang,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

Name of Cell Site	EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Low	Park Inn Radison, Lanang	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Park Inn Radison, Lanang	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	J.P. Laurel, Bajada, Kwik kwei Engineering Cmpd.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	J.P. Laurel Ave., Monark Compound, Brgy. Rafael Castillo	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	SM Davao, Ecoland,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	SM Davao Ecoland	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	SM Davao Ecoland,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	J.P. Laurel Ave.,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Kwik-way Compound, JP Laurel Bajada, Buhangin	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Kwik Kwei Engineering Cpd., J.P. Laurenl St., Bajada	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Bacaca Rd., El Rio, Brgy. 19-B	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	South Villa Heights, Maa	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
GLOBE TELECOM, INC.	Low	Km.5 Buhangin Road, Buhangin District, Buhangin (Pob.),	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Grand Regal Hotel, J.P. Laurel, Lanang,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Elenita Height Subd., Purok 18 Mintal	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Roberto/Paul Dacudao, Dakudao Water Tank, J.P. Laurel Avenue, Lanang,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Belisarian Heights, Lanang	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Waterfront Hotel, Lanang,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Buhangin Road cor. Diversion Road, Buhangin,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Sulmar St., NHA, Brgy. Buhangin	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Brgy. Buhangin (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Buhangin (Pob.),	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Doña Asuncion Road, Brgy. Pampanga, Lanang,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Mamay Rd., Block 7, Lot 16, Vincent Heights Subd., Lanang,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Low	Km. 9, KMA, Brgy. Sasa	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Erlinda Reyes Bldg. 19-Piapi Quezon Blvd.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Falcata St., Nova Tierra Village, Pampanga	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Faicata St., Nova Tierra Village, Pampanga,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Tigatto,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Sofia Village, Bo. Pampanga,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Tugbok, Los Amigos, (near Vitarich)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Mamay Rd., Vincent Hts. Subd., Brgy. Angliongto,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low		300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Km. 8. Diversion Road, Cabantian	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Jehovahs Witness Road, Diversion Rd., Brgy. Cabantian, Buhangin District,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Roman Property, Jehovah's Witness Road, Diversion Road, Brgy. Cabantian, Buhangin District	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
GLOBE TELECOM, INC.	Low	Davao International Airport, Catitipan Sasa	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	KM 10 Doña Salud Subd., Sasa	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	So Peng Kee Lot, Airport Road, Sosa,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Airport Road, Sasa	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Sitio Nahul, Barangay Baliok,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Sitio Nahul, Brgy. Baliok	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Brgy. Tagakpan, Tugbok District,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	New Davao Airport Sasa,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	National Highway (beside Camp Catitipan), Diversion Road,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Brgy. Cabantian,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Emilyhomes Cabantian,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Cabantian Rd., Buhangin	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Sasa	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Camp Catitipan, Brgy. Com-monal, Buhangin District	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Lapena Property, Camp Catitipan, Brgy. Commonal, Buhangin District,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Communal Road, Buhangin District,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Lot 6 Blk 38, Barrio Bayabas, Crossing Toril	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Km10 Doña Salud Subd., Sasa	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Km10 Doña Salud Subd., Sasa,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Brgy. Cabantian	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Brgy. Cabantian	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Brgy. Cabantian,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Diversion Road, Socorro Village Panacan,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Diversion Road, Relocation panacan,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Pres. Carlos P. Garcia Highway, Brgy. Panacan,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	President Carlos P. Garcia Highway (Diversion Road), Brgy. Panacan	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Lapena Property, Camp Cati-tipan, Brgy. Commonal, Buhangin District,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Communal Road, Buhangin District,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Lot 6 Blk 38, Barrio Bayabas, Crossing Toril	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Km10 Doña Salud Subd., Sasa	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Km10 Doña Salud Subd., Sasa,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Brgy. Cabantian	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Brgy. Cabantian	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Brgy. Cabantian,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Diversion Road, Socorro Village Panacan,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Diversion Road, Relocation Panacan,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Pres. Carlos P. Garcia Highway, Brgy. Panacan,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	President Carlos P. Garcia Highway (Diversion Road), Brgy. Panacan	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
DIGITEL MOBILE PHILIPPINES, INC.	Low	Cruz Property, President. Carlos P. Garcia Highway (Diversion Road), Brgy. Panacan	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	National Highway Panacan	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Malagamot Road, Bayani Diaz Compound, Panacan	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Malagamot Road, Panacan,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	PLDT Compound, National Highway, Panacan	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Lapanday Agri, Mandug	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	PLDT Compound, National Highway	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Malagamot Road, Brgy. Panacan	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Sto. Nino2, Millenium Village, Indangan	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Brgy. Poblacion, Baguio District	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Tefasco Lot, Panacan,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Panacan,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Brgy. Baguio Proper, Baguio District	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

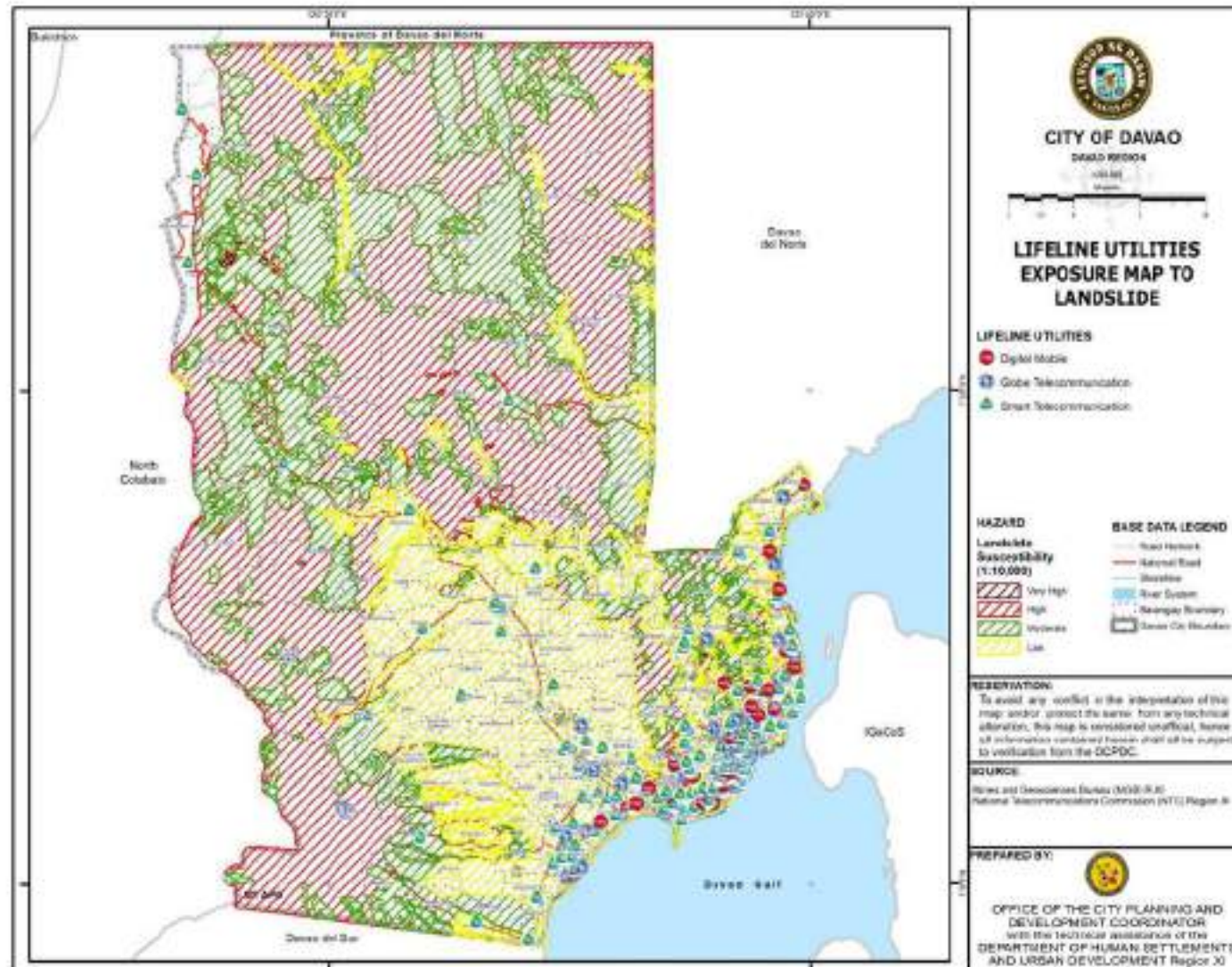
Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Low	Piñano St., Poblacion, Calinan,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Calinan (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Calinan (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Pinano St., Poblacion, Calinan	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Principe Property, R.Magsaysay St., Purok 9, Brgy. Calinan	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	R. Magsaysay St., Purok 9, Brgy. Calinan	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Purok II Tibungko	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	PILTEL-Tibungco site, Valdez Village, Tibungco,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Purok 3, Valdez Vill., Tibungco (Piltel Tibungco)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Deles Property Km. 19 Purok 5, San Juan Upper Crossing Ileong Road, Brgy. Tibungko	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Deles Property, Upper Crossing Ileong Road, Brgy. Tibungko,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Brgy. Dacudao, Calinan District,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Brgy. Mahayag, Bunawan, (near Mahayag Elem. School)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-16. Lifeline Utilities, Cell Sites, Exposure Database to Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Landslide Susceptibility	Location	Area Occupied (ha)	Replacement Cost	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Low	Purok 3, Kasilak, Brgy.	300 sq. m	₱5 million	Steel &	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Purok 15-A Km. 22 Bubud, Bunawan,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Mercado Property, Purok 3 (Near Market Site), Brgy.	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Purok 3, (near Market site), Brgy. Bunawan	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Before DOLE Office, Brgy. Tamugan,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Crossing Licanan, Brgy. Alejandra Navarro (Lasang)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Lasang	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Barilio Lasang	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Hao Property, Bariio Lasang,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Map 5.10 Lifeline Utilities, Cell Sites, Exposure Map to Landslide, Davao City



Liquefaction

Exposure Database for Road

The road with longest exposed length is the Davao Agusan Highway with 11. 2802 kilometers highly susceptible to liquefaction. It is followed by McArthur Highway with an exposed length of 5.1120 kilometers, thereafter followed by Quezon Boulevard, with 4. 2215 kilometers exposed length. As to the Replacement cost, roads with highest replacement cost per kilometer are Quezon Boulevard and Rafael Castillo St., with the replacement cost of ₱86,000,000.

Table LU-17. Lifeline Utilities, Roads, Exposure Database for Liquefaction, Davao City

ROAD NAME	EXPOSURE			SENSITIVITY			ADAPTIVE CAPACITY	
	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
2nd Avenue	High	0.2056	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
5th Ave.	High	0.2043	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Agdao Flyover	High	0.4734	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Bonifacio Rotonda	High	0.0839	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Calinan-Baguio-Cadalian Road	Low	1.4846	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	High	0.9844	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	Moderate	0.3141	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	Low	0.1466	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	Moderate	0.6716	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	Low	0.1867	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-17. Lifeline Utilities, Roads, Exposure Database for Liquefaction, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Carlos P. Garcia Highway	Low	1.5282	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Claro M. Recto St.	High	1.2152	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Dacudao Avenue	High	0.7526	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Dacudao Avenue	Moderate	0.7785	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	Moderate	0.0092	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	Low	11.9684	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	Low	0.2438	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	High	0.0202	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Don Julian Rodriguez Ave. (Maa Road)	Moderate	0.7840	28,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Don Julian Rodriguez Ave. (Maa Road)	Low	0.0394	28,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Don Julian Rodriguez Ave. (Maa Road)	Moderate	0.3266	28,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Florentino Torres St	Moderate	1.3493	65,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Inawayan-Baracatan Road	Low	0.0439	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
J.P. Cabaguio Avenue	High	0.6968	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
J.P. Cabaguio Avenue	Moderate	0.3525	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	High	2.4896	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-17. Lifeline Utilities, Roads, Exposure Database for Liquefaction, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Jose P. Laurel Avenue	Moderate	1.0490	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Leon Garcia St.	High	0.6511	49,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Libby Road	Moderate	0.3655	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Libby Road	Low	0.1741	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Maa Radio Station St.	Low	0.1010	28,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Maa Radio Station St.	Moderate	0.3727	28,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Manggahan St.	Low	0.3774	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	High	5.1120	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	Low	1.3155	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	Moderate	8.1776	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	Low	6.6191	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Old Airport Road	High	0.1267	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Old Airport Road	Moderate	0.1236	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Pakiputan Wharf Road	High	0.5062	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Pichon St.	High	0.9460	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quezon Boulevard	High	4.2215	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-17. Lifeline Utilities, Roads, Exposure Database for Liquefaction, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Quimpo Boulevard	High	3.9110	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	Low	0.4167	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	Moderate	0.3944	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	High	2.0325	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	High	3.1795	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Ramon Magsaysay Ave.	High	1.3741	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Sta. Ana Ave.	High	1.2910	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Toril-Bayabas-Eden Road	Low	0.6280	30,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	High	0.0351	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	Moderate	0.0351	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Exposure Database for Bridges

For bridges, highly susceptible to liquefaction and with the longest exposed length is the Agdao Flyover with a total of 382.98 meters exposed length. This is followed by Bunawan Bridge 1 with an exposed length of 49.76 meters, followed by Bunawan Bridge 2 with a total exposed length of 47.79. All these bridges have a replacement cost per line per kilometer of ₱1, 200,000.

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Table LU-18. Lifeline Utilities, Bridges, Exposure Database Table for Liquefaction

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Angalan Br. III	L	48.88	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes
Angalan Br. IV	L	15.90	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes

Table LU-18. Lifeline Utilities, Bridges, Exposure Database Table for Liquefaction

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Angalan Br. V	L	18.00	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes
Angalan Br. VI	L	45.00	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes
Bago Br.	H	31.21	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes

Table LU-18. Lifeline Utilities, Bridges, Exposure Database Table for Liquefaction

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RE-SOURCES
Bunawan Br. 1	H	49.76	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes
Bunawan Br. 2	H	47.79	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes
Ilang Br.	M	25.70	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes

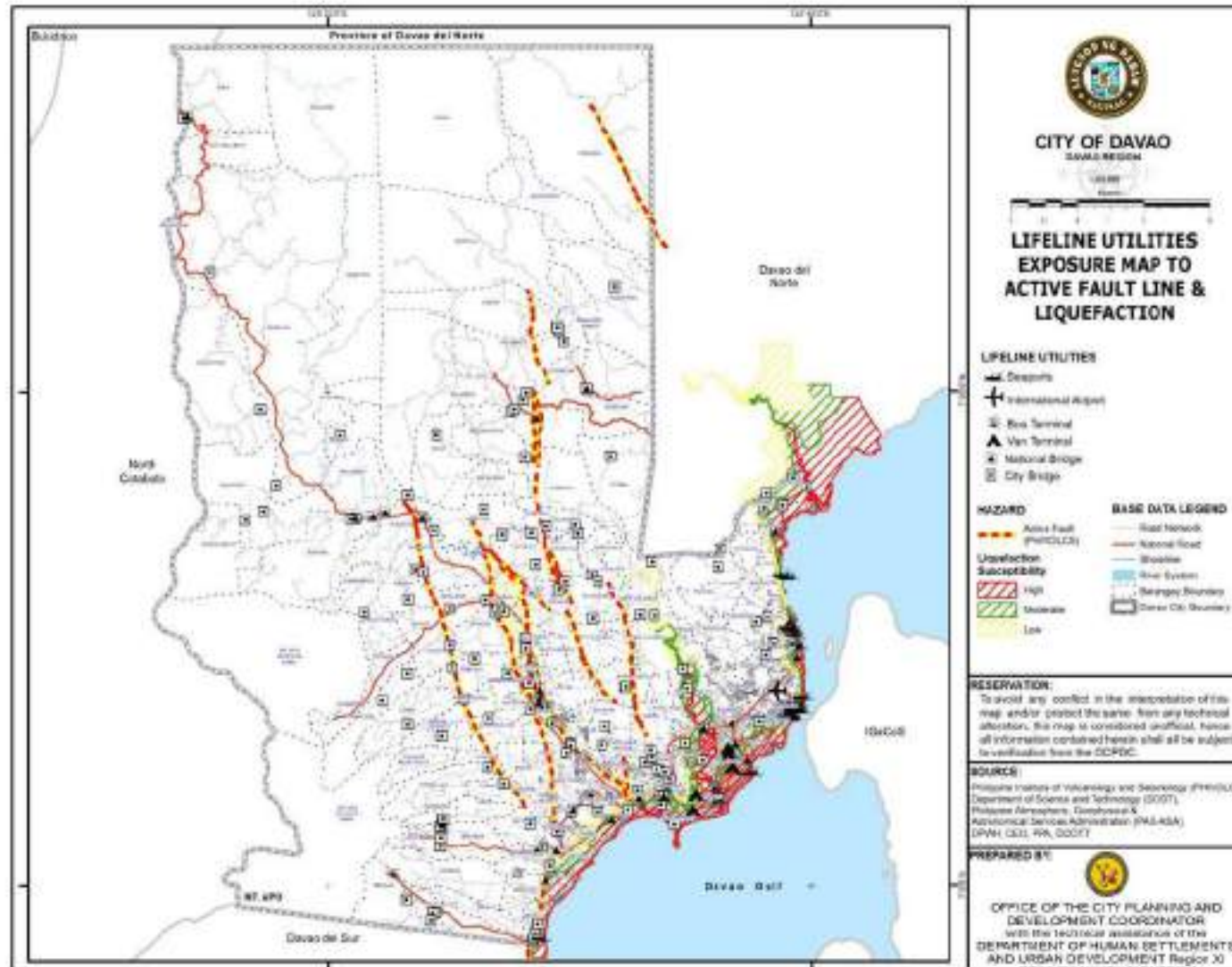
Table LU-18. Lifeline Utilities, Bridges, Exposure Database Table for Liquefaction

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Lipadas Br. I	M	37.80	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes
Lipadas Br. II	M	40.00	1,200,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes
Matina Br.	H	38.66	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes

Table LU-18. Lifeline Utilities, Bridges, Exposure Database Table for Liquefaction

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Panacan Br.	H	23.53	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes
Pangi Br.	M	121.69	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes
Piedad Br.	L	47.82	1,200,000	Steel	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes
Sasa Br.	H	18.43	1,200,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to

Map 5.7 Lifeline Utilities, Bridges, Exposure Map to Active Fault Line and Liquefaction, Davao City



Exposure Database for Power Substations

Dumoy Substation, Puan Substation, P. Reyes Substation, Gaisano Substation, Sta. Ana, R.Castillo, Panacan, Pampanga, have high susceptibility to liquefaction. Each has a replacement cost ranging from P 85 million– P 118 million. These substations are made of steel and concrete materials. For existing condition, Dumoy Substation and Puan Substation were upgraded in the last 10 years and last 5 years respectively. The two substations which are highly susceptible to liquefaction are resistant to earthquake, flood, and oil spill. The two substations also have industrial risk insurance and comprehensive general liability. Both have no available government resources primarily because it is maintained and rehabilitated by the Davao Light and Power Company.

Table LU-19 Lifeline Utilities, Power Substations, Exposure Database Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME	LIQUEFACTION SUSCEPTIBILITY	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Dumoy Substation	High	1,322	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Puan Substation	High	803	85 Million	a) Perimeter Fence : Concrete Fence b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Matina Substation	Moderate	1,000.00	120 Million	a) Perimeter Fence : Concrete Fence (3.0m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

Table LU-19 Lifeline Utilities, Power Substations, Exposure Database Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME	LIQUEFACTION SUSCEPTIBILITY	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Ecoland Substation	Moderate	1,547.00	120 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
P.Reyes Substation	High	825.86	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : Concrete Pole and Steel Beams	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Gaisano Substation	High	454.00	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Sta Ana Substation	High	607.00	135 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) & Bended Metal Sheets b) Control Building: Concrete Wall and Floor ; with Roof deck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

Table LU-19 Lifeline Utilities, Power Substations, Exposure Database Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME	LIQUEFACTION SUSCEPTIBILITY	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Victoria Substation	Moderate	595.00	120 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Up-graded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
R.Castillo Sub-station	High	852.00	125 Million	a) Perimeter Fence : Concrete High Wall Fence (3.5m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Up-graded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Pampanga Sub-station	High	1,031.00	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Panacan Substation	High	858.00	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: Concrete wall and Floor, PU Panel Roof. c) Equip-ment Support :Concrete Pole and Steel Beams	a) Operational b) Last upgraded 10 yrs ago.	Recommended for relocation or Reconstruction	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

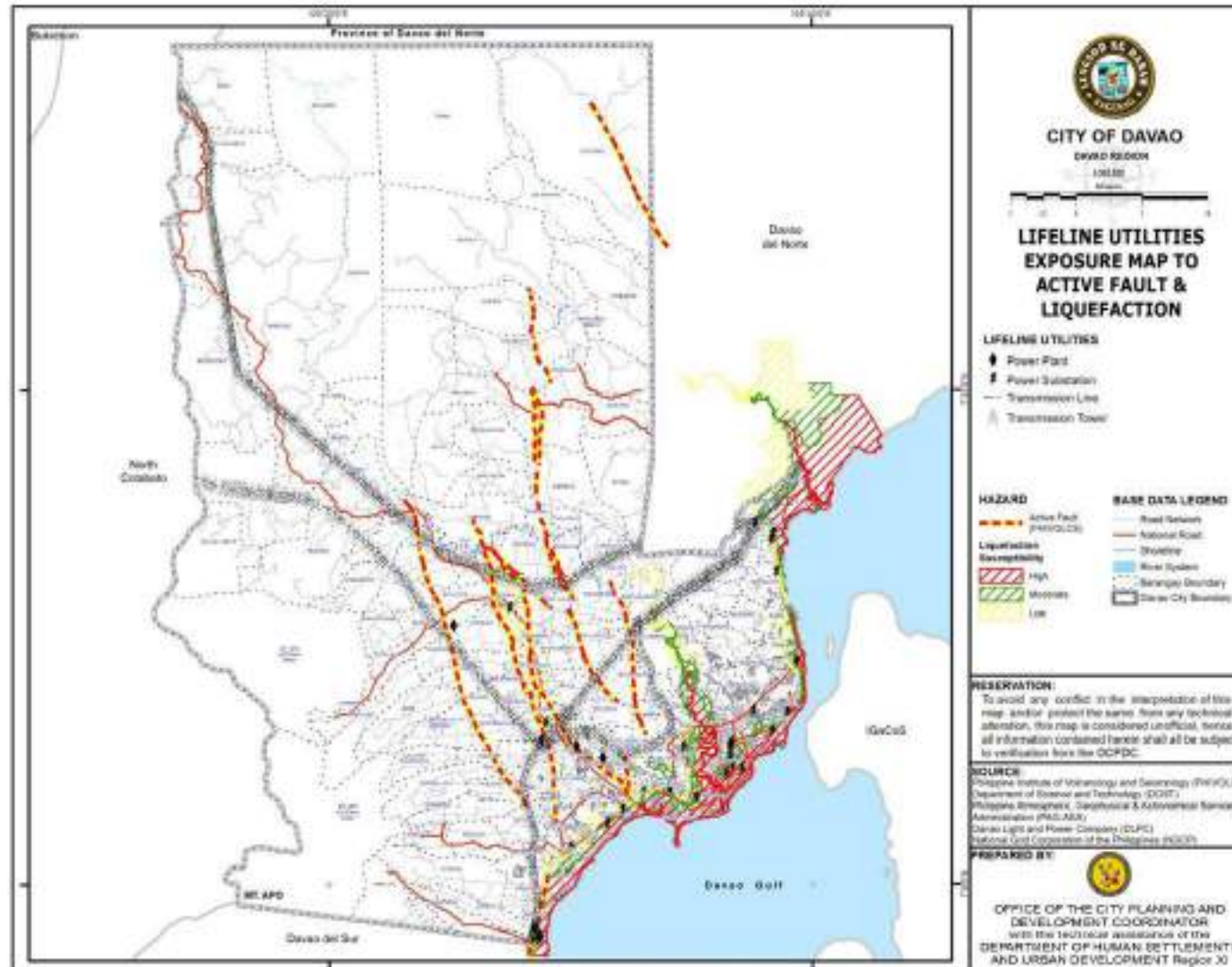
Table LU-19 Lifeline Utilities, Power Substations, Exposure Database Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME	LIQUEFACTION SUSCEPTIBILITY	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Don Ramon Substation	Moderate	15,540.00	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel Structures	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Bunawan Substation	Moderate	1,085.00	110 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside b) Control Building: Concrete wall and floor, ; Preprinted Roofing Sheet. c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Toril Substation	Low	1,125	125 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Calinan Substation	Low	1,000.00	140 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; with Roof deck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

Table LU-19 Lifeline Utilities, Power Substations, Exposure Database Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME	LIQUEFACTION SUSCEPTIBILITY	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Bangkal Substation'	Low	1,142.00	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Maa Substation	Low	1,308.00	145 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; with Roof deck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

Map 5.8 Lifeline Utilities, Exposure Map to Active Fault and Liquefaction, Davao City



Exposure Database for Water Level I Water System

For Level I Water System, a total out of 92 spring sources and wells are identified. Of which, 47 are highly susceptible to liquefaction. These are found in Binugao, Bunawan, Daliao, Lizada, Mahayag and Sirawan. Out of all barangays Daliao has the most number of units exposed with 24 units.

For Level I Water System, a total out of 92 spring sources and wells are identified. Of which, 47 are highly susceptible to liquefaction. These are found in Binugao, Bunawan, Daliao, Lizada, Mahayag and Sirawan. Out of all barangays Daliao has the most number of units exposed with 24 units.

Table LU-20. Lifeline Utilities, Level I Water Supply System, Exposure Database Table for Liquefaction, Davao City

ADMINISTRATIVE DIVISION	EXPOSURE				SENSITIVITY	HAZARD RESISTANT DESIGN	ADAPTIVE CAPACITY	AVAILABILITY OF GOVERNMENT RESOURCES
	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION		INSURANCE COVERAGE	
Buhangin	MANDUG		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	BUNAWAN	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	BUNAWAN		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	MAHAYAG	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	MAHAYAG	M	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	BUNAWAN	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	ILANG		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	ILANG		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	ILANG		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	ILANG		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	MAHAYAG		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Buhangin	MANDUG		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	TIBUNGCO	L	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	TIBUNGCO		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	TIBUNGCO		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	TIBUNGCO		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	TIBUNGCO	L	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	TIBUNGCO	L	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	MUDIANG		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	ILANG		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	ILANG		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	PANACAN		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	PANACAN	L	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Buhangin	MANDUG		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	PANACAN		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal

Table LU-20. Lifeline Utilities, Level I Water Supply System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Bunawan	SAN ISIDRO		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	BUNAWAN		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	BUNAWAN	L	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	MAHAYAG		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	BUNAWAN	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	GATUNGAN		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	GATUNGAN		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Bunawan	BUNAWAN	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Calinan	TALOMO RIVER		DEEP WELL	5,500,000	FAIR	Yes: Casing of the well	None but there is 1 month warranty if waterpump is installed by supplier.	YES. For funding proposal
Calinan	WANGAN		DEEP WELL	5,500,000	FAIR	Yes: Casing of the well	None but there is 1 month warranty if waterpump is installed by supplier.	YES. For funding proposal
Tugbok	TALAN-DANG		DEEP WELL	5,500,000	FAIR	Yes: Casing of the well	None but there is 1 month warranty if waterpump is installed by supplier.	YES. For funding proposal
Tugbok	TALAN-DANG		DEEP WELL	5,500,000	FAIR	Yes: Casing of the well	None but there is 1 month warranty if waterpump is installed by supplier.	YES. For funding proposal
Tugbok	ULA		DEEPWELL	5,500,000	FAIR	Yes: Casing of the well	None but there is 1 month warranty if waterpump is installed by supplier.	YES. For funding proposal

Table LU-20. Lifeline Utilities, Level I Water Supply System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	AVAILABILITY OF GOVERNMENT RESOURCES
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	
Tugbok	ULA		DEEPWELL	5,500,000	FAIR	Yes: Casing of the well	None but there is 1 month warranty if waterpump is installed by supplier.	YES. For funding proposal
Calinan	RIVERSIDE		DEEPWELL	5,500,000	FAIR	Yes: Casing of the well	None but there is 1 month warranty if waterpump is installed by supplier.	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	M	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	LIZADA	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal

Table LU-20. Lifeline Utilities, Level I Water Supply System, Exposure Database Table for Liquefaction, Davao City

ADMINISTRATIVE DIVISION	EXPOSURE				SENSITIVITY	HAZARD RESISTANT DESIGN	ADAPTIVE CAPACITY	AVAILABILITY OF GOVERNMENT RESOURCES
	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION		INSURANCE COVERAGE	
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	LIZADA	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	LIZADA	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	LIZADA	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	LIZADA	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	LIZADA	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	LIZADA	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	LIZADA	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	LIZADA	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	SIRAWAN	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	SIRAWAN	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	SIRAWAN	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	SIRAWAN	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	SIRAWAN	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	SIRAWAN	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	SIRAWAN	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	SIRAWAN	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	SIRAWAN	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	SIRAWAN	M	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	SIRAWAN	M	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	SIRAWAN	M	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	SIRAWAN		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	BINUGAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	BINUGAO	H	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	LUBOGAN		SPRING	41,586.32	FAIR	None	None	YES. For funding proposal

Exposure Database for Level II

Level 2 Water System, there are two 2 horsepower (HP) wells found in Sirawan and one unit of 186,520 well, and one 2 horsepower well found in Waan are highly exposed to liquefaction. The existing condition of all the units are fair and its hazard resistant design includes the casing of the well.

Level 2 Water System, there are two 2 horsepower (HP) wells found in Sirawan and one unit of 186,520 well, and one 2 horsepower well found in Waan are highly exposed to liquefaction. The existing condition of all the units are fair and its hazard resistant design includes the casing of the well.

Table LU-21. Lifeline Utilities, Level II Water System, Exposure Database Table for Liquefaction, Davao City

ADMINISTRATIVE DIVISION	BARANGAY	EXPOSURE			SENSITIVITY		ADAPTIVE CAPACITY	
		SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT
Toril	BINUGAO	Moderate	2HP	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the waterpump is installed by the supplier	Yes. Subject to fund proposal
Toril	SIRAWAN	High	2HP	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the waterpump is installed by the supplier	Yes. Subject to fund proposal
Toril	SIRAWAN	High	2HP	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the waterpump is installed by the supplier	Yes. Subject to fund proposal
Toril	SIRAWAN	Moderate	2HP	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the waterpump is installed by the supplier	Yes. Subject to fund proposal
Buhangin	WAAN	High	18GS20	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the waterpump is installed by the supplier	Yes. Subject to fund proposal
Buhangin	WAAN	High	2HP	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the waterpump is installed by the supplier	Yes. Subject to fund proposal

Exposure Database for Level III Water System

Out of 755 mainline pipes, a total of 433 mainline pipes are highly exposed and 186 are moderately exposed to liquefaction. Bago Aplaya has the highest exposed length 1,547.52, which is a combined length of three long mainline pipes with 600 mm diameter. Bago Aplaya is followed by Dumoy with an exposed length of 461 meters and Matina Crossing with 424.59 meters. The exposed length of pipe in Matina Crossing is 750 mm diameter.

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
CALINAN	Low	PVC	150	11,200.00	30.35	GOOD	YES	NONE	DCWD reserve fund
CALINAN	Low	PVC	200	12,500.00	177.15	GOOD	YES	NONE	DCWD reserve fund
WANGAN	Low	PVC	200	12,500.00	0.76	GOOD	YES	NONE	DCWD reserve fund
RIVERSIDE	Low	MLCSP	250	17,700.00	47.65	GOOD	YES	NONE	DCWD reserve fund
RIVERSIDE	Low	PVC	150	11,200.00	22.74	GOOD	YES	NONE	DCWD reserve fund
CALINAN	Low	PVC	200	12,500.00	87.38	GOOD	YES	NONE	DCWD reserve fund
5-A	High	MLCSP	300	19,100.00	42.36	GOOD	YES	NONE	DCWD reserve fund
10-A	Moderate	PVC	150	11,200.00	160.52	GOOD	YES	NONE	DCWD reserve fund
10-A	Moderate	PVC	150	11,200.00	162.51	GOOD	YES	NONE	DCWD reserve fund
12-B	Moderate	PVC	150	11,200.00	365.93	GOOD	YES	NONE	DCWD reserve fund
11-B	Moderate	PVC	150	11,200.00	164.29	GOOD	YES	NONE	DCWD reserve fund
39-D	High	MLCSP	300	19,100.00	156.23	GOOD	YES	NONE	DCWD reserve fund
37-D	High	MLCSP	300	19,100.00	76.08	GOOD	YES	NONE	DCWD reserve fund
32-D	High	MLCSP	300	19,100.00	236.99	GOOD	YES	NONE	DCWD reserve fund
24-C	High	MLCSP	300	19,100.00	2.96	GOOD	YES	NONE	DCWD reserve fund
24-C	High	PVC	150	11,200.00	187.67	GOOD	YES	NONE	DCWD reserve fund
32-D	High	MLCSP	300	19,100.00	222.24	GOOD	YES	NONE	DCWD reserve fund
30-C	High	MLCSP	300	19,100.00	10.29	GOOD	YES	NONE	DCWD reserve fund
11-B	High	MLCSP	300	19,100.00	117.30	GOOD	YES	NONE	DCWD reserve fund
28-C	High	PVC	150	11,200.00	165.94	GOOD	YES	NONE	DCWD reserve fund
28-C	High	PVC	150	11,200.00	164.76	GOOD	YES	NONE	DCWD reserve fund
30-C	High	PVC	150	11,200.00	117.93	GOOD	YES	NONE	DCWD reserve fund
28-C	High	PVC	150	11,200.00	6.71	GOOD	YES	NONE	DCWD reserve fund
32-D	High	MLCSP	300	19,100.00	67.83	GOOD	YES	NONE	DCWD reserve fund
32-D	High	MLCSP	400	23,600.00	31.07	GOOD	YES	NONE	DCWD reserve fund
30-C	High	MLCSP	400	23,600.00	500.92	GOOD	YES	NONE	DCWD reserve fund
12-B	High	MLCSP	400	23,600.00	40.79	GOOD	YES	NONE	DCWD reserve fund
30-C	High	PVC	150	11,200.00	34.82	GOOD	YES	NONE	DCWD reserve fund
11-B	High	MLCSP	300	19,100.00	91.64	GOOD	YES	NONE	DCWD reserve fund
15-B	High	MLCSP	400	23,600.00	8.27	GOOD	YES	NONE	DCWD reserve fund
14-B	High	MLCSP	400	23,600.00	63.08	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
18-B	Moderate	MLCSP	300	19,100.00	194.44	GOOD	YES	NONE	DCWD reserve fund
19-B	Moderate	MLCSP	300	19,100.00	2.43	GOOD	YES	NONE	DCWD reserve fund
18-B	Moderate	MLCSP	300	19,100.00	3.62	GOOD	YES	NONE	DCWD reserve fund
19-B	Moderate	MLCSP	300	19,100.00	115.53	GOOD	YES	NONE	DCWD reserve fund
12-B	Moderate	PVC	150	11,200.00	58.01	GOOD	YES	NONE	DCWD reserve fund
19-B	Moderate	PVC	150	11,200.00	37.77	GOOD	YES	NONE	DCWD reserve fund
18-B	Moderate	MLCSP	300	19,100.00	13.35	GOOD	YES	NONE	DCWD reserve fund
13-B	Moderate	MLCSP	300	19,100.00	42.75	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	Moderate	PVC	150	11,200.00	18.93	GOOD	YES	NONE	DCWD reserve fund
18-B	Moderate	PVC	150	11,200.00	34.32	GOOD	YES	NONE	DCWD reserve fund
18-B	Moderate	PVC	150	11,200.00	10.91	GOOD	YES	NONE	DCWD reserve fund
32-D	High	MLCSP	300	19,100.00	26.31	GOOD	YES	NONE	DCWD reserve fund
30-C	High	MLCSP	300	19,100.00	12.67	GOOD	YES	NONE	DCWD reserve fund
28-C	High	PVC	150	11,200.00	8.52	GOOD	YES	NONE	DCWD reserve fund
28-C	High	PVC	150	11,200.00	110.26	GOOD	YES	NONE	DCWD reserve fund
28-C	High	PVC	150	11,200.00	59.34	GOOD	YES	NONE	DCWD reserve fund
28-C	High	PVC	150	11,200.00	15.83	GOOD	YES	NONE	DCWD reserve fund
28-C	High	PVC	150	11,200.00	54.80	GOOD	YES	NONE	DCWD reserve fund
26-C	High	PVC	150	11,200.00	6.50	GOOD	YES	NONE	DCWD reserve fund
28-C	High	PVC	150	11,200.00	59.36	GOOD	YES	NONE	DCWD reserve fund
30-C	High	PVC	150	11,200.00	114.89	GOOD	YES	NONE	DCWD reserve fund
14-B	High	PVC	150	11,200.00	0.45	GOOD	YES	NONE	DCWD reserve fund
14-B	High	PVC	150	11,200.00	100.83	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	High	PVC	150	11,200.00	2.87	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	High	PVC	150	11,200.00	123.65	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	High	PVC	150	11,200.00	119.84	GOOD	YES	NONE	DCWD reserve fund
15-B	High	MLCSP	400	23,600.00	160.75	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	High	PVC	150	11,200.00	11.50	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	MLCSP	400	23,600.00	175.51	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	PVC	150	11,200.00	57.96	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	PVC	150	11,200.00	131.04	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
AGDAO PROPER	High	PVC	150	11,200.00	25.00	GOOD	YES	NONE	DCWD reserve fund
15-B	High	PVC	150	11,200.00	39.81	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	300	19,100.00	49.80	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	300	19,100.00	51.94	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	300	19,100.00	111.40	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	Moderate	PVC	150	11,200.00	2.57	GOOD	YES	NONE	DCWD reserve fund
18-B	Moderate	PVC	150	11,200.00	213.68	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	300	19,100.00	58.49	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	255.23	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	54.75	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	69.38	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	67.38	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	72.51	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	750	48,500.00	8.42	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	67.51	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	69.38	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	246.01	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	2.79	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	73.68	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	8.29	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	300	19,100.00	7.81	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	69.00	GOOD	YES	NONE	DCWD reserve fund
11-B	Moderate	MLCSP	300	19,100.00	65.48	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	300	19,100.00	8.09	GOOD	YES	NONE	DCWD reserve fund
19-B	Moderate	MLCSP	300	19,100.00	38.01	GOOD	YES	NONE	DCWD reserve fund
10-A	Moderate	MLCSP	300	19,100.00	13.62	GOOD	YES	NONE	DCWD reserve fund
19-B	Moderate	MLCSP	300	19,100.00	39.23	GOOD	YES	NONE	DCWD reserve fund
11-B	Moderate	MLCSP	300	19,100.00	50.70	GOOD	YES	NONE	DCWD reserve fund
2-A	High	MLCSP	300	19,100.00	113.84	GOOD	YES	NONE	DCWD reserve fund
32-D	High	MLCSP	300	19,100.00	201.85	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	300	19,100.00	64.28	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
5-A	High	PVC	150	11,200.00	171.57	GOOD	YES	NONE	DCWD reserve fund
19-B	Moderate	MLCSP	300	19,100.00	96.96	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	MLCSP	400	23,600.00	17.76	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	MLCSP	400	23,600.00	63.34	GOOD	YES	NONE	DCWD reserve fund
5-A	High	MLCSP	300	19,100.00	107.30	GOOD	YES	NONE	DCWD reserve fund
DUMOY	Low	MLCSP	400	23,600.00	387.05	GOOD	YES	NONE	DCWD reserve fund
DUMOY	Low	MLCSP	400	23,600.00	66.22	GOOD	YES	NONE	DCWD reserve fund
DUMOY	Low	MLCSP	400	23,600.00	116.44	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	300	19,100.00	55.49	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	300	19,100.00	141.31	GOOD	YES	NONE	DCWD reserve fund
DUMOY	High	MLCSP	300	19,100.00	529.87	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	300	19,100.00	69.16	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	53.11	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	15.54	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	85.92	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	800	52,800.00	408.53	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	900	56,500.00	214.09	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	900	56,500.00	102.07	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	7.27	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	87.34	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Low	PVC	150	11,200.00	149.59	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	900	56,500.00	36.87	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	900	56,500.00	96.56	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	221.03	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	61.88	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	750	48,500.00	66.72	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	750	48,500.00	212.13	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	750	48,500.00	146.85	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Low	MLCSP	750	48,500.00	100.50	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	750	48,500.00	108.73	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	96.58	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MATINA CROSSING	Moderate	PVC	150	11,200.00	38.24	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	154.20	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	149.77	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	700	44,200.00	101.51	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	750	48,500.00	177.49	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	227.31	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	74.65	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	86.26	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	120.89	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	80.28	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	102.64	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	174.49	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	109.92	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	750	48,500.00	265.80	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	326.59	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	750	48,500.00	9.95	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Low	MLCSP	250	17,700.00	76.55	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	250	17,700.00	89.61	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	750	48,500.00	132.25	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	250	17,700.00	62.30	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	250	17,700.00	61.15	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	600	40,100.00	560.60	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	600	40,100.00	10.57	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	500	33,200.00	134.63	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	900	56,500.00	95.28	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	113.38	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	900	56,500.00	165.62	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	900	56,500.00	44.85	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	900	56,500.00	49.09	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	900	56,500.00	128.39	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	High	PVC	150	11,200.00	125.17	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
TOMAS MONTEVERDE	High	PVC	150	11,200.00	124.31	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	69.95	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	MLCSP	400	23,600.00	90.43	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	Moderate	MLCSP	250	17,700.00	86.86	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	Low	MLCSP	250	17,700.00	436.34	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	250	17,700.00	11.53	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	250	17,700.00	231.91	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	400	23,600.00	407.29	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	700	44,200.00	193.19	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	750	48,500.00	301.54	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	500	33,200.00	140.03	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	474.04	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	60.62	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	750	48,500.00	18.45	GOOD	YES	NONE	DCWD reserve fund
39-D	High	MLCSP	300	19,100.00	23.90	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	95.18	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	111.11	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	163.40	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	79.00	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	12.02	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	14.21	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	95.76	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	37.24	GOOD	YES	NONE	DCWD reserve fund
7-A	High	MLCSP	600	40,100.00	59.90	GOOD	YES	NONE	DCWD reserve fund
2-A	High	MLCSP	350	20,800.00	214.03	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	80.03	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	1.01	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	78.94	GOOD	YES	NONE	DCWD reserve fund
18-B	Moderate	PVC	150	11,200.00	175.92	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	MLCSP	400	23,600.00	9.02	GOOD	YES	NONE	DCWD reserve fund
15-B	High	MLCSP	400	23,600.00	339.50	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
5-A	High	PVC	150	11,200.00	171.57	GOOD	YES	NONE	DCWD reserve fund
19-B	Moderate	MLCSP	300	19,100.00	96.96	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	MLCSP	400	23,600.00	17.76	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	MLCSP	400	23,600.00	63.34	GOOD	YES	NONE	DCWD reserve fund
5-A	High	MLCSP	300	19,100.00	107.30	GOOD	YES	NONE	DCWD reserve fund
DUMOY	Low	MLCSP	400	23,600.00	387.05	GOOD	YES	NONE	DCWD reserve fund
DUMOY	Low	MLCSP	400	23,600.00	66.22	GOOD	YES	NONE	DCWD reserve fund
DUMOY	Low	MLCSP	400	23,600.00	116.44	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	300	19,100.00	55.49	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	300	19,100.00	141.31	GOOD	YES	NONE	DCWD reserve fund
DUMOY	High	MLCSP	300	19,100.00	529.87	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	300	19,100.00	69.16	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	53.11	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	15.54	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	85.92	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	800	52,800.00	408.53	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	900	56,500.00	214.09	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	900	56,500.00	102.07	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	7.27	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	87.34	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Low	PVC	150	11,200.00	149.59	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	900	56,500.00	36.87	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	900	56,500.00	96.56	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	221.03	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	61.88	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	750	48,500.00	66.72	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	750	48,500.00	212.13	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	750	48,500.00	146.85	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Low	MLCSP	750	48,500.00	100.50	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	750	48,500.00	108.73	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	96.58	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MATINA CROSSING	Moderate	PVC	150	11,200.00	38.24	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	154.20	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	149.77	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	700	44,200.00	101.51	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	750	48,500.00	177.49	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	227.31	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	74.65	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	86.26	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	120.89	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	80.28	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	102.64	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	174.49	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	109.92	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	750	48,500.00	265.80	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	326.59	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	750	48,500.00	9.95	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Low	MLCSP	250	17,700.00	76.55	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	250	17,700.00	89.61	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	750	48,500.00	132.25	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	250	17,700.00	62.30	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	250	17,700.00	61.15	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	600	40,100.00	560.60	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	600	40,100.00	10.57	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	500	33,200.00	134.63	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	900	56,500.00	95.28	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	113.38	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	900	56,500.00	165.62	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	900	56,500.00	44.85	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	900	56,500.00	49.09	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	900	56,500.00	128.39	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	High	PVC	150	11,200.00	125.17	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
TOMAS MONTEVERDE	High	PVC	150	11,200.00	124.31	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	69.95	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	MLCSP	400	23,600.00	90.43	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	Moderate	MLCSP	250	17,700.00	86.86	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	Low	MLCSP	250	17,700.00	436.34	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	250	17,700.00	11.53	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	250	17,700.00	231.91	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	400	23,600.00	407.29	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	700	44,200.00	193.19	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	750	48,500.00	301.54	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	500	33,200.00	140.03	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	474.04	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	60.62	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	750	48,500.00	18.45	GOOD	YES	NONE	DCWD reserve fund
39-D	High	MLCSP	300	19,100.00	23.90	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	95.18	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	111.11	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	163.40	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	79.00	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	12.02	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	14.21	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	95.76	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	37.24	GOOD	YES	NONE	DCWD reserve fund
7-A	High	MLCSP	600	40,100.00	59.90	GOOD	YES	NONE	DCWD reserve fund
2-A	High	MLCSP	350	20,800.00	214.03	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	80.03	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	1.01	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	78.94	GOOD	YES	NONE	DCWD reserve fund
18-B	Moderate	PVC	150	11,200.00	175.92	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	MLCSP	400	23,600.00	9.02	GOOD	YES	NONE	DCWD reserve fund
15-B	High	MLCSP	400	23,600.00	339.50	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MATINA CROSSING	High	PVC	150	11,200.00	62.93	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	71.10	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	67.73	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	456.04	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	750	48,500.00	346.36	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	750	48,500.00	78.22	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	MLCSP	700	44,200.00	97.50	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	700	44,200.00	7.40	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	MLCSP	750	48,500.00	249.82	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	750	48,500.00	424.59	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	PVC	150	11,200.00	229.10	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	8.13	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	PVC	150	11,200.00	137.90	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	350	20,800.00	13.06	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	300	19,100.00	62.29	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	300	19,100.00	385.14	GOOD	YES	NONE	DCWD reserve fund
17-B	Moderate	MLCSP	300	19,100.00	13.23	GOOD	YES	NONE	DCWD reserve fund
16-B	High	MLCSP	300	19,100.00	3.58	GOOD	YES	NONE	DCWD reserve fund
16-B	Moderate	MLCSP	300	19,100.00	34.10	GOOD	YES	NONE	DCWD reserve fund
13-B	Moderate	MLCSP	300	19,100.00	2.10	GOOD	YES	NONE	DCWD reserve fund
13-B	Moderate	MLCSP	300	19,100.00	49.44	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	101.35	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	71.97	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	70.12	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	123.94	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	70.95	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	75.38	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	74.97	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	62.80	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	74.07	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	65.52	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MATINA CROSSING	High	PVC	150	11,200.00	76.59	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	96.92	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	200.67	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	62.98	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	169.54	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	56.27	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	64.45	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	69.02	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	116.06	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	750	48,500.00	25.53	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	750	48,500.00	47.07	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	750	48,500.00	4.59	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	750	48,500.00	221.24	GOOD	YES	NONE	DCWD reserve fund
11-B	Moderate	PVC	150	11,200.00	13.05	GOOD	YES	NONE	DCWD reserve fund
10-A	Moderate	PVC	150	11,200.00	142.32	GOOD	YES	NONE	DCWD reserve fund
11-B	Moderate	MLCSP	300	19,100.00	54.95	GOOD	YES	NONE	DCWD reserve fund
11-B	Moderate	MLCSP	300	19,100.00	64.27	GOOD	YES	NONE	DCWD reserve fund
11-B	High	MLCSP	300	19,100.00	12.45	GOOD	YES	NONE	DCWD reserve fund
11-B	Moderate	MLCSP	300	19,100.00	39.02	GOOD	YES	NONE	DCWD reserve fund
7-A	Moderate	MLCSP	600	40,100.00	57.59	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	20.09	GOOD	YES	NONE	DCWD reserve fund
9-A	Moderate	MLCSP	600	40,100.00	11.89	GOOD	YES	NONE	DCWD reserve fund
7-A	Moderate	MLCSP	600	40,100.00	47.21	GOOD	YES	NONE	DCWD reserve fund
7-A	High	MLCSP	600	40,100.00	40.64	GOOD	YES	NONE	DCWD reserve fund
7-A	Moderate	MLCSP	600	40,100.00	17.51	GOOD	YES	NONE	DCWD reserve fund
10-A	High	PVC	150	11,200.00	47.41	GOOD	YES	NONE	DCWD reserve fund
10-A	High	PVC	150	11,200.00	13.28	GOOD	YES	NONE	DCWD reserve fund
10-A	Moderate	PVC	150	11,200.00	98.24	GOOD	YES	NONE	DCWD reserve fund
9-A	Moderate	PVC	150	11,200.00	78.36	GOOD	YES	NONE	DCWD reserve fund
9-A	Moderate	PVC	150	11,200.00	46.61	GOOD	YES	NONE	DCWD reserve fund
10-A	Moderate	PVC	150	11,200.00	2.36	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
9-A	Moderate	PVC	150	11,200.00	190.27	GOOD	YES	NONE	DCWD reserve fund
10-A	Moderate	PVC	150	11,200.00	9.56	GOOD	YES	NONE	DCWD reserve fund
9-A	Moderate	PVC	150	11,200.00	183.82	GOOD	YES	NONE	DCWD reserve fund
7-A	High	MLCSP	600	40,100.00	150.53	GOOD	YES	NONE	DCWD reserve fund
7-A	High	MLCSP	500	33,200.00	140.13	GOOD	YES	NONE	DCWD reserve fund
7-A	High	MLCSP	600	40,100.00	7.69	GOOD	YES	NONE	DCWD reserve fund
6-A	High	MLCSP	600	40,100.00	80.98	GOOD	YES	NONE	DCWD reserve fund
7-A	High	MLCSP	500	33,200.00	3.52	GOOD	YES	NONE	DCWD reserve fund
4-A	High	MLCSP	500	33,200.00	182.25	GOOD	YES	NONE	DCWD reserve fund
6-A	High	MLCSP	350	20,800.00	1.74	GOOD	YES	NONE	DCWD reserve fund
5-A	High	MLCSP	350	20,800.00	11.53	GOOD	YES	NONE	DCWD reserve fund
2-A	High	MLCSP	350	20,800.00	100.23	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	900	56,500.00	78.13	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	800	52,800.00	294.59	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	750	48,500.00	79.51	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	300	19,100.00	169.74	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	Moderate	MLCSP	300	19,100.00	64.29	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	47.99	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	14.63	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	38.75	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	87.81	GOOD	YES	NONE	DCWD reserve fund
2-A	High	MLCSP	300	19,100.00	39.19	GOOD	YES	NONE	DCWD reserve fund
2-A	High	MLCSP	350	20,800.00	173.02	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	900	56,500.00	73.84	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	28.56	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	109.47	GOOD	YES	NONE	DCWD reserve fund
28-C	High	PVC	150	11,200.00	0.83	GOOD	YES	NONE	DCWD reserve fund
24-C	High	PVC	150	11,200.00	84.43	GOOD	YES	NONE	DCWD reserve fund
30-C	High	MLCSP	400	23,600.00	65.86	GOOD	YES	NONE	DCWD reserve fund
32-D	High	MLCSP	300	19,100.00	47.65	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	34.89	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
11-B	Moderate	PVC	150	11,200.00	12.97	GOOD	YES	NONE	DCWD reserve fund
10-A	Moderate	PVC	150	11,200.00	142.86	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	300	19,100.00	92.43	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	300	19,100.00	307.29	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Low	MLCSP	300	19,100.00	81.99	GOOD	YES	NONE	DCWD reserve fund
26-C	High	PVC	150	11,200.00	3.71	GOOD	YES	NONE	DCWD reserve fund
27-C	High	PVC	150	11,200.00	155.64	GOOD	YES	NONE	DCWD reserve fund
27-C	High	PVC	150	11,200.00	150.89	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	High	PVC	150	11,200.00	10.44	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	High	PVC	150	11,200.00	56.38	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	High	PVC	150	11,200.00	51.40	GOOD	YES	NONE	DCWD reserve fund
LEON GARCIA SR.	High	PVC	150	11,200.00	9.75	GOOD	YES	NONE	DCWD reserve fund
32-D	High	MLCSP	300	19,100.00	118.33	GOOD	YES	NONE	DCWD reserve fund
32-D	High	MLCSP	300	19,100.00	86.96	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	600	40,100.00	148.22	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	600	40,100.00	198.94	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	600	40,100.00	411.37	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	High	PVC	150	11,200.00	177.11	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	High	PVC	150	11,200.00	169.10	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	PVC	150	11,200.00	6.83	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	High	PVC	150	11,200.00	46.10	GOOD	YES	NONE	DCWD reserve fund
20-B	Moderate	PVC	150	11,200.00	52.02	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	Moderate	PVC	150	11,200.00	12.10	GOOD	YES	NONE	DCWD reserve fund
20-B	Moderate	PVC	150	11,200.00	41.11	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	Moderate	PVC	150	11,200.00	1.20	GOOD	YES	NONE	DCWD reserve fund
18-B	Moderate	PVC	150	11,200.00	48.43	GOOD	YES	NONE	DCWD reserve fund
20-B	Moderate	PVC	150	11,200.00	1.49	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	Moderate	PVC	150	11,200.00	5.98	GOOD	YES	NONE	DCWD reserve fund
18-B	Moderate	PVC	150	11,200.00	170.17	GOOD	YES	NONE	DCWD reserve fund
18-B	Moderate	PVC	150	11,200.00	278.99	GOOD	YES	NONE	DCWD reserve fund
19-B	Moderate	PVC	150	11,200.00	2.77	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
WILFREDO AQUINO	High	MLCSP	300	19,100.00	37.07	GOOD	YES	NONE	DCWD reserve fund
2-A	High	MLCSP	300	19,100.00	127.25	GOOD	YES	NONE	DCWD reserve fund
39-D	High	MLCSP	300	19,100.00	5.37	GOOD	YES	NONE	DCWD reserve fund
DUMOY	High	MLCSP	600	40,100.00	461.42	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	600	40,100.00	513.65	GOOD	YES	NONE	DCWD reserve fund
31-D	High	MLCSP	300	19,100.00	9.14	GOOD	YES	NONE	DCWD reserve fund
37-D	High	MLCSP	300	19,100.00	63.83	GOOD	YES	NONE	DCWD reserve fund
9-A	Moderate	PVC	150	11,200.00	26.58	GOOD	YES	NONE	DCWD reserve fund
7-A	Moderate	PVC	150	11,200.00	6.79	GOOD	YES	NONE	DCWD reserve fund
9-A	Moderate	PVC	150	11,200.00	156.68	GOOD	YES	NONE	DCWD reserve fund
9-A	Moderate	MLCSP	600	40,100.00	59.42	GOOD	YES	NONE	DCWD reserve fund
7-A	Moderate	MLCSP	600	40,100.00	32.72	GOOD	YES	NONE	DCWD reserve fund
7-A	Moderate	MLCSP	600	40,100.00	131.91	GOOD	YES	NONE	DCWD reserve fund
7-A	High	MLCSP	600	40,100.00	78.89	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Low	MLCSP	750	48,500.00	142.84	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	600	40,100.00	570.45	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	600	40,100.00	436.83	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	250	17,700.00	59.24	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	250	17,700.00	26.17	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	300	19,100.00	154.59	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	500	33,200.00	65.78	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	400	23,600.00	96.40	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	400	23,600.00	47.27	GOOD	YES	NONE	DCWD reserve fund
DUMOY	Low	MLCSP	250	17,700.00	269.22	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Low	MLCSP	750	48,500.00	457.25	GOOD	YES	NONE	DCWD reserve fund
6-A	High	MLCSP	600	40,100.00	101.25	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	900	56,500.00	119.84	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	900	56,500.00	55.82	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	124.24	GOOD	YES	NONE	DCWD reserve fund
DUMOY	Moderate	MLCSP	500	33,200.00	404.49	GOOD	YES	NONE	DCWD reserve fund
DUMOY	Low	MLCSP	500	33,200.00	136.78	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
DUMOY	High	MLCSP	500	33,200.00	421.94	GOOD	YES	NONE	DCWD reserve fund
DUMOY	Moderate	MLCSP	500	33,200.00	94.17	GOOD	YES	NONE	DCWD reserve fund
DUMOY	Moderate	MLCSP	250	17,700.00	27.30	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	300	19,100.00	39.52	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	300	19,100.00	42.46	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	31.66	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	91.74	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	450	24,300.00	8.64	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	450	24,300.00	39.25	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	600	40,100.00	4.63	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	600	40,100.00	41.60	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	360.06	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	61.17	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	13.10	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	1.49	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	358.81	GOOD	YES	NONE	DCWD reserve fund
5-A	High	PVC	150	11,200.00	49.36	GOOD	YES	NONE	DCWD reserve fund
DUMOY	Low	MLCSP	400	23,600.00	505.22	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	450	24,300.00	645.07	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	450	24,300.00	388.51	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	700	44,200.00	13.77	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	700	44,200.00	219.87	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	700	44,200.00	7.87	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	PVC	150	11,200.00	63.07	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	750	48,500.00	22.87	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Low	MLCSP	750	48,500.00	434.31	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Low	MLCSP	250	17,700.00	25.07	GOOD	YES	NONE	DCWD reserve fund
7-A	High	MLCSP	600	40,100.00	74.86	GOOD	YES	NONE	DCWD reserve fund
31-D	High	MLCSP	300	19,100.00	33.02	GOOD	YES	NONE	DCWD reserve fund
37-D	High	MLCSP	300	19,100.00	104.48	GOOD	YES	NONE	DCWD reserve fund
31-D	High	MLCSP	300	19,100.00	12.87	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
37-D	High	MLCSP	300	19,100.00	97.71	GOOD	YES	NONE	DCWD reserve fund
38-D	High	MLCSP	300	19,100.00	13.57	GOOD	YES	NONE	DCWD reserve fund
37-D	High	MLCSP	300	19,100.00	227.02	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	MLCSP	300	19,100.00	239.57	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	MLCSP	400	23,600.00	53.67	GOOD	YES	NONE	DCWD reserve fund
GOV. VICENTE DUTERTE	High	MLCSP	400	23,600.00	206.29	GOOD	YES	NONE	DCWD reserve fund
GOV. VICENTE DUTERTE	High	MLCSP	400	23,600.00	116.45	GOOD	YES	NONE	DCWD reserve fund
GOV. VICENTE DUTERTE	High	MLCSP	400	23,600.00	20.82	GOOD	YES	NONE	DCWD reserve fund
GOV. VICENTE DUTERTE	High	MLCSP	400	23,600.00	66.75	GOOD	YES	NONE	DCWD reserve fund
GOV. VICENTE DUTERTE	High	MLCSP	400	23,600.00	124.74	GOOD	YES	NONE	DCWD reserve fund
UBALDE	High	MLCSP	400	23,600.00	173.79	GOOD	YES	NONE	DCWD reserve fund
UBALDE	High	MLCSP	400	23,600.00	21.83	GOOD	YES	NONE	DCWD reserve fund
GOV. VICENTE DUTERTE	High	MLCSP	400	23,600.00	368.65	GOOD	YES	NONE	DCWD reserve fund
SAN ANTONIO	High	MLCSP	400	23,600.00	196.92	GOOD	YES	NONE	DCWD reserve fund
UBALDE	High	MLCSP	400	23,600.00	9.54	GOOD	YES	NONE	DCWD reserve fund
LAPU - LAPU	High	MLCSP	400	23,600.00	180.35	GOOD	YES	NONE	DCWD reserve fund
LAPU - LAPU	High	MLCSP	400	23,600.00	490.41	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	300	19,100.00	37.02	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	300	19,100.00	39.11	GOOD	YES	NONE	DCWD reserve fund
32-D	High	MLCSP	500	33,200.00	19.37	GOOD	YES	NONE	DCWD reserve fund
10-A	High	MLCSP	500	33,200.00	173.65	GOOD	YES	NONE	DCWD reserve fund
4-A	High	MLCSP	500	33,200.00	147.97	GOOD	YES	NONE	DCWD reserve fund
10-A	High	PVC	150	11,200.00	169.02	GOOD	YES	NONE	DCWD reserve fund
4-A	High	PVC	150	11,200.00	2.89	GOOD	YES	NONE	DCWD reserve fund
4-A	High	MLCSP	500	33,200.00	263.63	GOOD	YES	NONE	DCWD reserve fund
4-A	High	MLCSP	500	33,200.00	36.32	GOOD	YES	NONE	DCWD reserve fund
UBALDE	High	MLCSP	400	23,600.00	56.80	GOOD	YES	NONE	DCWD reserve fund
LAPU - LAPU	High	MLCSP	400	23,600.00	162.28	GOOD	YES	NONE	DCWD reserve fund
CENTRO	High	MLCSP	400	23,600.00	93.79	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	PVC	100	11,000.00	11.77	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	750	48,500.00	160.59	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MA-A	Moderate	MLCSP	750	48,500.00	117.14	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	750	48,500.00	228.64	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	750	48,500.00	134.23	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	16.87	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	32.12	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	11.21	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	21.56	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	143.01	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	42.88	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	224.73	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	69.27	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	40.60	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	300	19,100.00	72.23	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	300	19,100.00	76.88	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	67.98	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	98.64	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	66.40	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	PVC	150	11,200.00	73.05	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	38.45	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	42.39	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	43.58	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	52.77	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Low	MLCSP	300	19,100.00	115.43	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	PVC	150	11,200.00	72.06	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	250	17,700.00	274.45	GOOD	YES	NONE	DCWD reserve fund
SASA	High	PVC	200	12,500.00	172.47	GOOD	YES	NONE	DCWD reserve fund
SASA	Moderate	PVC	200	12,500.00	287.63	GOOD	YES	NONE	DCWD reserve fund
SASA	High	PVC	200	12,500.00	158.22	GOOD	YES	NONE	DCWD reserve fund
SASA	Moderate	PVC	200	12,500.00	116.91	GOOD	YES	NONE	DCWD reserve fund
SASA	High	PVC	200	12,500.00	706.36	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	High	MLCSP	250	17,700.00	130.50	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
A. ANGLIONGTO	High	MLCSP	250	17,700.00	45.55	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	High	MLCSP	300	19,100.00	15.35	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	High	MLCSP	300	19,100.00	118.53	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	High	MLCSP	300	19,100.00	45.71	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	High	MLCSP	250	17,700.00	2.88	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	High	MLCSP	250	17,700.00	12.43	GOOD	YES	NONE	DCWD reserve fund
SASA	High	MLCSP	250	17,700.00	75.16	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	High	MLCSP	250	17,700.00	223.75	GOOD	YES	NONE	DCWD reserve fund
SASA	High	PVC	200	12,500.00	96.35	GOOD	YES	NONE	DCWD reserve fund
SASA	Moderate	PVC	200	12,500.00	14.44	GOOD	YES	NONE	DCWD reserve fund
SASA	High	MLCSP	250	17,700.00	261.04	GOOD	YES	NONE	DCWD reserve fund
SASA	Moderate	MLCSP	250	17,700.00	167.70	GOOD	YES	NONE	DCWD reserve fund
SASA	High	PVC	200	12,500.00	15.76	GOOD	YES	NONE	DCWD reserve fund
SASA	High	PVC	200	12,500.00	178.68	GOOD	YES	NONE	DCWD reserve fund
SASA	High	PVC	200	12,500.00	55.47	GOOD	YES	NONE	DCWD reserve fund
SASA	High	PVC	200	12,500.00	15.42	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	High	MLCSP	250	17,700.00	386.97	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	High	MLCSP	250	17,700.00	23.61	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	High	MLCSP	250	17,700.00	23.06	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	High	MLCSP	300	19,100.00	336.36	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	300	19,100.00	255.78	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	300	19,100.00	12.92	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	300	19,100.00	262.23	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	300	19,100.00	15.65	GOOD	YES	NONE	DCWD reserve fund
MA-A	Moderate	MLCSP	300	19,100.00	22.52	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	300	19,100.00	41.54	GOOD	YES	NONE	DCWD reserve fund
SASA	High	MLCSP	250	17,700.00	178.44	GOOD	YES	NONE	DCWD reserve fund
SASA	Moderate	MLCSP	250	17,700.00	328.88	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	350	20,800.00	485.34	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	800	52,800.00	88.73	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	800	52,800.00	26.39	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
V. HIZON	High	MLCSP	250	17,700.00	664.01	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	High	MLCSP	250	17,700.00	107.30	GOOD	YES	NONE	DCWD reserve fund
SASA	High	PVC	200	12,500.00	149.99	GOOD	YES	NONE	DCWD reserve fund
SASA	High	PVC	200	12,500.00	155.39	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	Low	MLCSP	350	20,800.00	170.19	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	Moderate	MLCSP	350	20,800.00	447.09	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	Low	MLCSP	350	20,800.00	439.40	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	350	20,800.00	101.39	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	350	20,800.00	180.67	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	Moderate	MLCSP	350	20,800.00	161.78	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	Low	MLCSP	350	20,800.00	436.09	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	350	20,800.00	86.72	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	350	20,800.00	468.81	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	350	20,800.00	444.08	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	250	17,700.00	14.99	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	Moderate	MLCSP	350	20,800.00	434.15	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	Low	MLCSP	350	20,800.00	268.90	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	350	20,800.00	88.28	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	350	20,800.00	193.82	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	PVC	150	11,200.00	42.01	GOOD	YES	NONE	DCWD reserve fund
11-B	Moderate	MLCSP	300	19,100.00	60.43	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	300	19,100.00	190.87	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	High	MLCSP	300	19,100.00	576.33	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	High	MLCSP	300	19,100.00	73.97	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	High	MLCSP	300	19,100.00	10.52	GOOD	YES	NONE	DCWD reserve fund
16-B	High	MLCSP	300	19,100.00	13.62	GOOD	YES	NONE	DCWD reserve fund
15-B	High	MLCSP	300	19,100.00	481.76	GOOD	YES	NONE	DCWD reserve fund
16-B	High	MLCSP	300	19,100.00	50.22	GOOD	YES	NONE	DCWD reserve fund
16-B	High	PVC	150	11,200.00	176.25	GOOD	YES	NONE	DCWD reserve fund
16-B	High	PVC	150	11,200.00	174.06	GOOD	YES	NONE	DCWD reserve fund
16-B	High	PVC	150	11,200.00	172.80	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
PACIANO BANGOY	High	PVC	150	11,200.00	25.58	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	High	PVC	150	11,200.00	82.20	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	High	PVC	150	11,200.00	264.25	GOOD	YES	NONE	DCWD reserve fund
16-B	High	PVC	150	11,200.00	0.97	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	High	PVC	150	11,200.00	171.17	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	300	19,100.00	3.66	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	MLCSP	300	19,100.00	111.52	GOOD	YES	NONE	DCWD reserve fund
A. ANGLIONGTO	High	MLCSP	250	17,700.00	498.54	GOOD	YES	NONE	DCWD reserve fund
A. ANGLIONGTO	High	MLCSP	400	23,600.00	16.33	GOOD	YES	NONE	DCWD reserve fund
A. ANGLIONGTO	High	MLCSP	400	23,600.00	7.10	GOOD	YES	NONE	DCWD reserve fund
RAFAEL CASTILLO	High	MLCSP	400	23,600.00	203.98	GOOD	YES	NONE	DCWD reserve fund
RAFAEL CASTILLO	High	MLCSP	400	23,600.00	134.22	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	Moderate	MLCSP	400	23,600.00	84.33	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	Moderate	MLCSP	400	23,600.00	32.46	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	Moderate	MLCSP	300	19,100.00	136.87	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	37.85	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	107.71	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	140.58	GOOD	YES	NONE	DCWD reserve fund
SAN ANTONIO	High	MLCSP	400	23,600.00	227.24	GOOD	YES	NONE	DCWD reserve fund
RAFAEL CASTILLO	High	MLCSP	400	23,600.00	157.10	GOOD	YES	NONE	DCWD reserve fund
28-C	High	PVC	150	11,200.00	41.08	GOOD	YES	NONE	DCWD reserve fund
30-C	High	MLCSP	400	23,600.00	85.55	GOOD	YES	NONE	DCWD reserve fund
30-C	High	PVC	150	11,200.00	159.98	GOOD	YES	NONE	DCWD reserve fund
14-B	High	MLCSP	400	23,600.00	71.45	GOOD	YES	NONE	DCWD reserve fund
30-C	High	MLCSP	400	23,600.00	7.64	GOOD	YES	NONE	DCWD reserve fund
14-B	High	MLCSP	400	23,600.00	59.98	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	PVC	200	12,500.00	20.10	GOOD	YES	NONE	DCWD reserve fund
40-D	High	MLCSP	250	17,700.00	283.77	GOOD	YES	NONE	DCWD reserve fund
2-A	High	MLCSP	250	17,700.00	7.32	GOOD	YES	NONE	DCWD reserve fund
39-D	High	MLCSP	250	17,700.00	196.26	GOOD	YES	NONE	DCWD reserve fund
19-B	Moderate	MLCSP	300	19,100.00	254.95	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
WILFREDO AQUINO	High	PVC	150	11,200.00	15.86	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	High	PVC	150	11,200.00	5.45	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	MLCSP	400	23,600.00	421.48	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	MLCSP	750	48,500.00	163.35	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	MLCSP	750	48,500.00	16.15	GOOD	YES	NONE	DCWD reserve fund
5-A	High	MLCSP	750	48,500.00	196.61	GOOD	YES	NONE	DCWD reserve fund
2-A	High	MLCSP	750	48,500.00	103.21	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	MLCSP	750	48,500.00	224.13	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	208.98	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	Moderate	MLCSP	350	20,800.00	23.71	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	350	20,800.00	493.05	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Low	MLCSP	350	20,800.00	52.46	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	Moderate	MLCSP	300	19,100.00	4.41	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	300	19,100.00	8.71	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	PVC	150	11,200.00	294.00	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	Moderate	MLCSP	400	23,600.00	7.72	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	MLCSP	350	20,800.00	224.84	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	MLCSP	400	23,600.00	40.19	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	MLCSP	450	24,300.00	35.26	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	MLCSP	500	33,200.00	22.76	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	MLCSP	600	40,100.00	319.83	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	MLCSP	600	40,100.00	137.98	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	MLCSP	600	40,100.00	132.34	GOOD	YES	NONE	DCWD reserve fund
MA-A	Moderate	MLCSP	300	19,100.00	2.23	GOOD	YES	NONE	DCWD reserve fund
MA-A	Moderate	MLCSP	300	19,100.00	336.29	GOOD	YES	NONE	DCWD reserve fund
MA-A	Moderate	MLCSP	300	19,100.00	13.96	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	MLCSP	300	19,100.00	46.39	GOOD	YES	NONE	DCWD reserve fund
MA-A	Moderate	MLCSP	300	19,100.00	175.78	GOOD	YES	NONE	DCWD reserve fund
MA-A	Moderate	MLCSP	300	19,100.00	118.72	GOOD	YES	NONE	DCWD reserve fund
MA-A	Moderate	MLCSP	300	19,100.00	32.27	GOOD	YES	NONE	DCWD reserve fund
MA-A	Moderate	MLCSP	300	19,100.00	63.45	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MA-A	High	PVC	150	11,200.00	33.21	GOOD	YES	NONE	DCWD reserve fund
2-A	High	MLCSP	300	19,100.00	13.62	GOOD	YES	NONE	DCWD reserve fund
SASA	High	MLCSP	250	17,700.00	317.51	GOOD	YES	NONE	DCWD reserve fund
31-D	High	MLCSP	300	19,100.00	105.93	GOOD	YES	NONE	DCWD reserve fund
31-D	High	PVC	150	11,200.00	16.42	GOOD	YES	NONE	DCWD reserve fund
35-D	High	PVC	200	12,500.00	10.88	GOOD	YES	NONE	DCWD reserve fund
MATINA PANGI	Moderate	MLCSP	800	52,800.00	710.84	GOOD	YES	NONE	DCWD reserve fund
MATINA PANGI	Moderate	MLCSP	800	52,800.00	168.64	GOOD	YES	NONE	DCWD reserve fund
MATINA PANGI	Moderate	MLCSP	800	52,800.00	71.59	GOOD	YES	NONE	DCWD reserve fund
18-B	Moderate	PVC	150	11,200.00	347.83	GOOD	YES	NONE	DCWD reserve fund
39-D	High	MLCSP	300	19,100.00	135.63	GOOD	YES	NONE	DCWD reserve fund
38-D	High	MLCSP	300	19,100.00	7.79	GOOD	YES	NONE	DCWD reserve fund
39-D	High	MLCSP	300	19,100.00	18.93	GOOD	YES	NONE	DCWD reserve fund
26-C	High	PVC	150	11,200.00	156.73	GOOD	YES	NONE	DCWD reserve fund
23-C	High	PVC	150	11,200.00	4.57	GOOD	YES	NONE	DCWD reserve fund
26-C	High	PVC	150	11,200.00	3.84	GOOD	YES	NONE	DCWD reserve fund
23-C	High	PVC	150	11,200.00	3.90	GOOD	YES	NONE	DCWD reserve fund
32-D	High	MLCSP	300	19,100.00	10.20	GOOD	YES	NONE	DCWD reserve fund
31-D	High	MLCSP	300	19,100.00	8.38	GOOD	YES	NONE	DCWD reserve fund
31-D	High	MLCSP	300	19,100.00	150.78	GOOD	YES	NONE	DCWD reserve fund
32-D	High	MLCSP	300	19,100.00	85.03	GOOD	YES	NONE	DCWD reserve fund
24-C	High	MLCSP	300	19,100.00	18.13	GOOD	YES	NONE	DCWD reserve fund
31-D	High	MLCSP	300	19,100.00	3.56	GOOD	YES	NONE	DCWD reserve fund
27-C	High	PVC	200	12,500.00	18.97	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	300	19,100.00	193.14	GOOD	YES	NONE	DCWD reserve fund
MA-A	Moderate	MLCSP	300	19,100.00	233.32	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	300	19,100.00	71.82	GOOD	YES	NONE	DCWD reserve fund
MA-A	Low	MLCSP	800	52,800.00	13.71	GOOD	YES	NONE	DCWD reserve fund
SASA	High	MLCSP	250	17,700.00	178.33	GOOD	YES	NONE	DCWD reserve fund
12-B	High	PVC	100	11,000.00	0.78	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	450	24,300.00	5.47	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
TALOMO	Low	MLCSP	450	24,300.00	88.89	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	450	24,300.00	2.35	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	High	MLCSP	350	20,800.00	625.57	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	MLCSP	350	20,800.00	98.18	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	MLCSP	300	19,100.00	665.27	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	350	20,800.00	7.81	GOOD	YES	NONE	DCWD reserve fund
TIGATTO	High	MLCSP	400	23,600.00	823.75	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	250	17,700.00	7.69	GOOD	YES	NONE	DCWD reserve fund
DUMOY	High	MLCSP	250	17,700.00	15.00	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	250	17,700.00	5.64	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	250	17,700.00	28.02	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	Moderate	MLCSP	250	17,700.00	6.99	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	Low	MLCSP	250	17,700.00	8.63	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	High	MLCSP	300	19,100.00	3.45	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	High	MLCSP	250	17,700.00	2.68	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	High	MLCSP	250	17,700.00	8.89	GOOD	YES	NONE	DCWD reserve fund
PANACAN	High	MLCSP	250	17,700.00	43.61	GOOD	YES	NONE	DCWD reserve fund
PANACAN	High	MLCSP	250	17,700.00	182.18	GOOD	YES	NONE	DCWD reserve fund
PANACAN	High	MLCSP	250	17,700.00	359.55	GOOD	YES	NONE	DCWD reserve fund
PANACAN	Moderate	MLCSP	250	17,700.00	313.82	GOOD	YES	NONE	DCWD reserve fund
PANACAN	Low	MLCSP	250	17,700.00	176.25	GOOD	YES	NONE	DCWD reserve fund
PANACAN	High	MLCSP	250	17,700.00	505.50	GOOD	YES	NONE	DCWD reserve fund
CROSSING BAYABAS	Low	MLCSP	250	17,700.00	248.41	GOOD	YES	NONE	DCWD reserve fund
CROSSING BAYABAS	Low	MLCSP	250	17,700.00	89.37	GOOD	YES	NONE	DCWD reserve fund
CROSSING BAYABAS	Low	MLCSP	250	17,700.00	38.98	GOOD	YES	NONE	DCWD reserve fund
TUGBOK	Low	MLCSP	250	17,700.00	110.00	GOOD	YES	NONE	DCWD reserve fund
TUGBOK	Low	MLCSP	500	33,200.00	156.72	GOOD	YES	NONE	DCWD reserve fund
TUGBOK	Low	MLCSP	500	33,200.00	11.53	GOOD	YES	NONE	DCWD reserve fund
TUGBOK	Low	MLCSP	500	33,200.00	256.82	GOOD	YES	NONE	DCWD reserve fund
TUGBOK	Low	MLCSP	250	17,700.00	79.26	GOOD	YES	NONE	DCWD reserve fund
TUGBOK	Low	MLCSP	250	17,700.00	20.77	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
TUGBOK	Low	MLCSP	500	33,200.00	304.69	GOOD	YES	NONE	DCWD reserve fund
TUGBOK	Low	MLCSP	500	33,200.00	108.53	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Low	MLCSP	300	19,100.00	7.79	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	300	19,100.00	182.35	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Low	MLCSP	300	19,100.00	30.74	GOOD	YES	NONE	DCWD reserve fund
TIGATTO	High	MLCSP	400	23,600.00	796.06	GOOD	YES	NONE	DCWD reserve fund
TIGATTO	Moderate	MLCSP	400	23,600.00	280.23	GOOD	YES	NONE	DCWD reserve fund
PANACAN	High	MLCSP	250	17,700.00	40.33	GOOD	YES	NONE	DCWD reserve fund
PANACAN	Moderate	MLCSP	250	17,700.00	1,040.48	GOOD	YES	NONE	DCWD reserve fund
PANACAN	Low	MLCSP	250	17,700.00	12.88	GOOD	YES	NONE	DCWD reserve fund
SASA	High	MLCSP	300	19,100.00	79.92	GOOD	YES	NONE	DCWD reserve fund
6-A	High	MLCSP	600	40,100.00	90.17	GOOD	YES	NONE	DCWD reserve fund
5-A	High	MLCSP	600	40,100.00	9.16	GOOD	YES	NONE	DCWD reserve fund
6-A	High	MLCSP	600	40,100.00	9.89	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	High	MLCSP	300	19,100.00	18.37	GOOD	YES	NONE	DCWD reserve fund
SASA	High	MLCSP	300	19,100.00	169.79	GOOD	YES	NONE	DCWD reserve fund
PANACAN	Low	MLCSP	250	17,700.00	176.25	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	High	MLCSP	300	19,100.00	276.83	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	450	24,300.00	34.79	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	450	24,300.00	155.47	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	450	24,300.00	199.17	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Low	MLCSP	450	24,300.00	22.97	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	Moderate	MLCSP	450	24,300.00	62.16	GOOD	YES	NONE	DCWD reserve fund
LOS AMIGOS	Low	MLCSP	350	20,800.00	929.29	GOOD	YES	NONE	DCWD reserve fund
RIVERSIDE	Low	MLCSP	350	20,800.00	1,675.88	GOOD	YES	NONE	DCWD reserve fund
PANACAN	High	MLCSP	250	17,700.00	180.38	GOOD	YES	NONE	DCWD reserve fund
PANACAN	High	MLCSP	250	17,700.00	0.71	GOOD	YES	NONE	DCWD reserve fund
MATINA PANGI	Moderate	MLCSP	250	17,700.00	455.49	GOOD	YES	NONE	DCWD reserve fund
CATALUNAN GRANDE	Moderate	MLCSP	250	17,700.00	243.39	GOOD	YES	NONE	DCWD reserve fund
11-B	Moderate	MLCSP	300	19,100.00	11.72	GOOD	YES	NONE	DCWD reserve fund
19-B	Moderate	MLCSP	300	19,100.00	108.19	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
19-B	Moderate	MLCSP	300	19,100.00	45.56	GOOD	YES	NONE	DCWD reserve fund
PANACAN	Low	MLCSP	300	19,100.00	371.63	GOOD	YES	NONE	DCWD reserve fund
PANACAN	Low	MLCSP	300	19,100.00	363.14	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	18.07	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	PVC	150	11,200.00	24.03	GOOD	YES	NONE	DCWD reserve fund
TIGATTO	Moderate	MLCSP	400	23,600.00	979.68	GOOD	YES	NONE	DCWD reserve fund
MANDUG	Low	MLCSP	300	19,100.00	71.39	GOOD	YES	NONE	DCWD reserve fund
TIGATTO	Moderate	MLCSP	400	23,600.00	465.86	GOOD	YES	NONE	DCWD reserve fund
TIGATTO	Low	MLCSP	400	23,600.00	74.59	GOOD	YES	NONE	DCWD reserve fund
TIGATTO	Moderate	MLCSP	400	23,600.00	495.13	GOOD	YES	NONE	DCWD reserve fund
MANDUG	Low	MLCSP	400	23,600.00	403.25	GOOD	YES	NONE	DCWD reserve fund
PANACAN	Low	MLCSP	250	17,700.00	176.25	GOOD	YES	NONE	DCWD reserve fund
MANDUG	Low	MLCSP	400	23,600.00	919.71	GOOD	YES	NONE	DCWD reserve fund
MANDUG	Low	MLCSP	400	23,600.00	156.66	GOOD	YES	NONE	DCWD reserve fund
MANDUG	Low	PVC	200	12,500.00	92.57	GOOD	YES	NONE	DCWD reserve fund
MANDUG	Low	PVC	200	12,500.00	108.23	GOOD	YES	NONE	DCWD reserve fund
MANDUG	Low	MLCSP	400	23,600.00	4.33	GOOD	YES	NONE	DCWD reserve fund
MANDUG	Low	MLCSP	400	23,600.00	2.43	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	400	23,600.00	215.20	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	400	23,600.00	458.49	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	250	17,700.00	39.30	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	600	40,100.00	223.51	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	High	MLCSP	600	40,100.00	463.42	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	MLCSP	250	17,700.00	184.63	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	MLCSP	250	17,700.00	922.60	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	MLCSP	250	17,700.00	1,041.85	GOOD	YES	NONE	DCWD reserve fund
20-B	Moderate	PVC	150	11,200.00	82.14	GOOD	YES	NONE	DCWD reserve fund
20-B	Moderate	PVC	150	11,200.00	41.02	GOOD	YES	NONE	DCWD reserve fund
10-A	Moderate	PVC	150	11,200.00	3.91	GOOD	YES	NONE	DCWD reserve fund
10-A	Moderate	PVC	150	11,200.00	58.32	GOOD	YES	NONE	DCWD reserve fund
PANACAN	High	MLCSP	400	23,600.00	118.38	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
PANACAN	Moderate	MLCSP	400	23,600.00	532.14	GOOD	YES	NONE	DCWD reserve fund
ILANG	High	MLCSP	400	23,600.00	407.33	GOOD	YES	NONE	DCWD reserve fund
ILANG	Moderate	MLCSP	400	23,600.00	31.69	GOOD	YES	NONE	DCWD reserve fund
ILANG	Moderate	MLCSP	400	23,600.00	988.28	GOOD	YES	NONE	DCWD reserve fund
ILANG	Low	MLCSP	400	23,600.00	394.57	GOOD	YES	NONE	DCWD reserve fund
PANACAN	Low	MLCSP	250	17,700.00	176.25	GOOD	YES	NONE	DCWD reserve fund
ILANG	Moderate	MLCSP	400	23,600.00	268.48	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	250	17,700.00	452.18	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Low	MLCSP	250	17,700.00	164.20	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Moderate	MLCSP	250	17,700.00	92.29	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	Low	MLCSP	250	17,700.00	298.66	GOOD	YES	NONE	DCWD reserve fund
TUGBOK	Low	MLCSP	250	17,700.00	177.45	GOOD	YES	NONE	DCWD reserve fund
TUGBOK	Low	MLCSP	250	17,700.00	721.72	GOOD	YES	NONE	DCWD reserve fund
CALINAN	Low	PVC	200	12,500.00	110.45	GOOD	YES	NONE	DCWD reserve fund
TIGATTO	High	MLCSP	400	23,600.00	333.61	GOOD	YES	NONE	DCWD reserve fund
TIGATTO	Moderate	MLCSP	400	23,600.00	654.51	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	300	19,100.00	54.26	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	300	19,100.00	59.75	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	450	24,300.00	6.06	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	750	48,500.00	428.56	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	750	48,500.00	82.32	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	350	20,800.00	39.38	GOOD	YES	NONE	DCWD reserve fund
TALOMO	High	MLCSP	350	20,800.00	70.52	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	350	20,800.00	479.16	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	350	20,800.00	20.04	GOOD	YES	NONE	DCWD reserve fund
TALOMO	High	MLCSP	250	17,700.00	16.21	GOOD	YES	NONE	DCWD reserve fund
TALOMO	High	MLCSP	350	20,800.00	5.75	GOOD	YES	NONE	DCWD reserve fund
TALOMO	High	MLCSP	350	20,800.00	437.34	GOOD	YES	NONE	DCWD reserve fund
TALOMO	High	MLCSP	250	17,700.00	328.00	GOOD	YES	NONE	DCWD reserve fund
TALOMO	High	MLCSP	250	17,700.00	0.61	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	MLCSP	800	52,800.00	157.45	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
PANACAN	Low	MLCSP	250	17,700.00	176.25	GOOD	YES	NONE	DCWD reserve fund
TIGATTO	High	MLCSP	800	52,800.00	397.12	GOOD	YES	NONE	DCWD reserve fund
BUHANGIN	High	MLCSP	800	52,800.00	19.46	GOOD	YES	NONE	DCWD reserve fund
MA-A	High	MLCSP	800	52,800.00	55.05	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	700	44,200.00	353.39	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	700	44,200.00	28.93	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	700	44,200.00	288.01	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Moderate	MLCSP	350	20,800.00	5.19	GOOD	YES	NONE	DCWD reserve fund
TALOMO	Low	MLCSP	350	20,800.00	242.88	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	Moderate	MLCSP	400	23,600.00	12.17	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	High	PVC	150	11,200.00	71.18	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	High	PVC	150	11,200.00	2.02	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	MLCSP	400	23,600.00	24.87	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	MLCSP	400	23,600.00	5.86	GOOD	YES	NONE	DCWD reserve fund
SAN ANTONIO	High	MLCSP	400	23,600.00	3.88	GOOD	YES	NONE	DCWD reserve fund
A. ANGLIONGTO	High	MLCSP	300	19,100.00	348.93	GOOD	YES	NONE	DCWD reserve fund
LAPU - LAPU	High	MLCSP	300	19,100.00	5.08	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	High	MLCSP	300	19,100.00	162.74	GOOD	YES	NONE	DCWD reserve fund
A. ANGLIONGTO	High	MLCSP	300	19,100.00	23.08	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	MLCSP	250	17,700.00	341.23	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	High	MLCSP	250	17,700.00	266.89	GOOD	YES	NONE	DCWD reserve fund
BUCANA	High	MLCSP	250	17,700.00	434.23	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	PVC	150	11,200.00	55.96	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	High	PVC	150	11,200.00	8.86	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	High	PVC	150	11,200.00	37.93	GOOD	YES	NONE	DCWD reserve fund
PANACAN	Low	MLCSP	250	17,700.00	176.25	GOOD	YES	NONE	DCWD reserve fund
15-B	High	PVC	150	11,200.00	19.13	GOOD	YES	NONE	DCWD reserve fund
SAN ANTONIO	High	MLCSP	400	23,600.00	78.61	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	High	MLCSP	400	23,600.00	58.48	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	Moderate	MLCSP	400	23,600.00	64.24	GOOD	YES	NONE	DCWD reserve fund
SAN ANTONIO	High	MLCSP	400	23,600.00	367.39	GOOD	YES	NONE	DCWD reserve fund

Table LU-23. Lifeline Utilities, Level III Water System, Exposure Database Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
LOS AMIGOS	Low	MLCSP	250	17,700.00	8.80	GOOD	YES	NONE	DCWD reserve fund
LOS AMIGOS	Low	MLCSP	250	17,700.00	2.67	GOOD	YES	NONE	DCWD reserve fund
LOS AMIGOS	Low	MLCSP	250	17,700.00	2.22	GOOD	YES	NONE	DCWD reserve fund
LOS AMIGOS	Low	MLCSP	250	17,700.00	815.72	GOOD	YES	NONE	DCWD reserve fund
LOS AMIGOS	Low	MLCSP	250	17,700.00	359.81	GOOD	YES	NONE	DCWD reserve fund
LOS AMIGOS	Low	MLCSP	250	17,700.00	16.73	GOOD	YES	NONE	DCWD reserve fund
WANGAN	Low	PVC	200	12,500.00	8.85	GOOD	YES	NONE	DCWD reserve fund
WANGAN	Low	PVC	200	12,500.00	8.85	GOOD	YES	NONE	DCWD reserve fund
CALINAN	Low	PVC	200	12,500.00	22.81	GOOD	YES	NONE	DCWD reserve fund
CALINAN	Low	PVC	200	12,500.00	22.81	GOOD	YES	NONE	DCWD reserve fund
ILANG	High	MLCSP	400	23,600.00	21.96	GOOD	YES	NONE	DCWD reserve fund
ILANG	Moderate	MLCSP	400	23,600.00	21.96	GOOD	YES	NONE	DCWD reserve fund
CALINAN	Low	PVC	200	12,500.00	64.47	GOOD	YES	NONE	DCWD reserve fund
CALINAN	Low	PVC	200	12,500.00	64.47	GOOD	YES	NONE	DCWD reserve fund
CALINAN	Low	PVC	200	12,500.00	138.05	GOOD	YES	NONE	DCWD reserve fund
CALINAN	Low	PVC	200	12,500.00	138.05	GOOD	YES	NONE	DCWD reserve fund

Exposure Database for DCWD Wells

For Level 3 DCWD Wells, a total of six (6) wells are highly susceptible to liquefaction. These wells are found in Lower Rapnaga, Puan, Barangay Bago Aplaya, Corssing Bago Aplaya, Barangay Bago Aplaya, Km 10, Bago Aplaya, fronting Ideal Subdivision, Barangay Bago Aplaya, Davao-Cotabao Road, near Bago Bridge, Barangay Bago Aplaya, and Km 11, Dumoy, near the entrance of the Distal, Barangay Dumoy.

Table LU-24. Lifeline Utilities Level III DCWD Production Wells Exposure Database for Liquefaction, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
LOCATION	LIQUEFACTION	PUMP TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Km. 7, Talomo Sump Bangkal, Brgy. Talomo	Low	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Benedictine Sisters Road, Brgy. Talomo	Low	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
UUHSA, Brgy. Talomo	Moderate	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Km. 8 Ulas, Brgy. Talomo	Moderate	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Puan Junction, Brgy. Talomo	Moderate	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Lower Rapnaga, Puan, Brgy. Bago Aplaya	Moderate	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Lower Rapnaga, Puan, Brgy. Bago Aplaya	High	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Lower Rapnaga, Puan, Brgy. Bago Aplaya	High	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Crossing Bago Aplaya, Brgy. Bago Aplaya	High	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Km. 10 Bago Aplaya fronting Ideal Subdivision, Brgy. Bago Aplaya	High	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	High	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Km. 11 Dumoy near the entrance to Dusnai, Brgy. Dumoy	High	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Bago Gallera Road near Gallera De Oro Subd., Brgy. Bago Gallera	Moderate	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Km. 9, Puan along Davao Cotabato Road Brgy. Bago Aplaya	Moderate	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Along Bago Gallera Road infront of Mega Homes, Brgy. Bago Gallera	Low	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Catotal Subdivision near Block 22, Brgy. Bago Aplaya	Moderate	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Gallera de Oro Subdivision near Block 8, Brgy. Bago Aplaya	Low	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Purok 6, Sta Cruz Bago Gallera Road fronting Spring Valley, Brgy. Bago Gallera		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Reldo Village, Acacia St., Brgy. Bago Gallera		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Along Apo Golf Road, Brgy. Bago Aplaya		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund

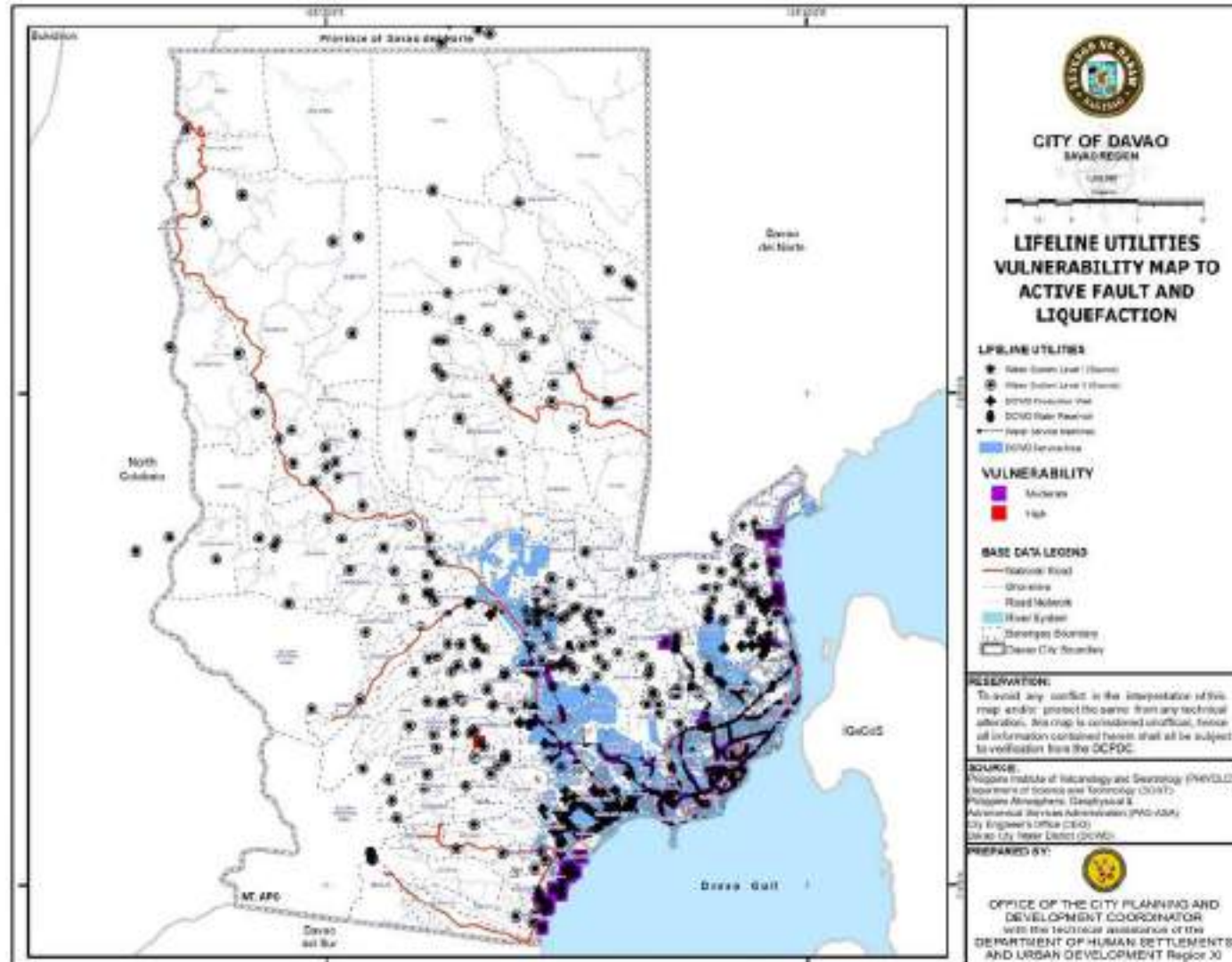
Table LU-24. Lifeline Utilities Level III DCWD Production Wells Exposure Database for Liquefaction, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
LOCATION	LIQUEFACTION	PUMP TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Along Libby Road infront of San Lorenzo Village, Brgy. Bago Gallera		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Entrance of Toscana Solariega, Brgy. Bago Gallera		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Entrance of Toscana Solariega, Brgy. Bago Gallera		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Toscana Solariega near Block 11, Brgy. Bago Gallera		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Libby Road, near Adciville Subdivision, Bago Gallera		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Farland Extension near Block 2, Brgy. Dumoy	Low	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Along Iwha Road, Brgy. Baliok		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Along Iwha Road, Brgy. Baliok		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Along Bago Gallera Road, Purok 3 , Brgy. Bago Gallera		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
BAGASA Village, Libby Road, Brgy. Bago Gallera		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Entrance to Greenland Subdivision, along Davao Cotabato Road, Brgy. Dumoy	Moderate	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Along Libby Road, Purok 5, Brgy. Bago Gallera		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Along Libby Road, Purok 1, Brgy. Baliok		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Libby Road, near Davao New Town Relocation, Brgy. Bago Gallera		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Sitio Saka, Brgy. Bago Oshiro		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Sitio Nalum, Along Libby Road, Brgy. Bago Oshiro		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Susana Homes near Block 11, Brgy. Baliok		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Bacanaya Compound, Brgy. Catalunan Peque?o		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Purok 6, Brgy. Baliok		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Brgy. Baliok, Davao City		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Dacoville Subd., Brgy. Dumoy			6,500,000.00	GOOD	YES	NO	DCWD fund
Rasay St., Brgy. Toril	Low	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Purok Pagkakaisa, Brgy. Lubogan		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Mangahan Bridge Alambre, Toril		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Bangcas Heights Lubogan, Toril		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Purok 1 Communal, Brgy. Communal		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Cabantian Road, Brgy. Cabantian		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Nagkahiusa Village, Brgy. Indangan		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Malagamot Road, Brgy. Indangan		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Davao Molave Homes, Brgy. Indangan		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund

Table LU-24. Lifeline Utilities Level III DCWD Production Wells Exposure Database for Liquefaction, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
LOCATION	LIQUEFACTION	PUMP TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Purok 27, Malagamot, Brgy. Panacan		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Purok 24, Malagamot, Brgy. Panacan		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Purok 24, Malagamot, Brgy. Panacan		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Malagamot Road, Panacan		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Tibungco Relocation, Brgy. Tibungco		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Sitio Mahayahay, Brgy. Tugbok		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Sitio Mahayahay, Brgy. Tugbok		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Sitio Mahayahay, Brgy. Tugbok		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
New Loon, Brgy. Mintal		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Tugbok Quarry, Along Davao Bukidnon Road, Brgy. Tugbok	Low	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Sitio Basak, Brgy. Mintal		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Purok 7, Near PCA, Brgy. Bago Oshiro		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
DCWD Property, Brgy. Catalunan Grande		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Malagos Barangay Road		SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Barangay Wangan		VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Davao - Bukidnon Road, Upper Riverside	Low	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Los Amigos	Low	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund

Map 5.9 Lifeline Utilities Vulnerability Map to Active Fault and Liquefaction, Davao City



Exposure Database for Cell Sites

For cell sites, a total of 26 cell sites of Digitel Mobile Philippines, 19 cell sites of Globe Telecom, Inc. and 67 cell sites of Smart Communications are highly susceptible to liquefaction. These cells sites are found in Poblacion, Agdao, and Talomo Districts.

For cell sites, a total of 26 cell sites of Digitel Mobile Philippines, 19 cell sites of Globe Telecom, Inc. and 67 cell sites of Smart Communications are highly susceptible to liquefaction. These cells sites are found in Poblacion, Agdao, and Talomo Districts.

Table LU-25. Lifeline Utilities, Cell Sites, Exposure Database Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LIQUEFACTION SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
GLOBE TELECOM, INC.	High	Brgy. Daliao, Toril,	300 sq. m	₱12-15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Lorenzo Manuel St., San Vicente Daliao, Toril, Davao City,	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Brgy. Daliao, Toril	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Mac Arthur Highway, Dumoy,	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Barangay Bago Aplaya, Talomo District, Davao City Golf Country Club	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	Doña Luisa Subdivision, Phase 2, Brgy. Matina Aplaya	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-25. Lifeline Utilities, Cell Sites, Exposure Database Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LIQUEFACTION SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	High	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	SM City Davao Annex Building, Brgy. Bucana	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	SM City Davao Annex Building, Brgy. Bucana,	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	SM Davao, Ecoland,	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	PLDT Village, Bo. Talomo,	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	PLDT Village, Bo. Talomo	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Matina Aplaya (near Lanzano Subd.)	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	JMS Bldg., #88 Maya Street, Barangay 76A,	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	University Ave., Juna Subd., Martina	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Abarquez Prop., University Ave., Juna Subd.,	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Acacia St., near Ecoland Subd.	300 sq. m	₱12-₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-25. Lifeline Utilities, Cell Sites, Exposure Database Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LIQUEFACTION SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	High	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Mc Arthur Hiway, Brgy. 74-A, Matina,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	NCC Mall Maa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Centerpoint Mall, Brgy. Matina Crossing,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Magno Prop., No. 64 V. Mapa St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	No. 64 V. Mapa St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	JVALL Bldg., McArthur Hi-way, (Maa Crossing)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Sandawa, McArthur Hi-Way, Matina,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Sandawa, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	Magallanes St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Luna Bldg., San Pedro corner Quimpo Blvd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	NCCC Mall, Maa,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-25. Lifeline Utilities, Cell Sites, Exposure Database Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LIQUEFACTION SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	High	Matina Hi-way cor. MAA Rd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	#88 Maya St., Brgy. 76A, Ecoland,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Luna Bldg., San Pedro cor. Quimpo Blvd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Ponciano Reyes St. (crooked Rd.)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Magno Bldg., Ponciano Reyes St. (crooked rd.),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	Bonifacio St., cor M.L. Quezon Blvd	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	109 Piapi, Quezon Blvd,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Santiago's Lot, Brgy. Sasa Buhangin,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Erlinda Reyes Bldg., 19-Piapi Quezon Blvd.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS,	High	5/F Gaisano Ilustre St.	300 sq. m	₱12 -₱15 mil-	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES,	High	Ilustre St.,	300 sq. m	₱12 -₱15 mil-	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	J.S. Gaisano Mall, Ilustre St., cor. Gen. Luna St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS,	High	General Malvar St.	300 sq. m	₱12 -₱15 mil-	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS,	High	D. Ponce St.,	300 sq. m	₱12 -₱15 mil-	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-25. Lifeline Utilities, Cell Sites, Exposure Database Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LIQUEFACTION SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
DIGITEL MOBILE PHILIPPINES, INC.	High	Chippens Bldg., 368 Padre Gomez St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Chippens Bldg., 368 Padre Gomez St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Davao Doctors Hospital, Malvar St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Legaspi St. Cor. Bonifacio St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Baguio (Pob.),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Km.12, National Highway, Barangay Catalunan Pequeno,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	PLDT Ponciano, PLDT Bldg., Ponciano St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Regency Inn, Villa Abrille St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Gov. Sales St., Brgy. 27	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Jose Co Bldg., Gov. Sales St., Brgy. 27,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	NCC Mall Uyanguren	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	NCC Mall Unaguren	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	PBCOM Bldg., Monteverde cor. Bangoy St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-25. Lifeline Utilities, Cell Sites, Exposure Database Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LIQUEFACTION SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	High	PLDT Post fronting Chimes Store, Sales St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Holy Cross College, Sta. Ana Ave. Cor Guerero	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	J.P Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	San Pedro Hospital Guzman St., Brgy. Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	San Pedro Hospital, Guzman St., Brgy. Gov. Vicente Duterte,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	San Pedro Hospital, Guzman St., Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Lapu Lapu corner Bangoy Sts., Agdao,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Lapu-lapu St., cor. Bangoy Agdao,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Banco Filipino Bldg., Lapu-lapu St., cor. Dacudao Ave.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	Wescon Suites Cmpd., R. Castillo, Agdao	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Peralta Property, Seminary Rd., Brgy Catalunan Grande Talomo District,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-25. Lifeline Utilities, Cell Sites, Exposure Database Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LIQUEFACTION SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	High	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Llanes Prop 1, Caba-guio Ave., Agdao,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS,	High	Cabaguio Ave., Agdao	300 sq. m	₱12 -₱15 mil-	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	R. Castillo St., Otero Compound, Lapu-Lapu	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Leonor Property, Camia St., Ubalde Subd., Brgy.Ubalde	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Camia St., Ubalde Subd., Brgy. Ubalde	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	J.P. Laurel Avenue, Lanang,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Rooftop SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	SM Lanang, Km. 6 Lanang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	SM Lanang, Km 6, Lanang,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-25. Lifeline Utilities, Cell Sites, Exposure Database Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LIQUEFACTION SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	High	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	SM Lanang Former Lanang Golf and Country Club, J.P. Laurel Ave., Lanang District, Brgy. San Antonio	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	J.P. Laurel Ave., Monark Compound, Brgy. Rafael Castillo	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	SM Davao Ecoland	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	SM Davao Ecoland,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Waterfront Hotel, Lanang,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Doña Asuncion Road, Brgy. Pampanga, Lanang,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Km. 9, KMA, Brgy. Sasa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Sitio Nahul, Barangay Baliok,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-25. Lifeline Utilities, Cell Sites, Exposure Database Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LIQUEFACTION SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	High	Sitio Nahul, Brgy. Baliok	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	High	National Highway Panacan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Lasang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	High	Barilio Lasang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	High	Hao Property, Barrio Lasang,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Corner National Highway-Lim Street, Brgy. Toril Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Ferriols Compound, Brgy. Toril Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Sto. Cristo St., cor. Ransay St., Brgy. Toril Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Along National Highway, Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Commandante Property, Along National Highway, Brgy. Bago Aplaya, Talomo District,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Telstar St., GSIS Subdivision, McArthur Highway, Matina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Crossing Puan, McArthur Highway	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-25. Lifeline Utilities, Cell Sites, Exposure Database Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LIQUEFACTION SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Bago Aplaya, Talomo	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Vega Property, Cariñosa St. cor Balitaw St., Lanzona Subd., Matina,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Carinosa St., cor. Balitaw St., Lanzona Subd., Matina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Ortis Road, Brgy. Ulas	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Ortis road, Brgy. Ulas,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Golden Hardware Bldg.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Golden Hardware Bldg., Km. 5 McArthur Highway, Matina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Guardsman, AGT Bldg., Nacilla Street, Brgy. Ma-a	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Guardsman AGT Bldg., Nacilla Street, Brgy. Ma-a,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	PLDT Maa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Moderate	Torres St., Brgy. 9-A (Pob.)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	PLDT Maa,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-25. Lifeline Utilities, Cell Sites, Exposure Database Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LIQUEFACTION SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Moderate	Infront of Luisa Avenue Square Bldg., B. Jacinto Ext. St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Landco Bldg., JP Laurel St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Moderate	Corner Palma Gil & Cervantes St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Billboard on Synchar Hotel, J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	J.P. Laurel Avenue, Bajada,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	University of Southern Philippines, Trade School Drive	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Opal St., Obrero,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Opal St., Obrero	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Moderate	Abreeza Mall JP Laurel St., Barangay 20-B (Pob.)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Moderate	Abreeza Mall JP Laurel St. Acacia,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Moderate	JP Laurel St., Barangay 20-B (Pob.),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Km10 Doña Salud Subd., Sasa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Km10 Doña Salud Subd., Sasa,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

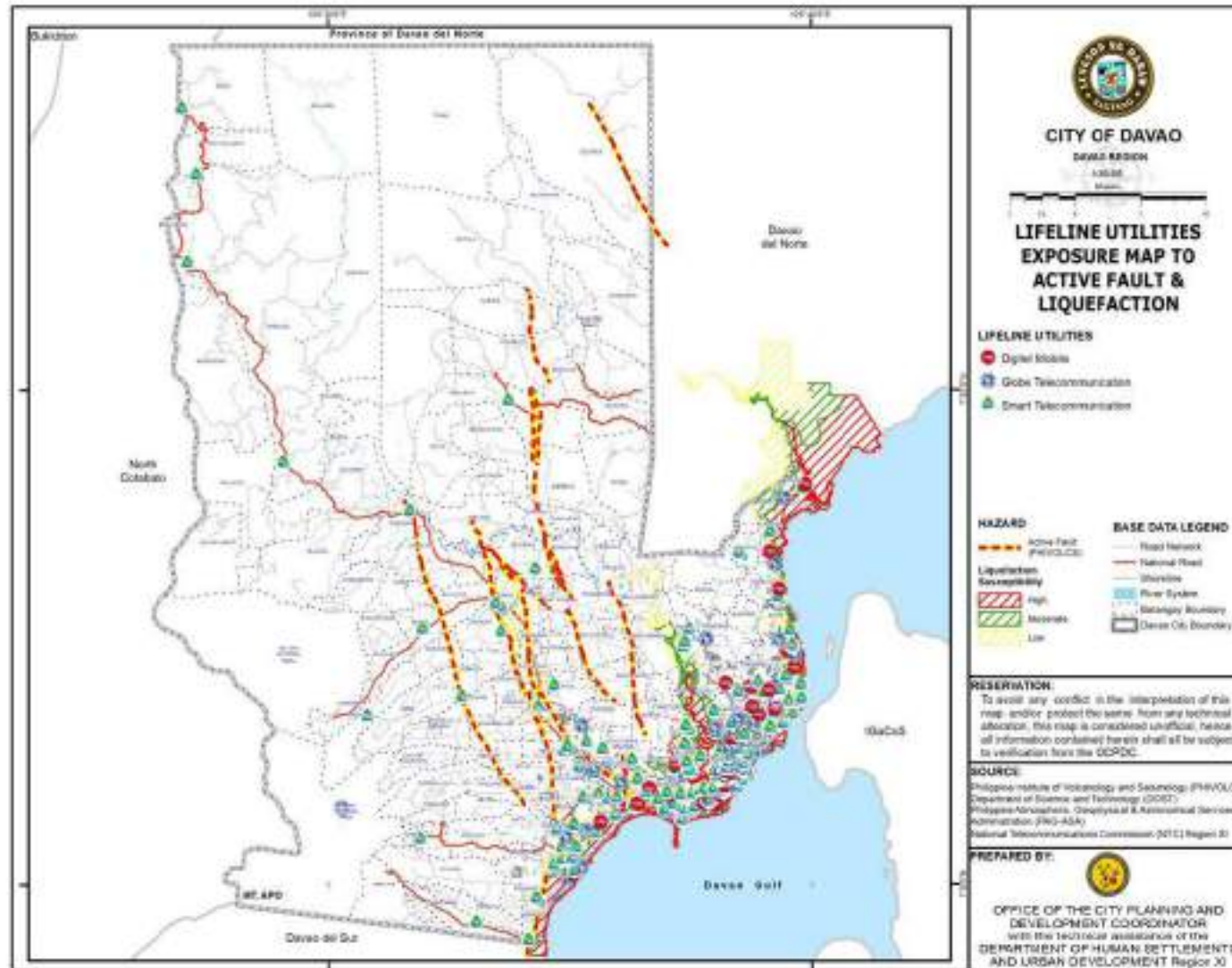
Table LU-25. Lifeline Utilities, Cell Sites, Exposure Database Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LIQUEFACTION SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Moderate	Pres. Carlos P. Garcia Highway, Brgy. Panacan,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	President Carlos P. Garcia Highway (Diversion Road), Brgy. Panacan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Cruz Property, President. Carlos P. Garcia Highway (Diversion Road), Brgy. Panacan,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Malagamot Road, Bayani Diaz Compound, Panacan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Malagamot Road, Panacan,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	PLDT Compound, National Highway, Panacan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	PLDT Compound, National Highway	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Tefasco Lot, Panacan,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Panacan,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	Brgy. Bunawan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Moderate	Purok 3, (near Market site), Brgy. Bunawan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Moderate	Crossing Licanan, Brgy. Alejandra Navarro (Lasang)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-25. Lifeline Utilities, Cell Sites, Exposure Database Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LIQUEFACTION SUSCEPTIBILITY	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Low	Macelod, Toril	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Macapili Subd., Dumoy	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Km. 3, Mc Arthur Highway,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Mac Arthur Highway, Bangkal,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Diversion Road, Bangkal	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Diversion Road, Bangkal,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Facundo, Purok 46, Alvarez Compound, Kapundok, Maa,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Facundo Purok 46 Maa	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	South Villa Heights, Maa	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Tugbok, Los Amigos, (near Vi-tarich)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Piñano St., Poblacion, Calinan,	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Calinan (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Low	Calinan (Pob.)	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	Pinano St., Poblacion, Calinan	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Low	Principe Property, R. Magsaysay St., Purok 9, Brgy. Calinan	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Low	R. Magsaysay St., Purok 9, Brgy. Calinan	300 sq. m	₱5 million	Steel & Concrete	good	Yes	None	No Available Fund

Map 5.10. Lifeline Utilities, Cell Sites, Exposure Map to Active Fault and Liquefaction, Davao City



Storm Surge

Exposure Database for Road

Road networks which are exposed to 5-meter wave susceptibility are the Carlos P. Garcia Highway, Dacudao Avenue, Davao Agusan Highway, Davao Bukidnon Road, Florentino Torres St, J.P Cabaguio, J. P Avenue, Libby Road, McArthur Highway, Airport Road, Pichon St., Quimpo Boulevard, and Quirino Avenue. The highest road length exposed to 5-m wave is the Quirino Avenue, with 0.2722 kilometers exposed.

Table LU-26. Lifeline Utilities, Roads, Exposure Database for Storm Surge, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
2nd Avenue	2m	0.2056	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
5th Ave.	2m	0.1964	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
5th Ave.	2m	0.0080	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Agdao Flyover	2m	0.3327	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Agdao Flyover	2m	0.1406	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Bonifacio Rotonda	3m	0.0839	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	5m	0.0067	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	5m	0.0289	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	2m	0.0015	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	3m	0.3565	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Carlos P. Garcia Highway	4m	0.0289	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Claro M. Recto St.	2m	0.2221	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-26. Lifeline Utilities, Roads, Exposure Database for Storm Surge, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUS-CEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOV-ERNMENT RE-SOURCES
Claro M. Recto St.	2m	0.2052	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Claro M. Recto St.	2m	0.5195	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Claro M. Recto St.	3m	0.0260	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Claro M. Recto St.	2m	0.0158	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Claro M. Recto St.	3m	0.0891	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Dacudao Avenue	2m	0.2357	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Dacudao Avenue	3m	0.4343	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Dacudao Avenue	4m	0.1959	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Dacudao Avenue	2m	0.3666	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Dacudao Avenue	5m	0.0738	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Dacudao Avenue	4m	0.2062	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	5m	0.2152	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	4m	0.0154	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	5m	0.3174	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	2m	0.0786	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-26. Lifeline Utilities, Roads, Exposure Database for Storm Surge, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUS-CEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOV-ERNMENT RE-SOURCES
Davao - Agusan Highway	3m	0.8175	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	4m	0.8613	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	2m	1.3049	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	3m	1.0823	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	4m	0.0561	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	5m	0.1872	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	3m	0.4608	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	4m	0.2881	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	5m	0.8330	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	3m	0.4090	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	4m	0.9115	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	5m	0.1423	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	2m	0.2755	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	3m	1.9411	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	4m	0.4573	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-26. Lifeline Utilities, Roads, Exposure Database for Storm Surge, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUS-CEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOV-ERNMENT RE-SOURCES
Davao - Agusan Highway	5m	0.5854	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	2m	1.2341	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	3m	1.5330	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	4m	0.2874	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	2m	0.5681	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	3m	0.5142	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	5m	0.4213	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	2m	1.8633	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	3m	0.7272	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	4m	0.2430	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao - Agusan Highway	2m	0.4561	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Florentino Torres St	3m	0.0015	65,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Florentino Torres St	5m	0.0521	65,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Florentino Torres St	3m	0.0223	65,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Florentino Torres St	4m	0.3497	65,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-26. Lifeline Utilities, Roads, Exposure Database for Storm Surge, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUS-CEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOV-ERNMENT RE-SOURCES
Florentino Torres St	5m	0.0095	65,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Florentino Torres St	4m	0.1677	65,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Florentino Torres St	5m	0.1291	65,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Florentino Torres St	4m	0.1745	65,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Florentino Torres St	3m	0.0396	65,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
J.P. Cabaguio Avenue	5m	0.0846	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
J.P. Cabaguio Avenue	2m	0.4031	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
J.P. Cabaguio Avenue	3m	0.1827	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
J.P. Cabaguio Avenue	4m	0.0910	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
J.P. Cabaguio Avenue	2m	0.1908	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	2m	0.2920	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	3m	0.2001	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	4m	0.1927	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	5m	0.1487	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	4m	0.1453	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-26. Lifeline Utilities, Roads, Exposure Database for Storm Surge, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUS-CEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Jose P. Laurel Avenue	3m	0.1008	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	3m	0.0300	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	3m	0.3206	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	3m	0.1157	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	4m	0.1912	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	3m	0.1200	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	4m	0.2159	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	3m	0.0008	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	2m	0.2964	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	3m	0.2024	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	4m	0.0609	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	2m	0.2931	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	3m	0.2108	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	5m	0.3861	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Jose P. Laurel Avenue	3m	0.2669	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-26. Lifeline Utilities, Roads, Exposure Database for Storm Surge, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUS-CEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOV-ERNMENT RE-SOURCES
Jose P. Laurel Avenue	4m	0.0942	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Leon Garcia St.	2m	0.2148	49,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Leon Garcia St.	2m	0.4363	49,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Libby Road	4m	0.0062	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Libby Road	5m	0.0605	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Libby Road	4m	0.2532	25,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	5m	0.1441	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	3m	0.0807	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	4m	0.1227	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	5m	0.0201	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	4m	0.0113	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	5m	0.0200	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	4m	0.0123	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	5m	0.0412	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	5m	0.4789	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-26. Lifeline Utilities, Roads, Exposure Database for Storm Surge, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUS-CEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Mc. Arthur Highway	3m	0.0563	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	4m	0.8616	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	5m	0.9282	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	2m	0.0869	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	3m	0.2745	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	5m	0.4608	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	3m	0.4339	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	4m	1.0214	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Old Airport Road	5m	0.0204	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Old Airport Road	2m	0.0616	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Old Airport Road	3m	0.1224	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Old Airport Road	4m	0.0408	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Pakiputan Wharf Road	2m	0.5062	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Pichon St.	5m	0.0019	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Pichon St.	5m	0.0102	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-26. Lifeline Utilities, Roads, Exposure Database for Storm Surge, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUS-CEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Pichon St.	5m	0.0467	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Pichon St.	3m	0.4288	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Pichon St.	4m	0.3063	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Pichon St.	3m	0.1521	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quezon Boulevard	2m	0.2429	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quezon Boulevard	2m	0.6597	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quezon Boulevard	2m	1.1526	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quezon Boulevard	2m	0.4056	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quezon Boulevard	2m	0.6372	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quezon Boulevard	2m	1.1235	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	2m	0.4617	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	2m	0.0002	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	5m	0.1625	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	4m	0.1923	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	5m	0.3518	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-26. Lifeline Utilities, Roads, Exposure Database for Storm Surge, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUS-CEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Quimpo Boulevard	2m	1.2646	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	3m	0.2471	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	4m	0.6000	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	2m	0.1951	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quimpo Boulevard	3m	0.0372	50,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	3m	0.0546	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	3m	0.2223	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	3m	0.0084	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	3m	0.2220	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	4m	0.1508	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	5m	0.0763	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	4m	0.2063	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	5m	0.1959	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	3m	0.0633	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	4m	0.1080	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-26. Lifeline Utilities, Roads, Exposure Database for Storm Surge, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUS-CEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RE-SOURCES
Quirino Avenue	3m	0.3941	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	4m	0.1893	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	3m	0.0145	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Quirino Avenue	4m	0.0555	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	2m	0.4876	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	2m	0.2671	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	2m	0.0173	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	3m	0.0009	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	2m	0.3657	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	3m	0.0016	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	2m	0.8343	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	2m	0.9058	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	2m	0.2916	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Ramon Magsaysay Ave.	2m	0.4384	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Ramon Magsaysay Ave.	2m	0.0217	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-26. Lifeline Utilities, Roads, Exposure Database for Storm Surge, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUS-CEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RE-SOURCES
Ramon Magsaysay Ave.	2m	0.0195	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Ramon Magsaysay Ave.	3m	0.0129	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Ramon Magsaysay Ave.	2m	0.4035	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Ramon Magsaysay Ave.	2m	0.4781	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Sta. Ana Ave.	2m	0.3457	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Sta. Ana Ave.	3m	0.2241	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Sta. Ana Ave.	2m	0.0213	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Sta. Ana Ave.	2m	0.6951	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Sta. Ana Ave.	2m	0.0049	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	5m	0.0000	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	5m	0.0000	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	2m	0.0026	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	2m	0.0026	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-26. Lifeline Utilities, Roads, Exposure Database for Storm Surge, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUS-CEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Ramon Magsaysay Ave.	2m	0.0195	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Ramon Magsaysay Ave.	3m	0.0129	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Ramon Magsaysay Ave.	2m	0.4035	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Ramon Magsaysay Ave.	2m	0.4781	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Sta. Ana Ave.	2m	0.3457	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Sta. Ana Ave.	3m	0.2241	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Sta. Ana Ave.	2m	0.0213	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Sta. Ana Ave.	2m	0.6951	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Sta. Ana Ave.	2m	0.0049	60,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	5m	0.0000	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	5m	0.0000	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	2m	0.0026	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Rafael Castillo St.	2m	0.0026	86,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

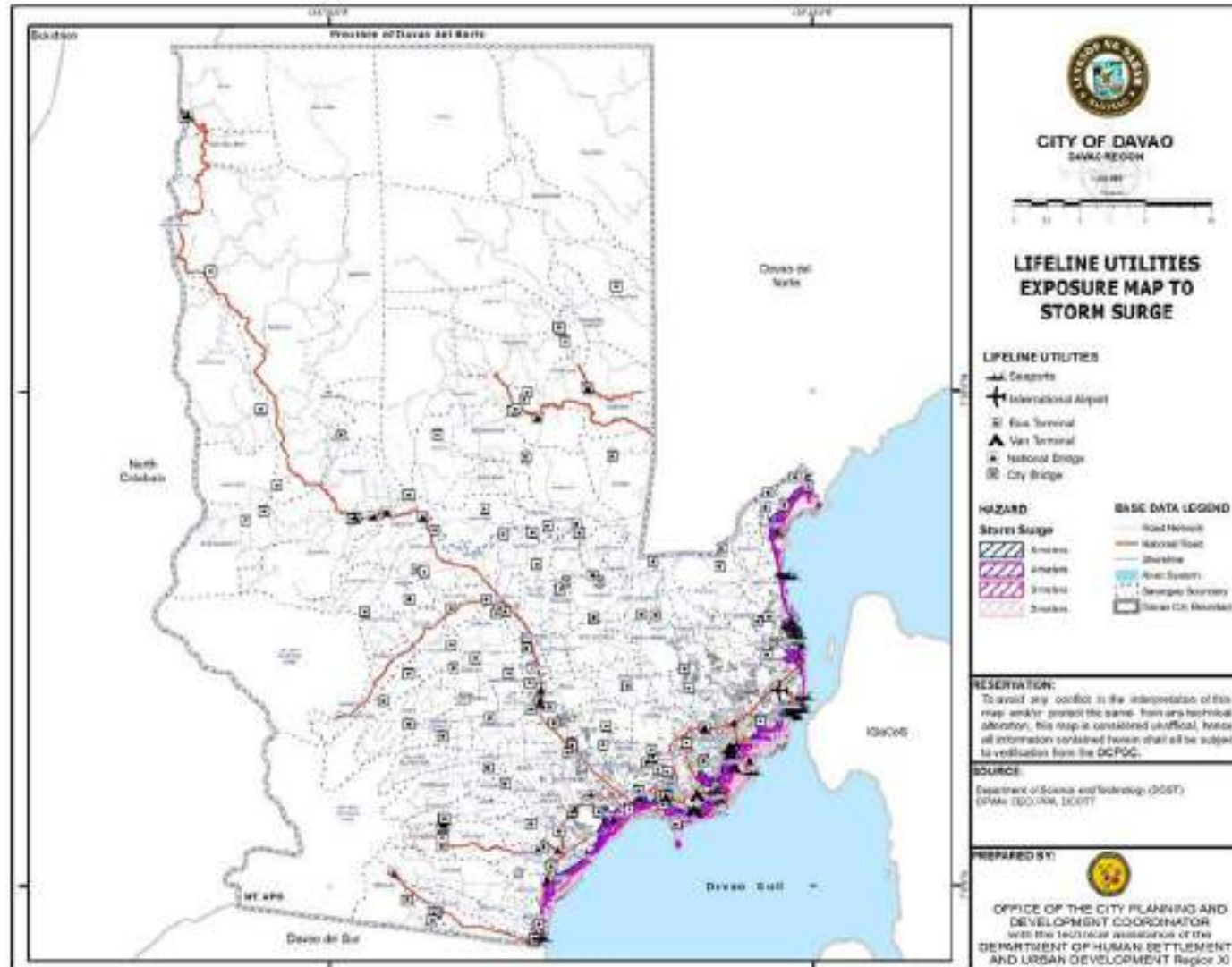
Exposure Database for Bridge

A total of four (4) bridges are exposed to storm surge 3-meter wave. These are Bago Bridge, Ilang Bridge, Talomo Bridge 1, and Talomo Bridge 2. Talomo Bridge 2 has the longest area susceptible to storm surge at 48.11 meters.

Table LU-27. Lifeline Utilities, Bridges, Exposure Database for Storm Surge, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Bago Br.	31.21	1,200,000	37,452,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Ilang Br.	25.70	1,200,000	30,840,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Talomo Br. 1	48.10	2,053,000	98,749,300	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Talomo Br. 2	48.11	2,053,000	98,769,830	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.

Map 5.11 Lifeline Utilities, Bridges, Exposure Map to Storm Surge, Davao City



Power Substations Exposure Database for Storm Surge

A total of 12 substations are susceptible to either 2-meter, 3-meter, 4-meter and 5-meter storm surge. Those which are susceptible 5-meter storm surge are Dumoy Substation, Bajada Substation, ERA Substation, and Don Ramon Substation, which is also exposed to (2-meter, 3-meter, and 4-meter Storm Surge).

Table LU-28. Power Substations Exposure Database for Storm Surge with 2-meter Wave, Davao City

EXPOSURE			SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Sta Ana Substation	607.00	135 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) & Bended Metal Sheets b) Control Building: Concrete Wall and Floor ; with Roofdeck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
R.Castillo Substation	852.00	125 Million	a) Perimeter Fence : Concrete High Wall Fence (3.5m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Pampanga Substation	1031.00	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Don Ramon Substation	15540.00	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel Structures	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE

Table LU-28. Lifeline Utilities, Power Substations, Exposure Database Table for Storm Surge with 3-meter Wave, Davao City

EXPOSURE			SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
P. Reyes Substation	825.86	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : Concrete Pole and Steel Beams	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Gaisano Substation	454.00	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Victoria Substation	595.00	120 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Panacan Substation	858.00	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: Concrete wall and Floor, PU Panel Roof. c) Equipment Support : Concrete Pole and Steel Beams	a) Operational b) Last upgraded 10 yrs ago.	Recommended for relocation or Reconstruction	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Don Ramon Substation	15,540.00	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel Structures	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Bunawan Substation	1,085.00	110 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside b) Control Building: Concrete wall and floor, ; Pre-painted Roofing Sheet. c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE

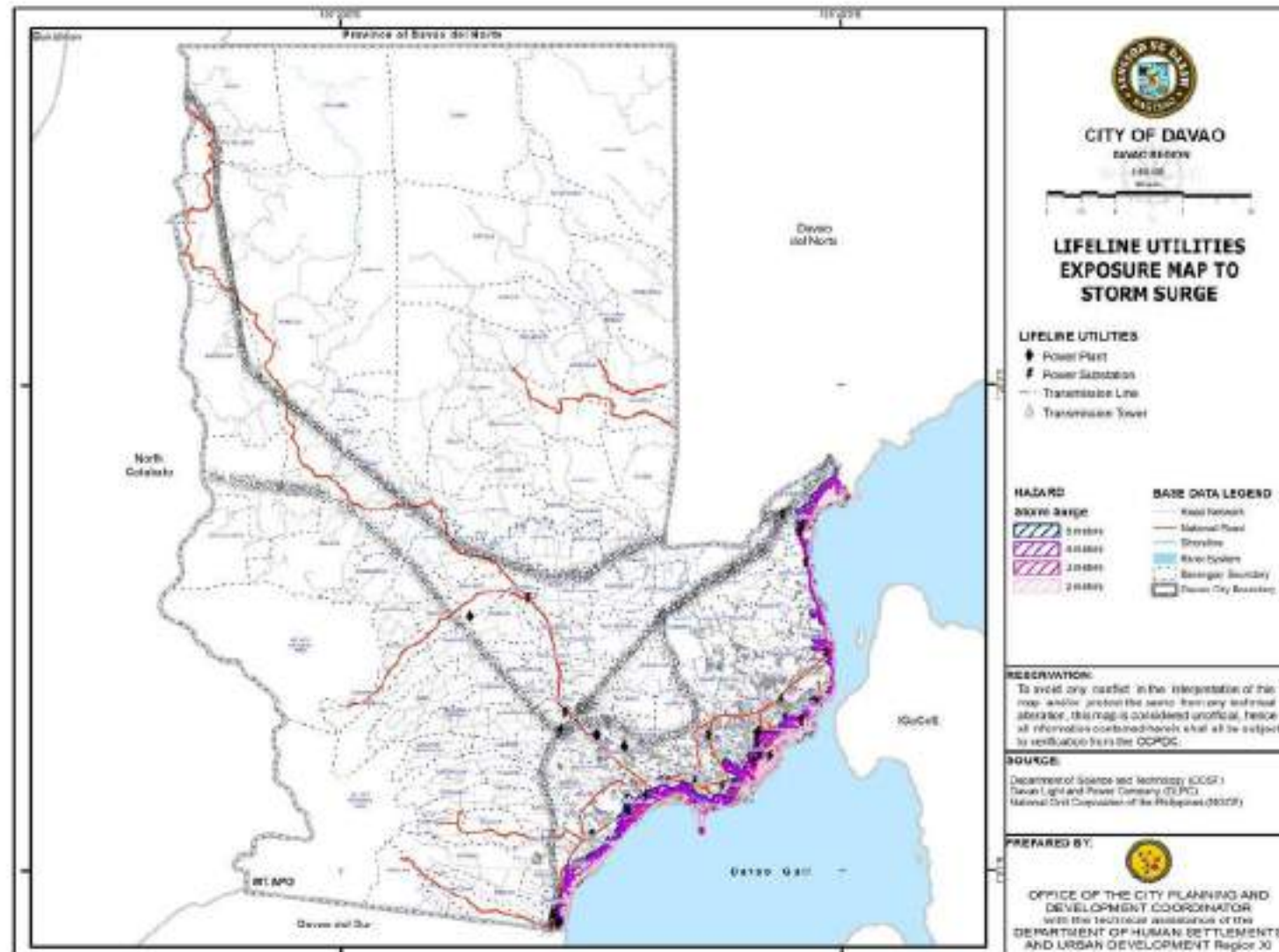
Table LU-28. Lifeline Utilities, Power Substations, Exposure Database Table for Storm Surge with 4-meter Wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Don Ramon Substation	15,540	570 Million	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Bunawan Substation	1085	110 Million	110 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside b) Control Building: Concrete wall and floor, ; Prepainted Roofing Sheet. c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE

Table LU-28 Lifeline Utilities, Power Substations, Exposure Database Table for Storm Surge with 5-meter wave, Davao City

EXPOSURE			SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Dumoy Substation	1,322	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Bajada Substation		200 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
ERA Substation	11926	200 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Don Ramon Substation	15,540	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel Structures	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE

Map 5.12 Lifeline Utilities Exposure Map to Storm Surge, Davao City



Exposure Database of Level II Water Supply for Storm Surge

Level I Water Supply Exposure to Storm Surge

A total of 60 spring sources are susceptible to storm surge with 2-meter wave (50%), 3-meter wave 16%), 4-meter wave (.06%), and 5-meter wave (.1%). These are found in barangays Binugao, Bunawan Daliao, Lizada, Mahayag, Sirawan, Tibungco, and Suawan. For 5-meter storm surge, six (6) spring sources in Daliao, Toril and one (1) spring source in Barangay Bunawan are susceptible.

Level II Water Supply Exposure to Storm Surge

Only two (2) wells located in Barangay Sirawan are susceptible to storm surge with 2-meter wave. The replacement cost of each is ₱46,200. For the hazard resistant design, each well has a casing. For insurance coverage, there is no insurance coverage but there is one (1) month warranty if the water pump is installed by the supplier.

Table LU-29. Lifeline Utilities, Level I Water Supply System, Exposure Database Table for Storm Surge 2-meter wave, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Bunawan	BUNAWAN	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Bunawan	MAHAYAG	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Bunawan	BUNAWAN	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Bunawan	TIBUNGCO	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Bunawan	TIBUNGCO	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	LIZADA	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	LIZADA	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	LIZADA	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal

Table LU-29. Lifeline Utilities, Level I Water Supply System, Exposure Database Table for Storm Surge 2-meter wave, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY		
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Toril	LIZADA	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	LIZADA	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	SIRAWAN	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	SIRAWAN	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	SIRAWAN	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	SIRAWAN	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	SIRAWAN	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	SIRAWAN	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	SIRAWAN	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	SIRAWAN	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	SIRAWAN	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	BINUGAO	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	BINUGAO	2m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Bunawan	MAHAYAG	3m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Bunawan	TIBUNGCO	3m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Bunawan	BUNAWAN	3m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Bunawan	BUNAWAN	3m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	3m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	3m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	3m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	LIZADA	3m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	LIZADA	3m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	LIZADA	3m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	4m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	4m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	4m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	4m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	5m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	5m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	5m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	5m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	5m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	5m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	DALIAO	5m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal
Toril	SIRAWAN	5m	SPRING	41,586.32	FAIR	NONE	NONE	YES. For funding proposal

Table LU-29. Lifeline Utilities, Level II Water Supply System, Exposure Database Table for Storm Surge 2-meter wave, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
SIRAWAN	2m	2HP	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the waterpump is installed by the supplier	Yes. Subject to proposal
SIRAWAN	2m	2HP	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the waterpump is installed by the supplier	Yes. Subject to proposal

Exposure Database of Level III Water Supply for Storm Surge

There are 624 mainline pipes susceptible to 2-meter, 3-meter, and 4-meter and 5-meter storm surge with a total length of 62,374.42 meters. The highest percentage or 37% is susceptible to 2-meter wave. Meanwhile, the shortest percentage or 14% is susceptible to storm surge with 5-meter wave. Main line pipes susceptible to 5-meter wave are found in Barangays 10-A, 11-B, 12-B, 19-B, 2-A, 5-A, 6-A, 7-A, 9-A, Bago-Aplaya, Bago Gallera, Bucana, Buhangin, Dumoy, Ilang, Ma-a, Matina Aplaya, Matina Crossing, Panacan, Sasa, Talomo, Tibungco and Wilfredo Aquino.

Table LU-30. Lifeline Utilities Level III Water System Exposure Database Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
10-A	5m	PVC	150	11,200.00	126.87	GOOD	YES	NONE	DCWD reserve fund
10-A	4m	PVC	150	11,200.00	33.65	GOOD	YES	NONE	DCWD reserve fund
10-A	4m	PVC	150	11,200.00	162.51	GOOD	YES	NONE	DCWD reserve fund
12-B	5m	PVC	150	11,200.00	49.64	GOOD	YES	NONE	DCWD reserve fund
12-B	4m	PVC	150	11,200.00	316.29	GOOD	YES	NONE	DCWD reserve fund
11-B	5m	PVC	150	11,200.00	6.39	GOOD	YES	NONE	DCWD reserve fund
11-B	4m	PVC	150	11,200.00	157.90	GOOD	YES	NONE	DCWD reserve fund
39-D	3m	MLCSP	300	19,100.00	156.23	GOOD	YES	NONE	DCWD reserve fund
37-D	2m	MLCSP	300	19,100.00	76.08	GOOD	YES	NONE	DCWD reserve fund
32-D	2m	MLCSP	300	19,100.00	236.99	GOOD	YES	NONE	DCWD reserve fund
24-C	2m	MLCSP	300	19,100.00	2.96	GOOD	YES	NONE	DCWD reserve fund
24-C	2m	PVC	150	11,200.00	187.67	GOOD	YES	NONE	DCWD reserve fund
32-D	3m	MLCSP	300	19,100.00	222.24	GOOD	YES	NONE	DCWD reserve fund
30-C	3m	MLCSP	300	19,100.00	10.29	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
11-B	3m	MLCSP	300	19,100.00	117.30	GOOD	YES	NONE	DCWD reserve fund
28-C	2m	PVC	150	11,200.00	165.94	GOOD	YES	NONE	DCWD reserve fund
28-C	2m	PVC	150	11,200.00	164.76	GOOD	YES	NONE	DCWD reserve fund
30-C	2m	PVC	150	11,200.00	117.93	GOOD	YES	NONE	DCWD reserve fund
28-C	2m	PVC	150	11,200.00	6.71	GOOD	YES	NONE	DCWD reserve fund
32-D	2m	MLCSP	300	19,100.00	67.83	GOOD	YES	NONE	DCWD reserve fund
32-D	3m	MLCSP	400	23,600.00	31.07	GOOD	YES	NONE	DCWD reserve fund
30-C	2m	MLCSP	400	23,600.00	81.18	GOOD	YES	NONE	DCWD reserve fund
30-C	3m	MLCSP	400	23,600.00	419.75	GOOD	YES	NONE	DCWD reserve fund
12-B	3m	MLCSP	400	23,600.00	40.79	GOOD	YES	NONE	DCWD reserve fund
30-C	2m	PVC	150	11,200.00	34.82	GOOD	YES	NONE	DCWD reserve fund
11-B	3m	MLCSP	300	19,100.00	91.64	GOOD	YES	NONE	DCWD reserve fund
15-B	2m	MLCSP	400	23,600.00	8.27	GOOD	YES	NONE	DCWD reserve fund
14-B	2m	MLCSP	400	23,600.00	63.08	GOOD	YES	NONE	DCWD reserve fund
18-B	3m	MLCSP	300	19,100.00	194.44	GOOD	YES	NONE	DCWD reserve fund
19-B	3m	MLCSP	300	19,100.00	2.43	GOOD	YES	NONE	DCWD reserve fund
18-B	3m	MLCSP	300	19,100.00	3.62	GOOD	YES	NONE	DCWD reserve fund
19-B	3m	MLCSP	300	19,100.00	115.40	GOOD	YES	NONE	DCWD reserve fund
12-B	3m	PVC	150	11,200.00	23.32	GOOD	YES	NONE	DCWD reserve fund
12-B	4m	PVC	150	11,200.00	34.69	GOOD	YES	NONE	DCWD reserve fund
19-B	3m	PVC	150	11,200.00	37.77	GOOD	YES	NONE	DCWD reserve fund
18-B	3m	MLCSP	300	19,100.00	13.35	GOOD	YES	NONE	DCWD reserve fund
13-B	3m	MLCSP	300	19,100.00	42.75	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	3m	PVC	150	11,200.00	18.93	GOOD	YES	NONE	DCWD reserve fund
18-B	3m	PVC	150	11,200.00	34.32	GOOD	YES	NONE	DCWD reserve fund
18-B	3m	PVC	150	11,200.00	10.91	GOOD	YES	NONE	DCWD reserve fund
32-D	2m	MLCSP	300	19,100.00	25.83	GOOD	YES	NONE	DCWD reserve fund
32-D	3m	MLCSP	300	19,100.00	0.48	GOOD	YES	NONE	DCWD reserve fund
30-C	3m	MLCSP	300	19,100.00	12.67	GOOD	YES	NONE	DCWD reserve fund
28-C	2m	PVC	150	11,200.00	8.52	GOOD	YES	NONE	DCWD reserve fund
28-C	2m	PVC	150	11,200.00	110.26	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY	HAZARD RESISTANT DESIGN	ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION		INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
28-C	2m	PVC	150	11,200.00	59.34	GOOD	YES	NONE	DCWD reserve fund
28-C	2m	PVC	150	11,200.00	15.83	GOOD	YES	NONE	DCWD reserve fund
28-C	2m	PVC	150	11,200.00	54.80	GOOD	YES	NONE	DCWD reserve fund
26-C	2m	PVC	150	11,200.00	6.50	GOOD	YES	NONE	DCWD reserve fund
28-C	2m	PVC	150	11,200.00	59.36	GOOD	YES	NONE	DCWD reserve fund
30-C	2m	PVC	150	11,200.00	114.89	GOOD	YES	NONE	DCWD reserve fund
14-B	2m	PVC	150	11,200.00	0.45	GOOD	YES	NONE	DCWD reserve fund
14-B	2m	PVC	150	11,200.00	100.83	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	2m	PVC	150	11,200.00	2.87	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	2m	PVC	150	11,200.00	123.65	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	2m	PVC	150	11,200.00	119.84	GOOD	YES	NONE	DCWD reserve fund
15-B	2m	MLCSP	400	23,600.00	160.75	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	2m	PVC	150	11,200.00	11.50	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	MLCSP	400	23,600.00	175.51	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	PVC	150	11,200.00	57.96	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	PVC	150	11,200.00	131.04	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	PVC	150	11,200.00	25.00	GOOD	YES	NONE	DCWD reserve fund
15-B	2m	PVC	150	11,200.00	39.81	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	2m	MLCSP	300	19,100.00	49.80	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	2m	MLCSP	300	19,100.00	51.94	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	2m	MLCSP	300	19,100.00	111.40	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	3m	PVC	150	11,200.00	2.57	GOOD	YES	NONE	DCWD reserve fund
18-B	3m	PVC	150	11,200.00	213.68	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	2m	MLCSP	300	19,100.00	58.49	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	5m	PVC	150	11,200.00	69.38	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	5m	PVC	150	11,200.00	39.95	GOOD	YES	NONE	DCWD reserve fund
BUCANA	4m	PVC	150	11,200.00	67.51	GOOD	YES	NONE	DCWD reserve fund
BUCANA	5m	PVC	150	11,200.00	26.46	GOOD	YES	NONE	DCWD reserve fund
BUCANA	4m	PVC	150	11,200.00	42.92	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	5m	PVC	150	11,200.00	178.52	GOOD	YES	NONE	DCWD reserve fund
BUCANA	5m	PVC	150	11,200.00	2.79	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY	ADAPTIVE CAPACITY		
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
BUCANA	5m	PVC	150	11,200.00	8.29	GOOD	YES	NONE	DCWD reserve fund
11-B	4m	MLCSP	300	19,100.00	65.48	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	2m	MLCSP	300	19,100.00	8.09	GOOD	YES	NONE	DCWD reserve fund
19-B	5m	MLCSP	300	19,100.00	37.75	GOOD	YES	NONE	DCWD reserve fund
19-B	5m	MLCSP	300	19,100.00	34.61	GOOD	YES	NONE	DCWD reserve fund
11-B	4m	MLCSP	300	19,100.00	50.70	GOOD	YES	NONE	DCWD reserve fund
2-A	3m	MLCSP	300	19,100.00	113.84	GOOD	YES	NONE	DCWD reserve fund
32-D	2m	MLCSP	300	19,100.00	201.85	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	2m	MLCSP	300	19,100.00	64.28	GOOD	YES	NONE	DCWD reserve fund
5-A	5m	PVC	150	11,200.00	128.45	GOOD	YES	NONE	DCWD reserve fund
19-B	3m	MLCSP	300	19,100.00	96.96	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	MLCSP	400	23,600.00	17.76	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	MLCSP	400	23,600.00	63.34	GOOD	YES	NONE	DCWD reserve fund
5-A	5m	MLCSP	300	19,100.00	100.92	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	3m	MLCSP	300	19,100.00	104.63	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	300	19,100.00	92.16	GOOD	YES	NONE	DCWD reserve fund
DUMOY	5m	MLCSP	300	19,100.00	529.87	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	300	19,100.00	69.16	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	4m	PVC	150	11,200.00	61.88	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	2m	PVC	150	11,200.00	154.20	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	2m	PVC	150	11,200.00	149.77	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	700	44,200.00	101.51	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	2m	PVC	150	11,200.00	174.49	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	4m	PVC	150	11,200.00	109.92	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	5m	PVC	150	11,200.00	110.39	GOOD	YES	NONE	DCWD reserve fund
TALOMO	5m	MLCSP	600	40,100.00	258.80	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	600	40,100.00	312.37	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	500	33,200.00	134.63	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	2m	PVC	150	11,200.00	125.17	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	2m	PVC	150	11,200.00	124.31	GOOD	YES	NONE	DCWD reserve fund
BUCANA	4m	PVC	150	11,200.00	69.95	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY	HAZARD RESISTANT DESIGN	ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION		INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
AGDAO PROPER	2m	MLCSP	400	23,600.00	90.43	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	5m	MLCSP	250	17,700.00	7.24	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	4m	MLCSP	250	17,700.00	232.38	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	250	17,700.00	243.45	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	3m	MLCSP	400	23,600.00	318.33	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	400	23,600.00	88.95	GOOD	YES	NONE	DCWD reserve fund
TALOMO	3m	MLCSP	700	44,200.00	150.90	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	700	44,200.00	84.93	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	500	33,200.00	18.39	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	500	33,200.00	121.64	GOOD	YES	NONE	DCWD reserve fund
TALOMO	3m	MLCSP	700	44,200.00	21.82	GOOD	YES	NONE	DCWD reserve fund
TALOMO	3m	MLCSP	750	48,500.00	18.45	GOOD	YES	NONE	DCWD reserve fund
39-D	3m	MLCSP	300	19,100.00	23.90	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	2m	PVC	150	11,200.00	95.18	GOOD	YES	NONE	DCWD reserve fund
BUCANA	3m	PVC	150	11,200.00	79.00	GOOD	YES	NONE	DCWD reserve fund
BUCANA	3m	PVC	150	11,200.00	12.02	GOOD	YES	NONE	DCWD reserve fund
BUCANA	3m	PVC	150	11,200.00	14.21	GOOD	YES	NONE	DCWD reserve fund
BUCANA	3m	PVC	150	11,200.00	95.76	GOOD	YES	NONE	DCWD reserve fund
BUCANA	2m	PVC	150	11,200.00	23.38	GOOD	YES	NONE	DCWD reserve fund
BUCANA	3m	PVC	150	11,200.00	13.86	GOOD	YES	NONE	DCWD reserve fund
7-A	4m	MLCSP	600	40,100.00	59.90	GOOD	YES	NONE	DCWD reserve fund
2-A	4m	MLCSP	350	20,800.00	214.03	GOOD	YES	NONE	DCWD reserve fund
BUCANA	5m	PVC	150	11,200.00	80.03	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	5m	PVC	150	11,200.00	1.01	GOOD	YES	NONE	DCWD reserve fund
BUCANA	5m	PVC	150	11,200.00	78.94	GOOD	YES	NONE	DCWD reserve fund
18-B	3m	PVC	150	11,200.00	175.92	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	MLCSP	400	23,600.00	9.02	GOOD	YES	NONE	DCWD reserve fund
15-B	2m	MLCSP	400	23,600.00	339.50	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	5m	PVC	150	11,200.00	59.92	GOOD	YES	NONE	DCWD reserve fund
MA-A	5m	MLCSP	750	48,500.00	143.95	GOOD	YES	NONE	DCWD reserve fund
MA-A	4m	MLCSP	750	48,500.00	28.11	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	ADAPTIVE CAPACITY AVAILABILITY OF GOVERNMENT RESOURCES
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION			
17-B	3m	MLCSP	300	19,100.00	13.23	GOOD	YES	NONE	DCWD reserve fund
16-B	3m	MLCSP	300	19,100.00	37.68	GOOD	YES	NONE	DCWD reserve fund
13-B	3m	MLCSP	300	19,100.00	2.10	GOOD	YES	NONE	DCWD reserve fund
13-B	3m	MLCSP	300	19,100.00	49.44	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	5m	PVC	150	11,200.00	75.75	GOOD	YES	NONE	DCWD reserve fund
11-B	4m	PVC	150	11,200.00	13.05	GOOD	YES	NONE	DCWD reserve fund
10-A	4m	PVC	150	11,200.00	142.32	GOOD	YES	NONE	DCWD reserve fund
11-B	4m	MLCSP	300	19,100.00	54.95	GOOD	YES	NONE	DCWD reserve fund
11-B	4m	MLCSP	300	19,100.00	64.27	GOOD	YES	NONE	DCWD reserve fund
11-B	3m	MLCSP	300	19,100.00	29.76	GOOD	YES	NONE	DCWD reserve fund
11-B	4m	MLCSP	300	19,100.00	21.72	GOOD	YES	NONE	DCWD reserve fund
7-A	5m	MLCSP	600	40,100.00	40.84	GOOD	YES	NONE	DCWD reserve fund
10-A	4m	PVC	150	11,200.00	47.41	GOOD	YES	NONE	DCWD reserve fund
10-A	4m	PVC	150	11,200.00	111.52	GOOD	YES	NONE	DCWD reserve fund
10-A	4m	PVC	150	11,200.00	2.36	GOOD	YES	NONE	DCWD reserve fund
9-A	5m	PVC	150	11,200.00	145.74	GOOD	YES	NONE	DCWD reserve fund
9-A	4m	PVC	150	11,200.00	11.94	GOOD	YES	NONE	DCWD reserve fund
10-A	5m	PVC	150	11,200.00	1.89	GOOD	YES	NONE	DCWD reserve fund
7-A	4m	MLCSP	600	40,100.00	150.53	GOOD	YES	NONE	DCWD reserve fund
7-A	4m	MLCSP	500	33,200.00	140.13	GOOD	YES	NONE	DCWD reserve fund
7-A	4m	MLCSP	600	40,100.00	7.69	GOOD	YES	NONE	DCWD reserve fund
6-A	4m	MLCSP	600	40,100.00	80.98	GOOD	YES	NONE	DCWD reserve fund
7-A	4m	MLCSP	500	33,200.00	3.49	GOOD	YES	NONE	DCWD reserve fund
4-A	4m	MLCSP	500	33,200.00	182.25	GOOD	YES	NONE	DCWD reserve fund
6-A	5m	MLCSP	350	20,800.00	1.70	GOOD	YES	NONE	DCWD reserve fund
5-A	5m	MLCSP	350	20,800.00	11.53	GOOD	YES	NONE	DCWD reserve fund
2-A	5m	MLCSP	350	20,800.00	47.49	GOOD	YES	NONE	DCWD reserve fund
2-A	4m	MLCSP	350	20,800.00	52.74	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	900	56,500.00	78.13	GOOD	YES	NONE	DCWD reserve fund
TALOMO	5m	MLCSP	800	52,800.00	150.02	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	800	52,800.00	130.78	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY	HAZARD RESISTANT DESIGN	ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION		INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
17-B	3m	MLCSP	300	19,100.00	13.23	GOOD	YES	NONE	DCWD reserve fund
16-B	3m	MLCSP	300	19,100.00	37.68	GOOD	YES	NONE	DCWD reserve fund
13-B	3m	MLCSP	300	19,100.00	2.10	GOOD	YES	NONE	DCWD reserve fund
13-B	3m	MLCSP	300	19,100.00	49.44	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	5m	PVC	150	11,200.00	75.75	GOOD	YES	NONE	DCWD reserve fund
11-B	4m	PVC	150	11,200.00	13.05	GOOD	YES	NONE	DCWD reserve fund
10-A	4m	PVC	150	11,200.00	142.32	GOOD	YES	NONE	DCWD reserve fund
11-B	4m	MLCSP	300	19,100.00	54.95	GOOD	YES	NONE	DCWD reserve fund
11-B	4m	MLCSP	300	19,100.00	64.27	GOOD	YES	NONE	DCWD reserve fund
11-B	3m	MLCSP	300	19,100.00	29.76	GOOD	YES	NONE	DCWD reserve fund
11-B	4m	MLCSP	300	19,100.00	21.72	GOOD	YES	NONE	DCWD reserve fund
7-A	5m	MLCSP	600	40,100.00	40.84	GOOD	YES	NONE	DCWD reserve fund
10-A	4m	PVC	150	11,200.00	47.41	GOOD	YES	NONE	DCWD reserve fund
10-A	4m	PVC	150	11,200.00	111.52	GOOD	YES	NONE	DCWD reserve fund
10-A	4m	PVC	150	11,200.00	2.36	GOOD	YES	NONE	DCWD reserve fund
9-A	5m	PVC	150	11,200.00	145.74	GOOD	YES	NONE	DCWD reserve fund
9-A	4m	PVC	150	11,200.00	11.94	GOOD	YES	NONE	DCWD reserve fund
10-A	5m	PVC	150	11,200.00	1.89	GOOD	YES	NONE	DCWD reserve fund
7-A	4m	MLCSP	600	40,100.00	150.53	GOOD	YES	NONE	DCWD reserve fund
7-A	4m	MLCSP	500	33,200.00	140.13	GOOD	YES	NONE	DCWD reserve fund
7-A	4m	MLCSP	600	40,100.00	7.69	GOOD	YES	NONE	DCWD reserve fund
6-A	4m	MLCSP	600	40,100.00	80.98	GOOD	YES	NONE	DCWD reserve fund
7-A	4m	MLCSP	500	33,200.00	3.49	GOOD	YES	NONE	DCWD reserve fund
4-A	4m	MLCSP	500	33,200.00	182.25	GOOD	YES	NONE	DCWD reserve fund
6-A	5m	MLCSP	350	20,800.00	1.70	GOOD	YES	NONE	DCWD reserve fund
5-A	5m	MLCSP	350	20,800.00	11.53	GOOD	YES	NONE	DCWD reserve fund
2-A	5m	MLCSP	350	20,800.00	47.49	GOOD	YES	NONE	DCWD reserve fund
2-A	4m	MLCSP	350	20,800.00	52.74	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	900	56,500.00	78.13	GOOD	YES	NONE	DCWD reserve fund
TALOMO	5m	MLCSP	800	52,800.00	150.02	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	800	52,800.00	130.78	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
TALOMO	3m	MLCSP	750	48,500.00	62.94	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	750	48,500.00	16.57	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	5m	MLCSP	300	19,100.00	26.00	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	3m	MLCSP	300	19,100.00	93.07	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	4m	MLCSP	300	19,100.00	57.35	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	3m	PVC	150	11,200.00	47.99	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	4m	PVC	150	11,200.00	14.63	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	2m	PVC	150	11,200.00	38.75	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	2m	PVC	150	11,200.00	87.81	GOOD	YES	NONE	DCWD reserve fund
2-A	3m	MLCSP	300	19,100.00	39.19	GOOD	YES	NONE	DCWD reserve fund
2-A	3m	MLCSP	350	20,800.00	134.66	GOOD	YES	NONE	DCWD reserve fund
2-A	4m	MLCSP	350	20,800.00	38.36	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	2m	PVC	150	11,200.00	28.56	GOOD	YES	NONE	DCWD reserve fund
28-C	2m	PVC	150	11,200.00	0.83	GOOD	YES	NONE	DCWD reserve fund
24-C	2m	PVC	150	11,200.00	84.43	GOOD	YES	NONE	DCWD reserve fund
30-C	2m	MLCSP	400	23,600.00	65.86	GOOD	YES	NONE	DCWD reserve fund
32-D	2m	MLCSP	300	19,100.00	47.65	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	2m	PVC	150	11,200.00	34.89	GOOD	YES	NONE	DCWD reserve fund
11-B	4m	PVC	150	11,200.00	12.97	GOOD	YES	NONE	DCWD reserve fund
10-A	4m	PVC	150	11,200.00	142.86	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	300	19,100.00	40.05	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	300	19,100.00	219.77	GOOD	YES	NONE	DCWD reserve fund
26-C	2m	PVC	150	11,200.00	3.71	GOOD	YES	NONE	DCWD reserve fund
27-C	2m	PVC	150	11,200.00	155.64	GOOD	YES	NONE	DCWD reserve fund
27-C	2m	PVC	150	11,200.00	150.89	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	2m	PVC	150	11,200.00	10.44	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	2m	PVC	150	11,200.00	56.38	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	2m	PVC	150	11,200.00	51.40	GOOD	YES	NONE	DCWD reserve fund
LEON GARCIA SR.	2m	PVC	150	11,200.00	9.75	GOOD	YES	NONE	DCWD reserve fund
32-D	2m	MLCSP	300	19,100.00	118.33	GOOD	YES	NONE	DCWD reserve fund
32-D	2m	MLCSP	300	19,100.00	86.96	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY	HAZARD RESISTANT DESIGN	ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION		INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
BAGO APLAYA	5m	MLCSP	600	40,100.00	69.46	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	600	40,100.00	230.12	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	600	40,100.00	196.64	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	2m	PVC	150	11,200.00	177.11	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	2m	PVC	150	11,200.00	169.10	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	PVC	150	11,200.00	6.83	GOOD	YES	NONE	DCWD reserve fund
TOMAS MONTEVERDE	2m	PVC	150	11,200.00	46.10	GOOD	YES	NONE	DCWD reserve fund
20-B	3m	PVC	150	11,200.00	52.02	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	3m	PVC	150	11,200.00	12.10	GOOD	YES	NONE	DCWD reserve fund
20-B	3m	PVC	150	11,200.00	41.11	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	3m	PVC	150	11,200.00	1.20	GOOD	YES	NONE	DCWD reserve fund
18-B	3m	PVC	150	11,200.00	48.43	GOOD	YES	NONE	DCWD reserve fund
20-B	3m	PVC	150	11,200.00	0.00	GOOD	YES	NONE	DCWD reserve fund
20-B	3m	PVC	150	11,200.00	0.00	GOOD	YES	NONE	DCWD reserve fund
20-B	3m	PVC	150	11,200.00	1.49	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	3m	PVC	150	11,200.00	5.98	GOOD	YES	NONE	DCWD reserve fund
18-B	3m	PVC	150	11,200.00	170.17	GOOD	YES	NONE	DCWD reserve fund
18-B	3m	PVC	150	11,200.00	278.99	GOOD	YES	NONE	DCWD reserve fund
19-B	3m	PVC	150	11,200.00	2.77	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	2m	MLCSP	300	19,100.00	37.07	GOOD	YES	NONE	DCWD reserve fund
2-A	3m	MLCSP	300	19,100.00	127.25	GOOD	YES	NONE	DCWD reserve fund
39-D	3m	MLCSP	300	19,100.00	5.37	GOOD	YES	NONE	DCWD reserve fund
DUMOY	5m	MLCSP	600	40,100.00	461.42	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	600	40,100.00	168.60	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	600	40,100.00	345.04	GOOD	YES	NONE	DCWD reserve fund
31-D	2m	MLCSP	300	19,100.00	9.14	GOOD	YES	NONE	DCWD reserve fund
37-D	2m	MLCSP	300	19,100.00	63.83	GOOD	YES	NONE	DCWD reserve fund
7-A	4m	MLCSP	600	40,100.00	78.89	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	600	40,100.00	347.68	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	600	40,100.00	424.60	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	250	17,700.00	85.41	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	ADAPTIVE CAPACITY
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION			AVAILABILITY OF GOVERNMENT RESOURCES
TALOMO	5m	MLCSP	300	19,100.00	1.65	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	300	19,100.00	152.94	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	500	33,200.00	65.78	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	3m	MLCSP	400	23,600.00	96.40	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	3m	MLCSP	400	23,600.00	29.30	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	400	23,600.00	17.98	GOOD	YES	NONE	DCWD reserve fund
6-A	4m	MLCSP	600	40,100.00	101.25	GOOD	YES	NONE	DCWD reserve fund
TALOMO	5m	MLCSP	900	56,500.00	99.08	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	900	56,500.00	20.76	GOOD	YES	NONE	DCWD reserve fund
TALOMO	5m	MLCSP	900	56,500.00	32.44	GOOD	YES	NONE	DCWD reserve fund
BUCANA	3m	PVC	150	11,200.00	58.36	GOOD	YES	NONE	DCWD reserve fund
BUCANA	4m	PVC	150	11,200.00	65.89	GOOD	YES	NONE	DCWD reserve fund
DUMOY	5m	MLCSP	500	33,200.00	347.62	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	2m	MLCSP	300	19,100.00	39.52	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	2m	MLCSP	300	19,100.00	42.46	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	5m	PVC	150	11,200.00	13.94	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	4m	PVC	150	11,200.00	17.73	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	5m	PVC	150	11,200.00	91.74	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	450	24,300.00	8.64	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	450	24,300.00	8.51	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	450	24,300.00	30.74	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	600	40,100.00	4.63	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	600	40,100.00	41.60	GOOD	YES	NONE	DCWD reserve fund
BUCANA	2m	PVC	150	11,200.00	15.67	GOOD	YES	NONE	DCWD reserve fund
BUCANA	3m	PVC	150	11,200.00	344.39	GOOD	YES	NONE	DCWD reserve fund
BUCANA	3m	PVC	150	11,200.00	5.70	GOOD	YES	NONE	DCWD reserve fund
BUCANA	4m	PVC	150	11,200.00	55.48	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	4m	PVC	150	11,200.00	13.10	GOOD	YES	NONE	DCWD reserve fund
BUCANA	4m	PVC	150	11,200.00	1.49	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	5m	PVC	150	11,200.00	123.52	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	4m	PVC	150	11,200.00	156.25	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
5-A	5m	PVC	150	11,200.00	56.71	GOOD	YES	NONE	DCWD reserve fund
19-B	5m	MLCSP	400	23,600.00	13.31	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	450	24,300.00	362.12	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	450	24,300.00	476.45	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	700	44,200.00	13.77	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	700	44,200.00	219.87	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	700	44,200.00	7.87	GOOD	YES	NONE	DCWD reserve fund
19-B	5m	MLCSP	400	23,600.00	235.19	GOOD	YES	NONE	DCWD reserve fund
BUCANA	5m	PVC	150	11,200.00	6.06	GOOD	YES	NONE	DCWD reserve fund
BUCANA	4m	PVC	150	11,200.00	57.01	GOOD	YES	NONE	DCWD reserve fund
7-A	5m	MLCSP	600	40,100.00	20.93	GOOD	YES	NONE	DCWD reserve fund
7-A	4m	MLCSP	600	40,100.00	53.93	GOOD	YES	NONE	DCWD reserve fund
31-D	2m	MLCSP	300	19,100.00	33.02	GOOD	YES	NONE	DCWD reserve fund
37-D	2m	MLCSP	300	19,100.00	104.48	GOOD	YES	NONE	DCWD reserve fund
31-D	2m	MLCSP	300	19,100.00	12.87	GOOD	YES	NONE	DCWD reserve fund
37-D	2m	MLCSP	300	19,100.00	97.71	GOOD	YES	NONE	DCWD reserve fund
38-D	2m	MLCSP	300	19,100.00	13.57	GOOD	YES	NONE	DCWD reserve fund
37-D	2m	MLCSP	300	19,100.00	227.02	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	MLCSP	300	19,100.00	239.57	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	MLCSP	400	23,600.00	53.67	GOOD	YES	NONE	DCWD reserve fund
GOV. VICENTE DUTERTE	2m	MLCSP	400	23,600.00	206.29	GOOD	YES	NONE	DCWD reserve fund
GOV. VICENTE DUTERTE	2m	MLCSP	400	23,600.00	116.45	GOOD	YES	NONE	DCWD reserve fund
GOV. VICENTE DUTERTE	2m	MLCSP	400	23,600.00	20.82	GOOD	YES	NONE	DCWD reserve fund
GOV. VICENTE DUTERTE	2m	MLCSP	400	23,600.00	66.75	GOOD	YES	NONE	DCWD reserve fund
GOV. VICENTE DUTERTE	2m	MLCSP	400	23,600.00	124.74	GOOD	YES	NONE	DCWD reserve fund
UBALDE	2m	MLCSP	400	23,600.00	173.79	GOOD	YES	NONE	DCWD reserve fund
UBALDE	2m	MLCSP	400	23,600.00	21.83	GOOD	YES	NONE	DCWD reserve fund
GOV. VICENTE DUTERTE	2m	MLCSP	400	23,600.00	368.65	GOOD	YES	NONE	DCWD reserve fund
SAN ANTONIO	2m	MLCSP	400	23,600.00	195.03	GOOD	YES	NONE	DCWD reserve fund
UBALDE	2m	MLCSP	400	23,600.00	9.54	GOOD	YES	NONE	DCWD reserve fund
LAPU - LAPU	2m	MLCSP	400	23,600.00	180.35	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY	HAZARD RESISTANT DESIGN	ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION		INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
LAPU - LAPU	2m	MLCSP	400	23,600.00	490.41	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	2m	MLCSP	300	19,100.00	22.87	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	3m	MLCSP	300	19,100.00	14.15	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	3m	MLCSP	300	19,100.00	39.11	GOOD	YES	NONE	DCWD reserve fund
32-D	3m	MLCSP	500	33,200.00	19.37	GOOD	YES	NONE	DCWD reserve fund
10-A	3m	MLCSP	500	33,200.00	173.65	GOOD	YES	NONE	DCWD reserve fund
4-A	3m	MLCSP	500	33,200.00	147.97	GOOD	YES	NONE	DCWD reserve fund
10-A	3m	PVC	150	11,200.00	93.24	GOOD	YES	NONE	DCWD reserve fund
10-A	4m	PVC	150	11,200.00	75.77	GOOD	YES	NONE	DCWD reserve fund
4-A	3m	PVC	150	11,200.00	2.89	GOOD	YES	NONE	DCWD reserve fund
4-A	3m	MLCSP	500	33,200.00	257.51	GOOD	YES	NONE	DCWD reserve fund
4-A	4m	MLCSP	500	33,200.00	6.13	GOOD	YES	NONE	DCWD reserve fund
4-A	3m	MLCSP	500	33,200.00	36.32	GOOD	YES	NONE	DCWD reserve fund
UBALDE	2m	MLCSP	400	23,600.00	56.80	GOOD	YES	NONE	DCWD reserve fund
LAPU - LAPU	2m	MLCSP	400	23,600.00	162.28	GOOD	YES	NONE	DCWD reserve fund
CENTRO	2m	MLCSP	400	23,600.00	93.72	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	4m	PVC	150	11,200.00	16.87	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	3m	PVC	150	11,200.00	32.12	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	4m	PVC	150	11,200.00	11.21	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	4m	PVC	150	11,200.00	21.56	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	5m	PVC	150	11,200.00	59.72	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	4m	PVC	150	11,200.00	83.29	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	5m	PVC	150	11,200.00	42.48	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	4m	PVC	150	11,200.00	0.40	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	3m	PVC	150	11,200.00	38.45	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	2m	PVC	150	11,200.00	1.58	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	3m	PVC	150	11,200.00	40.80	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	3m	PVC	150	11,200.00	41.65	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	4m	PVC	150	11,200.00	1.93	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	4m	PVC	150	11,200.00	52.77	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	PVC	150	11,200.00	72.06	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY	ADAPTIVE CAPACITY		
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
TALOMO	5m	MLCSP	250	17,700.00	65.60	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	250	17,700.00	44.64	GOOD	YES	NONE	DCWD reserve fund
SASA	5m	PVC	200	12,500.00	9.58	GOOD	YES	NONE	DCWD reserve fund
SASA	2m	PVC	200	12,500.00	87.85	GOOD	YES	NONE	DCWD reserve fund
SASA	3m	PVC	200	12,500.00	154.15	GOOD	YES	NONE	DCWD reserve fund
SASA	4m	PVC	200	12,500.00	208.51	GOOD	YES	NONE	DCWD reserve fund
SASA	2m	PVC	200	12,500.00	49.17	GOOD	YES	NONE	DCWD reserve fund
SASA	3m	PVC	200	12,500.00	164.74	GOOD	YES	NONE	DCWD reserve fund
SASA	4m	PVC	200	12,500.00	61.23	GOOD	YES	NONE	DCWD reserve fund
SASA	2m	PVC	200	12,500.00	601.31	GOOD	YES	NONE	DCWD reserve fund
SASA	3m	PVC	200	12,500.00	105.05	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	3m	MLCSP	250	17,700.00	130.50	GOOD	YES	NONE	DCWD reserve fund
A. ANGLIONGTO	2m	MLCSP	250	17,700.00	38.27	GOOD	YES	NONE	DCWD reserve fund
A. ANGLIONGTO	3m	MLCSP	250	17,700.00	7.29	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	3m	MLCSP	300	19,100.00	15.35	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	2m	MLCSP	300	19,100.00	118.53	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	2m	MLCSP	300	19,100.00	45.71	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	2m	MLCSP	250	17,700.00	2.88	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	2m	MLCSP	250	17,700.00	12.43	GOOD	YES	NONE	DCWD reserve fund
SASA	2m	MLCSP	250	17,700.00	75.16	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	2m	MLCSP	250	17,700.00	223.75	GOOD	YES	NONE	DCWD reserve fund
SASA	2m	PVC	200	12,500.00	96.35	GOOD	YES	NONE	DCWD reserve fund
SASA	5m	PVC	200	12,500.00	6.01	GOOD	YES	NONE	DCWD reserve fund
SASA	4m	PVC	200	12,500.00	3.12	GOOD	YES	NONE	DCWD reserve fund
SASA	5m	MLCSP	250	17,700.00	22.60	GOOD	YES	NONE	DCWD reserve fund
SASA	2m	MLCSP	250	17,700.00	154.43	GOOD	YES	NONE	DCWD reserve fund
SASA	3m	MLCSP	250	17,700.00	167.17	GOOD	YES	NONE	DCWD reserve fund
SASA	4m	MLCSP	250	17,700.00	84.53	GOOD	YES	NONE	DCWD reserve fund
SASA	2m	PVC	200	12,500.00	15.76	GOOD	YES	NONE	DCWD reserve fund
SASA	2m	PVC	200	12,500.00	178.68	GOOD	YES	NONE	DCWD reserve fund
SASA	2m	PVC	200	12,500.00	55.47	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
SASA	2m	PVC	200	12,500.00	15.42	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	2m	MLCSP	250	17,700.00	386.97	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	2m	MLCSP	250	17,700.00	23.61	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	2m	MLCSP	250	17,700.00	23.06	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	2m	MLCSP	300	19,100.00	336.36	GOOD	YES	NONE	DCWD reserve fund
SASA	5m	MLCSP	250	17,700.00	112.27	GOOD	YES	NONE	DCWD reserve fund
SASA	2m	MLCSP	250	17,700.00	152.72	GOOD	YES	NONE	DCWD reserve fund
SASA	3m	MLCSP	250	17,700.00	131.40	GOOD	YES	NONE	DCWD reserve fund
SASA	4m	MLCSP	250	17,700.00	110.93	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	2m	MLCSP	250	17,700.00	279.12	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	3m	MLCSP	250	17,700.00	384.89	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	2m	MLCSP	250	17,700.00	107.30	GOOD	YES	NONE	DCWD reserve fund
SASA	2m	PVC	200	12,500.00	149.99	GOOD	YES	NONE	DCWD reserve fund
SASA	2m	PVC	200	12,500.00	155.39	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	5m	MLCSP	350	20,800.00	201.34	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	5m	MLCSP	350	20,800.00	0.00	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	5m	MLCSP	350	20,800.00	0.00	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	4m	MLCSP	350	20,800.00	217.28	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	350	20,800.00	25.65	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	350	20,800.00	256.40	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	5m	MLCSP	350	20,800.00	120.55	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	350	20,800.00	105.58	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	350	20,800.00	449.95	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	350	20,800.00	97.58	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	350	20,800.00	346.50	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	250	17,700.00	14.99	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	5m	MLCSP	350	20,800.00	187.42	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	4m	MLCSP	350	20,800.00	217.59	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	350	20,800.00	38.70	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	350	20,800.00	243.39	GOOD	YES	NONE	DCWD reserve fund
11-B	4m	MLCSP	300	19,100.00	60.43	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
WILFREDO AQUINO	2m	MLCSP	300	19,100.00	190.87	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	2m	MLCSP	300	19,100.00	261.76	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	3m	MLCSP	300	19,100.00	314.57	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	2m	MLCSP	300	19,100.00	73.97	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	3m	MLCSP	300	19,100.00	10.52	GOOD	YES	NONE	DCWD reserve fund
16-B	3m	MLCSP	300	19,100.00	13.62	GOOD	YES	NONE	DCWD reserve fund
15-B	2m	MLCSP	300	19,100.00	323.39	GOOD	YES	NONE	DCWD reserve fund
15-B	3m	MLCSP	300	19,100.00	158.37	GOOD	YES	NONE	DCWD reserve fund
16-B	3m	MLCSP	300	19,100.00	50.22	GOOD	YES	NONE	DCWD reserve fund
16-B	3m	PVC	150	11,200.00	176.25	GOOD	YES	NONE	DCWD reserve fund
16-B	2m	PVC	150	11,200.00	59.10	GOOD	YES	NONE	DCWD reserve fund
16-B	3m	PVC	150	11,200.00	114.97	GOOD	YES	NONE	DCWD reserve fund
16-B	2m	PVC	150	11,200.00	4.43	GOOD	YES	NONE	DCWD reserve fund
16-B	3m	PVC	150	11,200.00	168.37	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	2m	PVC	150	11,200.00	25.58	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	2m	PVC	150	11,200.00	82.20	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	2m	PVC	150	11,200.00	215.35	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	3m	PVC	150	11,200.00	48.89	GOOD	YES	NONE	DCWD reserve fund
16-B	3m	PVC	150	11,200.00	0.97	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	2m	PVC	150	11,200.00	171.17	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	2m	MLCSP	300	19,100.00	3.66	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	MLCSP	300	19,100.00	111.52	GOOD	YES	NONE	DCWD reserve fund
A. ANGLIONGTO	2m	MLCSP	250	17,700.00	252.42	GOOD	YES	NONE	DCWD reserve fund
A. ANGLIONGTO	3m	MLCSP	250	17,700.00	176.14	GOOD	YES	NONE	DCWD reserve fund
A. ANGLIONGTO	4m	MLCSP	250	17,700.00	69.97	GOOD	YES	NONE	DCWD reserve fund
A. ANGLIONGTO	3m	MLCSP	400	23,600.00	16.33	GOOD	YES	NONE	DCWD reserve fund
A. ANGLIONGTO	3m	MLCSP	400	23,600.00	6.36	GOOD	YES	NONE	DCWD reserve fund
RAFAEL CASTILLO	2m	MLCSP	400	23,600.00	124.49	GOOD	YES	NONE	DCWD reserve fund
RAFAEL CASTILLO	3m	MLCSP	400	23,600.00	78.76	GOOD	YES	NONE	DCWD reserve fund
RAFAEL CASTILLO	2m	MLCSP	400	23,600.00	53.09	GOOD	YES	NONE	DCWD reserve fund
RAFAEL CASTILLO	3m	MLCSP	400	23,600.00	81.13	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	ADAPTIVE CAPACITY AVAILABILITY OF GOVERNMENT RESOURCES
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION			
WILFREDO AQUINO	5m	MLCSP	400	23,600.00	72.27	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	4m	MLCSP	400	23,600.00	12.06	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	5m	MLCSP	400	23,600.00	58.37	GOOD	YES	NONE	DCWD reserve fund
BUHANGIN	5m	MLCSP	400	23,600.00	1.98	GOOD	YES	NONE	DCWD reserve fund
BUHANGIN	5m	MLCSP	400	23,600.00	13.48	GOOD	YES	NONE	DCWD reserve fund
SAN ANTONIO	2m	MLCSP	400	23,600.00	207.81	GOOD	YES	NONE	DCWD reserve fund
SAN ANTONIO	3m	MLCSP	400	23,600.00	19.44	GOOD	YES	NONE	DCWD reserve fund
RAFAEL CASTILLO	2m	MLCSP	400	23,600.00	113.36	GOOD	YES	NONE	DCWD reserve fund
RAFAEL CASTILLO	3m	MLCSP	400	23,600.00	43.75	GOOD	YES	NONE	DCWD reserve fund
28-C	2m	PVC	150	11,200.00	41.08	GOOD	YES	NONE	DCWD reserve fund
30-C	2m	MLCSP	400	23,600.00	85.55	GOOD	YES	NONE	DCWD reserve fund
30-C	2m	PVC	150	11,200.00	159.98	GOOD	YES	NONE	DCWD reserve fund
14-B	2m	MLCSP	400	23,600.00	71.45	GOOD	YES	NONE	DCWD reserve fund
30-C	2m	MLCSP	400	23,600.00	7.64	GOOD	YES	NONE	DCWD reserve fund
14-B	2m	MLCSP	400	23,600.00	59.98	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	PVC	200	12,500.00	20.10	GOOD	YES	NONE	DCWD reserve fund
40-D	2m	MLCSP	250	17,700.00	283.77	GOOD	YES	NONE	DCWD reserve fund
2-A	3m	MLCSP	250	17,700.00	7.32	GOOD	YES	NONE	DCWD reserve fund
39-D	2m	MLCSP	250	17,700.00	45.97	GOOD	YES	NONE	DCWD reserve fund
39-D	3m	MLCSP	250	17,700.00	150.29	GOOD	YES	NONE	DCWD reserve fund
19-B	5m	MLCSP	300	19,100.00	55.61	GOOD	YES	NONE	DCWD reserve fund
19-B	3m	MLCSP	300	19,100.00	106.45	GOOD	YES	NONE	DCWD reserve fund
19-B	4m	MLCSP	300	19,100.00	92.88	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	2m	PVC	150	11,200.00	15.86	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	2m	PVC	150	11,200.00	5.45	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	MLCSP	400	23,600.00	421.48	GOOD	YES	NONE	DCWD reserve fund
MA-A	3m	MLCSP	750	48,500.00	67.96	GOOD	YES	NONE	DCWD reserve fund
MA-A	4m	MLCSP	750	48,500.00	95.39	GOOD	YES	NONE	DCWD reserve fund
MA-A	3m	MLCSP	750	48,500.00	16.15	GOOD	YES	NONE	DCWD reserve fund
5-A	5m	MLCSP	750	48,500.00	150.79	GOOD	YES	NONE	DCWD reserve fund
5-A	4m	MLCSP	750	48,500.00	45.83	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY	ADAPTIVE CAPACITY		
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
2-A	3m	MLCSP	750	48,500.00	13.62	GOOD	YES	NONE	DCWD reserve fund
2-A	4m	MLCSP	750	48,500.00	35.84	GOOD	YES	NONE	DCWD reserve fund
BUCANA	2m	MLCSP	750	48,500.00	43.90	GOOD	YES	NONE	DCWD reserve fund
BUCANA	3m	MLCSP	750	48,500.00	210.73	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	4m	MLCSP	350	20,800.00	23.71	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	350	20,800.00	148.52	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	350	20,800.00	397.00	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	4m	MLCSP	300	19,100.00	4.41	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	300	19,100.00	8.71	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	4m	MLCSP	400	23,600.00	7.72	GOOD	YES	NONE	DCWD reserve fund
2-A	3m	MLCSP	300	19,100.00	13.62	GOOD	YES	NONE	DCWD reserve fund
SASA	2m	MLCSP	250	17,700.00	317.51	GOOD	YES	NONE	DCWD reserve fund
31-D	2m	MLCSP	300	19,100.00	105.93	GOOD	YES	NONE	DCWD reserve fund
31-D	2m	PVC	150	11,200.00	16.42	GOOD	YES	NONE	DCWD reserve fund
35-D	2m	PVC	200	12,500.00	10.88	GOOD	YES	NONE	DCWD reserve fund
18-B	3m	PVC	150	11,200.00	347.83	GOOD	YES	NONE	DCWD reserve fund
39-D	2m	MLCSP	300	19,100.00	70.35	GOOD	YES	NONE	DCWD reserve fund
39-D	3m	MLCSP	300	19,100.00	65.28	GOOD	YES	NONE	DCWD reserve fund
38-D	2m	MLCSP	300	19,100.00	7.79	GOOD	YES	NONE	DCWD reserve fund
39-D	2m	MLCSP	300	19,100.00	18.93	GOOD	YES	NONE	DCWD reserve fund
26-C	2m	PVC	150	11,200.00	156.73	GOOD	YES	NONE	DCWD reserve fund
23-C	2m	PVC	150	11,200.00	4.57	GOOD	YES	NONE	DCWD reserve fund
26-C	2m	PVC	150	11,200.00	3.84	GOOD	YES	NONE	DCWD reserve fund
23-C	2m	PVC	150	11,200.00	3.90	GOOD	YES	NONE	DCWD reserve fund
32-D	2m	MLCSP	300	19,100.00	10.20	GOOD	YES	NONE	DCWD reserve fund
31-D	2m	MLCSP	300	19,100.00	8.38	GOOD	YES	NONE	DCWD reserve fund
31-D	2m	MLCSP	300	19,100.00	150.78	GOOD	YES	NONE	DCWD reserve fund
32-D	2m	MLCSP	300	19,100.00	85.03	GOOD	YES	NONE	DCWD reserve fund
24-C	2m	MLCSP	300	19,100.00	18.13	GOOD	YES	NONE	DCWD reserve fund
31-D	2m	MLCSP	300	19,100.00	3.56	GOOD	YES	NONE	DCWD reserve fund
27-C	2m	PVC	200	12,500.00	18.97	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY	HAZARD RESISTANT DESIGN	ADAPTIVE CAPACITY	
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION		INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
SASA	2m	MLCSP	250	17,700.00	178.33	GOOD	YES	NONE	DCWD reserve fund
12-B	4m	PVC	100	11,000.00	0.78	GOOD	YES	NONE	DCWD reserve fund
TALOMO	3m	MLCSP	450	24,300.00	5.47	GOOD	YES	NONE	DCWD reserve fund
TALOMO	3m	MLCSP	450	24,300.00	23.69	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	450	24,300.00	65.20	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	450	24,300.00	2.35	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	5m	MLCSP	350	20,800.00	162.66	GOOD	YES	NONE	DCWD reserve fund
MATINA CROSSING	4m	MLCSP	350	20,800.00	239.21	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	5m	MLCSP	350	20,800.00	98.18	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	5m	MLCSP	300	19,100.00	56.03	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	2m	MLCSP	300	19,100.00	258.46	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	3m	MLCSP	300	19,100.00	180.87	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	4m	MLCSP	300	19,100.00	169.90	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	350	20,800.00	7.81	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	3m	MLCSP	250	17,700.00	7.69	GOOD	YES	NONE	DCWD reserve fund
DUMOY	5m	MLCSP	250	17,700.00	15.00	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	250	17,700.00	5.64	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	2m	MLCSP	250	17,700.00	26.25	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	3m	MLCSP	250	17,700.00	1.77	GOOD	YES	NONE	DCWD reserve fund
BAGO GALLERA	5m	MLCSP	250	17,700.00	6.99	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	2m	MLCSP	300	19,100.00	3.45	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	2m	MLCSP	250	17,700.00	2.68	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	2m	MLCSP	250	17,700.00	8.89	GOOD	YES	NONE	DCWD reserve fund
PANACAN	2m	MLCSP	250	17,700.00	43.61	GOOD	YES	NONE	DCWD reserve fund
PANACAN	2m	MLCSP	250	17,700.00	182.18	GOOD	YES	NONE	DCWD reserve fund
PANACAN	5m	MLCSP	250	17,700.00	27.61	GOOD	YES	NONE	DCWD reserve fund
PANACAN	2m	MLCSP	250	17,700.00	20.56	GOOD	YES	NONE	DCWD reserve fund
PANACAN	3m	MLCSP	250	17,700.00	337.97	GOOD	YES	NONE	DCWD reserve fund
PANACAN	4m	MLCSP	250	17,700.00	27.17	GOOD	YES	NONE	DCWD reserve fund
PANACAN	2m	MLCSP	250	17,700.00	149.50	GOOD	YES	NONE	DCWD reserve fund
PANACAN	3m	MLCSP	250	17,700.00	355.99	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	ADAPTIVE CAPACITY
	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION			AVAILABILITY OF GOVERNMENT RESOURCES
TIBUNGCO	5m	MLCSP	400	23,600.00	21.98	GOOD	YES	NONE	DCWD reserve fund
TIBUNGCO	3m	MLCSP	400	23,600.00	50.15	GOOD	YES	NONE	DCWD reserve fund
TIBUNGCO	4m	MLCSP	400	23,600.00	99.02	GOOD	YES	NONE	DCWD reserve fund
PANACAN	5m	MLCSP	250	17,700.00	137.02	GOOD	YES	NONE	DCWD reserve fund
PANACAN	3m	MLCSP	250	17,700.00	98.20	GOOD	YES	NONE	DCWD reserve fund
PANACAN	4m	MLCSP	250	17,700.00	482.76	GOOD	YES	NONE	DCWD reserve fund
SASA	2m	MLCSP	300	19,100.00	79.92	GOOD	YES	NONE	DCWD reserve fund
6-A	5m	MLCSP	600	40,100.00	76.07	GOOD	YES	NONE	DCWD reserve fund
6-A	4m	MLCSP	600	40,100.00	14.10	GOOD	YES	NONE	DCWD reserve fund
5-A	5m	MLCSP	600	40,100.00	9.16	GOOD	YES	NONE	DCWD reserve fund
6-A	4m	MLCSP	600	40,100.00	9.89	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	2m	MLCSP	300	19,100.00	18.37	GOOD	YES	NONE	DCWD reserve fund
SASA	2m	MLCSP	300	19,100.00	169.79	GOOD	YES	NONE	DCWD reserve fund
PAMPANGA	2m	MLCSP	300	19,100.00	276.83	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	450	24,300.00	40.05	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	450	24,300.00	150.52	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	5m	MLCSP	450	24,300.00	12.26	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	450	24,300.00	49.90	GOOD	YES	NONE	DCWD reserve fund
PANACAN	2m	MLCSP	250	17,700.00	180.38	GOOD	YES	NONE	DCWD reserve fund
PANACAN	2m	MLCSP	250	17,700.00	0.71	GOOD	YES	NONE	DCWD reserve fund
11-B	4m	MLCSP	300	19,100.00	11.72	GOOD	YES	NONE	DCWD reserve fund
19-B	5m	MLCSP	300	19,100.00	100.29	GOOD	YES	NONE	DCWD reserve fund
19-B	4m	MLCSP	300	19,100.00	7.90	GOOD	YES	NONE	DCWD reserve fund
19-B	5m	MLCSP	300	19,100.00	45.56	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	2m	PVC	150	11,200.00	18.07	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	2m	PVC	150	11,200.00	24.03	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	2m	MLCSP	400	23,600.00	3.98	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	3m	MLCSP	400	23,600.00	106.19	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	400	23,600.00	105.04	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	3m	MLCSP	400	23,600.00	308.85	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	400	23,600.00	149.64	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
BAGO APLAYA	2m	MLCSP	250	17,700.00	16.85	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	3m	MLCSP	250	17,700.00	22.45	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	3m	MLCSP	600	40,100.00	133.67	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	600	40,100.00	89.84	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	3m	MLCSP	600	40,100.00	309.24	GOOD	YES	NONE	DCWD reserve fund
BAGO APLAYA	4m	MLCSP	600	40,100.00	154.19	GOOD	YES	NONE	DCWD reserve fund
BUCANA	3m	MLCSP	250	17,700.00	35.28	GOOD	YES	NONE	DCWD reserve fund
BUCANA	4m	MLCSP	250	17,700.00	149.35	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	2m	MLCSP	250	17,700.00	922.60	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	2m	MLCSP	250	17,700.00	1,041.85	GOOD	YES	NONE	DCWD reserve fund
20-B	3m	PVC	150	11,200.00	60.44	GOOD	YES	NONE	DCWD reserve fund
20-B	4m	PVC	150	11,200.00	21.70	GOOD	YES	NONE	DCWD reserve fund
20-B	4m	PVC	150	11,200.00	41.02	GOOD	YES	NONE	DCWD reserve fund
10-A	5m	PVC	150	11,200.00	3.91	GOOD	YES	NONE	DCWD reserve fund
10-A	5m	PVC	150	11,200.00	40.94	GOOD	YES	NONE	DCWD reserve fund
10-A	4m	PVC	150	11,200.00	17.38	GOOD	YES	NONE	DCWD reserve fund
PANACAN	2m	MLCSP	400	23,600.00	128.05	GOOD	YES	NONE	DCWD reserve fund
PANACAN	3m	MLCSP	400	23,600.00	394.81	GOOD	YES	NONE	DCWD reserve fund
PANACAN	4m	MLCSP	400	23,600.00	127.58	GOOD	YES	NONE	DCWD reserve fund
ILANG	5m	MLCSP	400	23,600.00	175.96	GOOD	YES	NONE	DCWD reserve fund
ILANG	5m	MLCSP	400	23,600.00	0.00	GOOD	YES	NONE	DCWD reserve fund
ILANG	4m	MLCSP	400	23,600.00	0.00	GOOD	YES	NONE	DCWD reserve fund
ILANG	2m	MLCSP	400	23,600.00	110.08	GOOD	YES	NONE	DCWD reserve fund
ILANG	3m	MLCSP	400	23,600.00	1,130.94	GOOD	YES	NONE	DCWD reserve fund
ILANG	4m	MLCSP	400	23,600.00	268.62	GOOD	YES	NONE	DCWD reserve fund
TIBUNGCO	5m	MLCSP	400	23,600.00	109.09	GOOD	YES	NONE	DCWD reserve fund
TIBUNGCO	3m	MLCSP	400	23,600.00	101.99	GOOD	YES	NONE	DCWD reserve fund
TIBUNGCO	4m	MLCSP	400	23,600.00	200.18	GOOD	YES	NONE	DCWD reserve fund
ILANG	5m	MLCSP	400	23,600.00	4.44	GOOD	YES	NONE	DCWD reserve fund
ILANG	2m	MLCSP	400	23,600.00	25.45	GOOD	YES	NONE	DCWD reserve fund
ILANG	3m	MLCSP	400	23,600.00	710.32	GOOD	YES	NONE	DCWD reserve fund
ILANG	4m	MLCSP	400	23,600.00	316.97	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
WILFREDO AQUINO	2m	MLCSP	300	19,100.00	54.26	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	2m	MLCSP	300	19,100.00	59.75	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	450	24,300.00	6.06	GOOD	YES	NONE	DCWD reserve fund
TALOMO	5m	MLCSP	750	48,500.00	17.28	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	750	48,500.00	411.28	GOOD	YES	NONE	DCWD reserve fund
TALOMO	3m	MLCSP	750	48,500.00	45.20	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	750	48,500.00	69.41	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	350	20,800.00	39.38	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	350	20,800.00	569.71	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	250	17,700.00	16.21	GOOD	YES	NONE	DCWD reserve fund
TALOMO	3m	MLCSP	350	20,800.00	5.75	GOOD	YES	NONE	DCWD reserve fund
TALOMO	3m	MLCSP	350	20,800.00	347.65	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	350	20,800.00	89.70	GOOD	YES	NONE	DCWD reserve fund
TALOMO	3m	MLCSP	250	17,700.00	161.17	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	250	17,700.00	166.83	GOOD	YES	NONE	DCWD reserve fund
TALOMO	3m	MLCSP	250	17,700.00	0.61	GOOD	YES	NONE	DCWD reserve fund
TALOMO	5m	MLCSP	700	44,200.00	275.23	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	700	44,200.00	78.15	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	700	44,200.00	316.94	GOOD	YES	NONE	DCWD reserve fund
TALOMO	5m	MLCSP	350	20,800.00	217.93	GOOD	YES	NONE	DCWD reserve fund
TALOMO	4m	MLCSP	350	20,800.00	8.74	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	4m	MLCSP	400	23,600.00	12.17	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	2m	PVC	150	11,200.00	71.18	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	2m	PVC	150	11,200.00	2.02	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	MLCSP	400	23,600.00	24.87	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	MLCSP	400	23,600.00	5.86	GOOD	YES	NONE	DCWD reserve fund
SAN ANTONIO	2m	MLCSP	400	23,600.00	3.88	GOOD	YES	NONE	DCWD reserve fund
A. ANGLIONGTO	2m	MLCSP	300	19,100.00	348.51	GOOD	YES	NONE	DCWD reserve fund
LAPU - LAPU	2m	MLCSP	300	19,100.00	5.08	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	2m	MLCSP	300	19,100.00	37.03	GOOD	YES	NONE	DCWD reserve fund
V. HIZON	3m	MLCSP	300	19,100.00	125.42	GOOD	YES	NONE	DCWD reserve fund
A. ANGLIONGTO	2m	MLCSP	300	19,100.00	23.08	GOOD	YES	NONE	DCWD reserve fund

Table LU-30. Lifeline Utilities, Level III Water System, Exposure Database Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MATINA APLAYA	2m	MLCSP	250	17,700.00	27.27	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	3m	MLCSP	250	17,700.00	244.85	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	4m	MLCSP	250	17,700.00	69.11	GOOD	YES	NONE	DCWD reserve fund
MATINA APLAYA	3m	MLCSP	250	17,700.00	266.89	GOOD	YES	NONE	DCWD reserve fund
BUCANA	2m	MLCSP	250	17,700.00	240.33	GOOD	YES	NONE	DCWD reserve fund
BUCANA	3m	MLCSP	250	17,700.00	193.89	GOOD	YES	NONE	DCWD reserve fund
TIBUNGCO	3m	MLCSP	400	23,600.00	10.06	GOOD	YES	NONE	DCWD reserve fund
TIBUNGCO	5m	MLCSP	350	20,800.00	21.54	GOOD	YES	NONE	DCWD reserve fund
TIBUNGCO	3m	MLCSP	350	20,800.00	5.56	GOOD	YES	NONE	DCWD reserve fund
TIBUNGCO	4m	MLCSP	350	20,800.00	22.60	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	PVC	150	11,200.00	55.96	GOOD	YES	NONE	DCWD reserve fund
PACIANO BANGOY	2m	PVC	150	11,200.00	8.48	GOOD	YES	NONE	DCWD reserve fund
AGDAO PROPER	2m	PVC	150	11,200.00	37.93	GOOD	YES	NONE	DCWD reserve fund
15-B	2m	PVC	150	11,200.00	19.13	GOOD	YES	NONE	DCWD reserve fund
SAN ANTONIO	4m	MLCSP	400	23,600.00	78.61	GOOD	YES	NONE	DCWD reserve fund
WILFREDO AQUINO	4m	MLCSP	400	23,600.00	122.72	GOOD	YES	NONE	DCWD reserve fund
SAN ANTONIO	2m	MLCSP	400	23,600.00	79.36	GOOD	YES	NONE	DCWD reserve fund
SAN ANTONIO	3m	MLCSP	400	23,600.00	166.74	GOOD	YES	NONE	DCWD reserve fund
SAN ANTONIO	4m	MLCSP	400	23,600.00	121.28	GOOD	YES	NONE	DCWD reserve fund

Exposure Database for Level III DCWD Production Wells

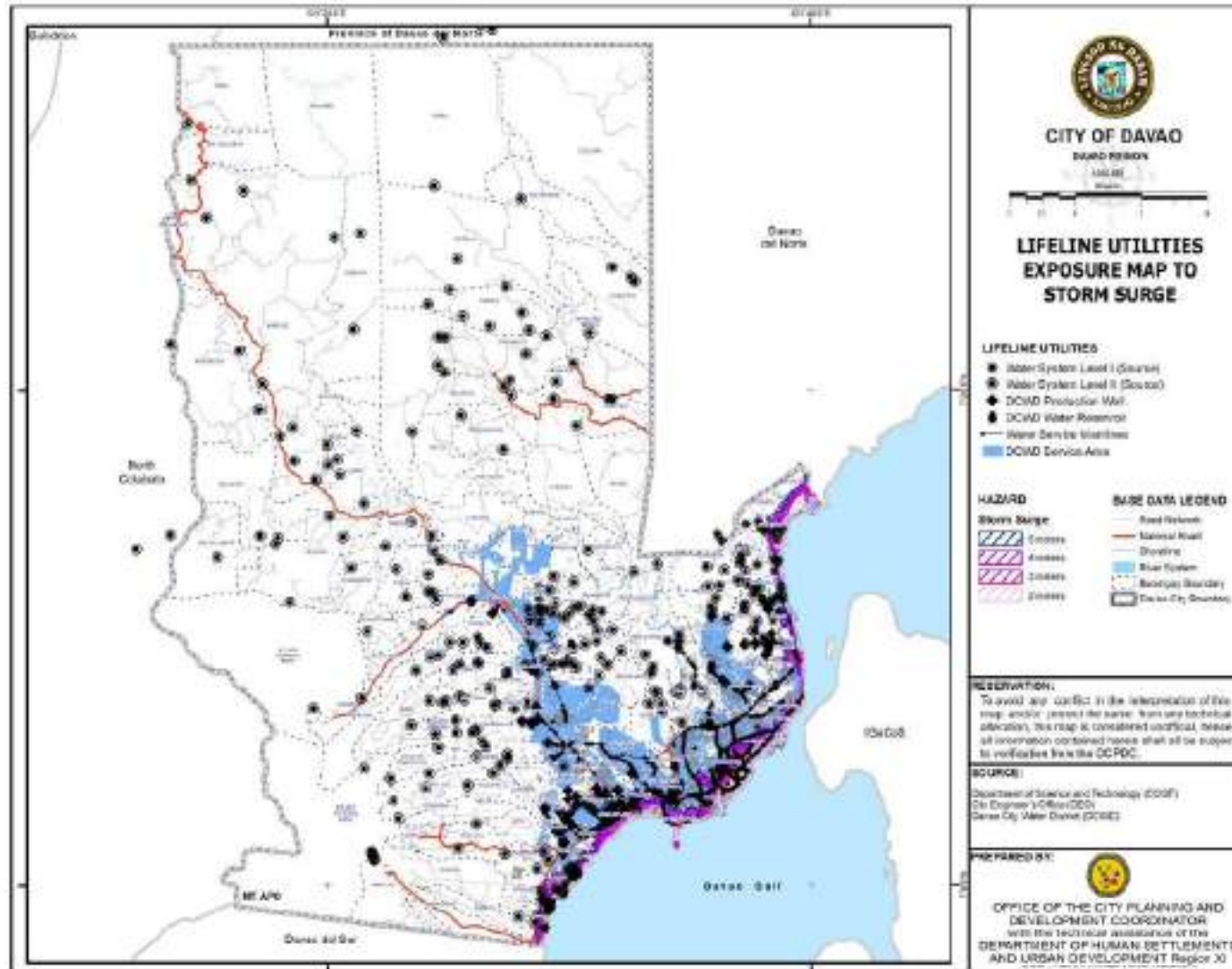
A total of 13 production wells are found in Barangay Talomo, Bago-Aplaya, Dumoy, and Bago-Gallera are exposed to storm surge with 2-meter, 3-meter, 4-meter and 5-meter wave.

A total of 13 production wells are found in Barangay Talomo, Bago-Aplaya, Dumoy, and Bago-Gallera are exposed to storm surge with 2-meter, 3-meter, 4-meter and 5-meter wave.

Table LU-31. Lifeline Utilities, DCWD Production Wells, Exposure Database for Storm Surge, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
LOCATION	SUSCEPTIBILITY	PUMP TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Km. 7, Talomo Sump Bangkal, Brgy. Talomo	5m	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
UUHSA, Brgy. Talomo	4m	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Km. 8 Ulas, Brgy. Talomo	5m	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Puan Junction, Brgy. Talomo	4m	SUBMERSIBLE	6,500,000.00	GOOD	YES	NO	DCWD fund
Lower Rapnaga, Puan, Brgy. Bago Aplaya	4m	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Lower Rapnaga, Puan, Brgy. Bago Aplaya	3m	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Crossing Bago Aplaya, Brgy. Bago Aplaya	4m	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Km. 10 Bago Aplaya fronting Ideal Subdivision, Brgy. Bago Aplaya	5m	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	2m	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Km. 11 Dumoy near the entrance to Dusnai, Brgy. Dumoy	5m	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Bago Gallera Road near Gallera De Oro Subd., Brgy. Bago Gallera	5m	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Catotal Subdivision near Block 22, Brgy. Bago Aplaya	4m	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund
Gallera de Oro Subdivision near Block 8, Brgy. Bago Aplaya	5m	VERTICAL TURBINE	6,500,000.00	GOOD	YES	NO	DCWD fund

Map 5.13. Lifeline Utilities Exposure Map to Storm Surge, Davao City



Exposure Database of Cell Sites

A total of 124 cell sites are susceptible to storm surge with 2-meter, 3-meter, and 4-meter and 5-meter wave. A total of 40 cell sites are highly susceptible with 2-meter wave, while only 15 cell sites are susceptible to 5-meter wave.

Table LU-31. Lifeline Utilities, Cell Sites, Exposure Database for Storm Surge with 2-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
DIGITEL MOBILE PHILIPPINES, INC.	Lorenzo Manuel St., San Vicente Daliao, Toril, Davao City,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	JMS Bldg., #88 Maya Street, Barangay 76A, Ecoland,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Magno Prop., No. 64 V. Mapa St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	No. 64 V. Mapa St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro corner Quimpo Blvd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Bonifacio St., cor M.L. Quezon Blvd	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	109 Piapi, Quezon Blvd,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Santiago's Lot, Brgy. Sasa Buhangin,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-31. Lifeline Utilities, Cell Sites, Exposure Database for Storm Surge with 2-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Erlinda Reyes Bldg., 19-Piapi Quezon Blvd.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	D. Ponce St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Chippens Bldg., 368 Padre Gomez St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Chippens Bldg., 368 Padre Gomez St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Gov. Sales St., Brgy. 27	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Jose Co Bldg., Gov. Sales St., Brgy. 27,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	NCC Mall Uyanguren	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	NCC Mall Unaguren	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PBCOM Bldg., Monteverde cor. Bangoy St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Post fronting Chimes Store, Sales St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Lapu Lapu corner Bangoy Sts., Agdao,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Lapu-lapu St., cor. Bangoy Agdao,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Banco Filipino Bldg., Lapu-lapu St., cor. Dacudao Ave.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Wescon Suites Cmpd., R. Castillo, Agdao	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES,	Llanes Prop 1, Cabaguio Ave., Agdao,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-31. Lifeline Utilities, Cell Sites, Exposure Database for Storm Surge with 2-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Cabaguio Ave., Agdao	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	R. Castillo St., Otero Compound, Lapu-Lapu	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Leonor Property, Camia St., Ubalde Subd., Brgy. Ubalde,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Camia St., Ubalde Subd., Brgy. Ubalde	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Waterfront Hotel, Lanang,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Doña Asuncion Road, Brgy. Pampanga, Lanang,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Km. 9, KMA, Brgy. Sasa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Sitio Nahul, Barangay Baliok,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Sitio Nahul, Brgy. Baliok	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	National Highway Panacan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-31. Lifeline Utilities, Cell Sites, Exposure Database for Storm Surge with 3-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
GLOBE TELECOM, INC.	Brgy. Daliao, Toril,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Brgy. Daliao, Toril	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Sandawa, McArthur Hi-Way, Matina,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Sandawa, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Magallanes St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	#88 Maya St., Brgy. 76A, Ecoland,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro cor. Quimpo Blvd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Ponciano Reyes St. (crooked Rd.)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Magno Bldg., Ponciano Reyes St. (crooked rd.),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Baguio (Pob.),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Km.12, National Highway, Barangay Catalunan Pequeno,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Ponciano, PLDT Bldg., Ponciano St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Regency Inn, Villa Abrille St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Holy Cross College, Sta. Ana Ave. Cor Guerero	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-31. Lifeline Utilities, Cell Sites, Exposure Database for Storm Surge with 3-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
GLOBE TELECOM, INC.	San Pedro Hospital Guzman St., Brgy. Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Brgy. Gov. Vicente Duterte,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Corner Palma Gil & Cervantes St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	University of Southern Philippines, Trade School Drive	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Opal St., Obrero,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Opal St., Obrero	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	SM Lanang, Km. 6 Lanang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	SM Lanang, Km 6, Lanang,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-31. Lifeline Utilities, Cell Sites, Exposure Database for Storm Surge with 3-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	SM Davao Ecoland	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	SM Davao Ecoland,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU 31. Lifeline Utilities, Cell Sites, Exposure Database for Storm Surge with 4-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Barangay Bago Aplaya, Talomo District, Davao City Golf Country Club	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Crossing Puan, McArthur Highway	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Bago Aplaya, Talomo	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Ortis Road, Brgy. Ulas	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Ortis road, Brgy. Uas,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-31. Lifeline Utilities, Cell Sites, Exposure Database for Storm Surge with 4-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
DIGITEL MOBILE PHILIPPINES, INC.	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	5/F Gaisano Ilustre St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Ilustre St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	J.S. Gaisano Mall, Ilustre St., cor. Gen. Luna St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	General Malvar St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Legaspi St. Cor. Bonifacio St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	J.P Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Infront of Luisa Avenue Square Bldg., B. Jacinto Ext. St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Landco Bldg., JP Laurel St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Billboard on Synchar Hotel, J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	J.P. Laurel Avenue, Bajada,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-31. Lifeline Utilities, Cell Sites, Exposure Database for Storm Surge with 4-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
GLOBE TELECOM, INC.	SM Lanang Former Lanang Golf and Country Club, J.P. Laurel Ave., Lanang District, Brgy. San Antonio	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	J.P. Laurel Ave., Monark Compound, Brgy. Rafael Castillo	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Malagamot Road, Panacan,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway, Panacan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Mercado Property, Purok 3 (Near Market Site),Brgy. Bunawan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Purok 3, (near Market site), Brgy. Bunawan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Lasang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU 31. Utilities Exposure. Cell Sites, Exposure Database for Storm Surge with 5-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Along National Highway, Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Commandante Property, Along National Highway, Brgy. Bago Aplaya, Talomo District,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Doña Luisa Subdivision, Phase 2, Brgy. Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	University Ave., Juna Subd., Martina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Abarquez Prop., University Ave., Juna Subd., Martina,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St., Barangay 20-B (Pob.)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St. Acacia,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	JP Laurel St., Barangay 20-B (Pob.),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Malagamot Road, Bayani Diaz Compound, Panacan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Tefasco Lot, Panacan,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Panacan,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Faultline

Exposure Database of Roads for Active Fault

A total of five (5) road networks, namely Calinan-Baguio-Cadalian Road, Davao Bukidnon Road, Fatima-Malabog Road, Inawayan-Baracatan Road and McArthur highway are exposed to active fault. For Calinan-Baguio-Cadalian Road, 0.0106 kilometers is exposed to Lacson Fault, and another 0.0108 kilometers is exposed to Tamugan Fault. Meanwhile, Davao-Bukidnon-Road is the road length which is exposed to three fault lines, 0.0482 kilometers of the same road length is exposed to Dacudao Fault, another 0.0179 kilometers is exposed to Lacson Fault, and 0.0100 kilometers is exposed to Tamugan Fault. On the other hand, Inawayan-Baracatan Road exposed to Lacson Fault with 0.0100 kilometers exposed length. Fatima-Malabog Road is also exposed to Pangyan-Biao Escuela Fault with a total 0.0427 kilometers exposed length. Additionally, a .0100 kilometers McArthur Highway is also exposed to Lacson Fault.

Table LU-32. Lifeline Utilities, Roads, Exposure Database for Exposure Database for Faultline, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Calinan-Baguio-Cadalian Road	Lacson Fault	0.0106	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Calinan-Baguio-Cadalian Road	Tamugan Fault	0.0108	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	Dacudao Fault	0.0100	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	Tamugan Fault	0.0100	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	Dacudao Fault	0.0117	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	Lacson Fault	0.0179	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Davao-Bukidnon Road	Dacudao Fault	0.0264	40,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Table LU-32. Lifeline Utilities, Roads, Exposure Database for Exposure Database for Faultline, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Fatima-Malabog Road	Pangyan-Biao Escuela Fault	0.0319	54,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Fatima-Malabog Road	Pangyan-Biao Escuela Fault	0.0108	54,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Inawayan-Baracatan Road	Lacson Fault	0.0100	35,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	Lacson Fault	0.0611	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	Lacson Fault	0.1842	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	Lacson Fault	0.0101	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund
Mc. Arthur Highway	Lacson Fault	0.1541	56,000,000	concrete	good	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund

Exposure Database of Bridges for Faultline

Lipadas Bridge 1 and Lipadas Bridge 2 are exposed to Tamugan Fault, with an exposed length of 37.80 meters and 40 meters, respectively.

Table LU-32. Lifeline Utilities, Bridges, Exposure Database for Exposure Database for Faultline, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Lipadas Br. 1	Tamugan Fault	37.80	1,200,000.00	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.

Table LU-32. Lifeline Utilities, Bridges, Exposure Database for Exposure Database for Faultline, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Lipadas Br. II	Tamugan Fault	40.00	1,200,000.00	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.

Exposure Database of Level II Water Supply for Active Fault

Only a 3HP well in Manambulan is exposed to Tamugan Fault. The well has a total replacement cost of ₱60,500.

Table LU-33. Lifeline Utilities, Level II Water System, Exposure Database Table for Faultline, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY		FAULT
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	
MANAMBULAN	Tamugan Fault	3 HP	60,500	FAIR	Yes: casing of the well	None, but there is one (1) month warranty if the waterpump is installed by the supplier	Yes. Subject to proposal	Tamugan Fault

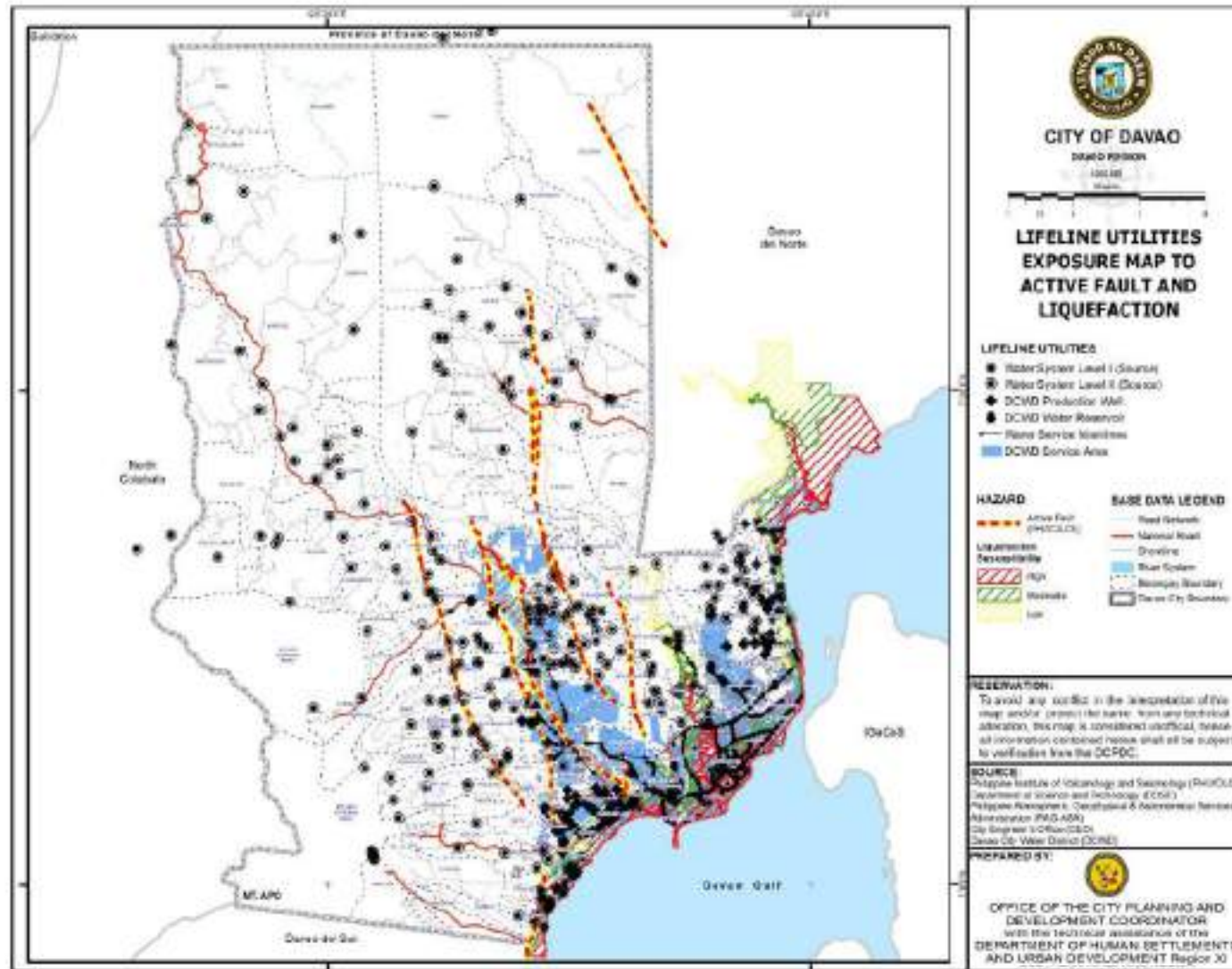
Exposure Database of Level III Water Supply for Active Fault

A total of seven (7) barangays with mainlines are exposed to Lacson and Dacudao Fault. If analyzed per fault, mainlines in Catalunan Grande, Los Amigos, Mintal and Talomo are exposed to Dacudao Fault with an exposed length of 10.37 meters, 35.73 meters, 11.19 meters, and 10.02 meters respectively. Calinan, Tugbok, and Wangan, on the other hand, are exposed to Lacson Fault, with exposed lengths of 10.63 meters, 10.04 meters, and 9.04 meters, respectively.

Table LU-34. Lifeline Utilities, Level III Water System, Exposure Database Table for Faultline, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY		FAULT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	
WANGAN	PVC	200	12,500.00	0.12	GOOD	YES	NONE	DCWD reserve fund	Lacson Fault
CALINAN	PVC	200	12,500.00	0.09	GOOD	YES	NONE	DCWD reserve fund	Lacson Fault
TUGBOK	MLCSP	500	33,200.00	10.04	GOOD	YES	NONE	DCWD reserve fund	Lacson Fault
MINTAL	MLCSP	350	20,800.00	11.19	GOOD	YES	NONE	DCWD reserve fund	Dacudao Fault
CATALUNAN GRANDE	MLCSP	350	20,800.00	10.37	GOOD	YES	NONE	DCWD reserve fund	Dacudao Fault
TALOMO	MLCSP	350	20,800.00	10.02	GOOD	YES	NONE	DCWD reserve fund	Dacudao Fault
LOS AMIGOS	MLCSP	250	17,700.00	35.73	GOOD	YES	NONE	DCWD reserve fund	Dacudao Fault
WANGAN	PVC	200	12,500.00	4.52	GOOD	YES	NONE	DCWD reserve fund	Lacson Fault
WANGAN	PVC	200	12,500.00	4.52	GOOD	YES	NONE	DCWD reserve fund	Lacson Fault
CALINAN	PVC	200	12,500.00	5.27	GOOD	YES	NONE	DCWD reserve fund	Lacson Fault
CALINAN	PVC	200	12,500.00	5.27	GOOD	YES	NONE	DCWD reserve fund	Lacson Fault

Map 5.14 Lifeline Utilities, Exposure Map to Active Fault and Liquefaction, Davao City



Exposure Estimation for Flood

The replacement cost per road ranges from ₱25,000,000 to ₱86,000,000. The highest value of exposed lifeline falls along the 51-kilometer stretch of Davao-Bukidnon Road with a value of ₱2,251,600,000. It is followed by Davao Agusan Highway at ₱1, 014,216,000 with a length of 18.111 kilometers with a replacement cost per linear kilometer of ₱56,000,000. The third with the highest value was the Fatima-Malabog Road with the total value of P ₱971,238,600.

Table LU– 35. Lifeline Utilities, Roads, Exposure Estimation Table for Flood, Davao City

ROAD NAME	EXPOSURE			SENSITIVITY		
	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
2nd Avenue	0.0055	60,000,000	327,355	concrete	good	Yes
2nd Avenue	0.1996	60,000,000	11,974,200	concrete	good	Yes
5th Ave.	0.2043	60,000,000	12,260,640	concrete	good	Yes
Agdao Flyover	0.4734	56,000,000	26,508,216	concrete	good	Yes
Bonifacio Rotonda	0.0839	56,000,000	4,697,403	concrete	good	Yes
Buhangin Road	0.1394	56,000,000	7,806,904	concrete	good	Yes
Calinan-Baguio-Cadalian Road	2.4488	35,000,000	85,708,700	concrete	good	Yes
Calinan-Baguio-Cadalian Road	0.4303	35,000,000	15,059,240	concrete	good	Yes
Calinan-Baguio-Cadalian Road	0.3427	35,000,000	11,995,655	concrete	good	Yes
Calinan-Baguio-Cadalian Road	1.7356	35,000,000	60,744,950	concrete	good	Yes
Carlos P. Garcia Highway	0.1052	60,000,000	6,310,020	concrete	good	Yes
Carlos P. Garcia Highway	0.0399	60,000,000	2,394,378	concrete	good	Yes
Carlos P. Garcia Highway	0.0817	60,000,000	4,899,636	concrete	good	Yes
Carlos P. Garcia Highway	0.3295	60,000,000	19,772,940	concrete	good	Yes
Carlos P. Garcia Highway	0.0314	60,000,000	1,886,508	concrete	good	Yes
Carlos P. Garcia Highway	0.3522	60,000,000	21,129,360	concrete	good	Yes
Carlos P. Garcia Highway	0.1119	60,000,000	6,711,120	concrete	good	Yes
Carlos P. Garcia Highway	0.0129	60,000,000	775,470	concrete	good	Yes
Carlos P. Garcia Highway	0.8425	60,000,000	50,551,800	concrete	good	Yes
Carlos P. Garcia Highway	0.0549	60,000,000	3,293,496	concrete	good	Yes
Carlos P. Garcia Highway	0.1044	60,000,000	6,261,360	concrete	good	Yes
Carlos P. Garcia Highway	0.0063	60,000,000	375,574	concrete	good	Yes
Carlos P. Garcia Highway	0.3292	60,000,000	19,751,820	concrete	good	Yes
Carlos P. Garcia Highway	0.2961	60,000,000	17,768,520	concrete	good	Yes

Table LU– 35. Lifeline Utilities, Roads, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY		
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Davao - Agusan Highway	0.6234	56,000,000	34,908,384	concrete	good	Yes
Davao - Agusan Highway	0.0860	56,000,000	4,813,519	concrete	good	Yes
Davao - Agusan Highway	0.0480	56,000,000	2,690,055	concrete	good	Yes
Davao - Agusan Highway	0.0329	56,000,000	1,843,610	concrete	good	Yes
Davao - Agusan Highway	0.0842	56,000,000	4,716,370	concrete	good	Yes
Davao - Agusan Highway	0.1324	56,000,000	7,415,800	concrete	good	Yes
Davao - Agusan Highway	0.0685	56,000,000	3,835,726	concrete	good	Yes
Davao - Agusan Highway	0.1062	56,000,000	5,948,488	concrete	good	Yes
Davao - Agusan Highway	0.0245	56,000,000	1,374,548	concrete	good	Yes
Davao - Agusan Highway	0.0880	56,000,000	4,928,465	concrete	good	Yes
Davao - Agusan Highway	0.0993	56,000,000	5,559,999	concrete	good	Yes
Davao - Agusan Highway	0.0226	56,000,000	1,262,839	concrete	good	Yes
Davao - Agusan Highway	0.0444	56,000,000	2,484,166	concrete	good	Yes
Davao - Agusan Highway	0.0796	56,000,000	4,456,368	concrete	good	Yes
Davao - Agusan Highway	0.0262	56,000,000	1,469,451	concrete	good	Yes
Don Julian Rodriguez Ave. (Maa Road)	0.5272	28,000,000	14,760,536	concrete	good	Yes
Don Julian Rodriguez Ave. (Maa Road)	0.3069	28,000,000	8,593,004	concrete	good	Yes
Don Julian Rodriguez Ave. (Maa Road)	0.3612	28,000,000	10,113,488	concrete	good	Yes
Don Julian Rodriguez Ave. (Maa Road)	2.8187	28,000,000	78,923,040	concrete	good	Yes
Dumanlas Rd.	0.0422	56,000,000	2,363,290	concrete	good	Yes
Eden-Tagurano Road	0.1210	35,000,000	4,235,595	concrete	good	Yes
Florentino Torres St	1.6838	65,000,000	109,443,750	concrete	good	Yes
Inawayan-Baracatan Road	0.0328	35,000,000	1,146,572	concrete	good	Yes
J.P. Cabaguio Avenue	1.4047	56,000,000	78,662,080	concrete	good	Yes
J.P. Cabaguio Avenue	0.0136	56,000,000	760,631	concrete	good	Yes
Jose P. Laurel Avenue	4.0756	56,000,000	228,234,720	concrete	good	Yes
Leon Garcia St.	0.2600	49,000,000	12,740,588	concrete	good	Yes
Leon Garcia St.	0.3911	49,000,000	19,164,145	concrete	good	Yes
Libby Road	0.0494	25,000,000	1,235,630	concrete	good	Yes
Libby Road	0.0075	25,000,000	186,545	concrete	good	Yes
Libby Road	0.5439	25,000,000	13,597,300	concrete	good	Yes
Libby Road	4.4314	25,000,000	110,783,750	concrete	good	Yes

Table LU– 35. Lifeline Utilities, Roads, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY		
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Claro M. Recto St.	1.2152	56,000,000	68,050,080	concrete	good	Yes
Dacudao Avenue	1.1168	56,000,000	62,540,800	concrete	good	Yes
Dacudao Avenue	0.5480	56,000,000	30,690,184	concrete	good	Yes
Davao-Bukidnon Road	2.2435	40,000,000	89,739,600	concrete	good	Yes
Davao-Bukidnon Road	0.5888	40,000,000	23,551,720	concrete	good	Yes
Davao-Bukidnon Road	0.9692	40,000,000	38,769,520	concrete	good	Yes
Davao-Bukidnon Road	0.3905	40,000,000	15,621,320	concrete	good	Yes
Davao-Bukidnon Road	1.6118	40,000,000	64,471,600	concrete	good	Yes
Davao-Bukidnon Road	0.6323	40,000,000	25,293,080	concrete	good	Yes
Davao-Bukidnon Road	0.9835	40,000,000	39,340,080	concrete	good	Yes
Davao-Bukidnon Road	0.8472	40,000,000	33,889,920	concrete	good	Yes
Davao-Bukidnon Road	0.2592	40,000,000	10,369,640	concrete	good	Yes
Davao-Bukidnon Road	1.9633	40,000,000	78,531,600	concrete	good	Yes
Davao-Bukidnon Road	1.1280	40,000,000	45,121,200	concrete	good	Yes
Davao-Bukidnon Road	0.5791	40,000,000	23,165,360	concrete	good	Yes
Davao-Bukidnon Road	0.6943	40,000,000	27,773,760	concrete	good	Yes
Davao-Bukidnon Road	0.0412	40,000,000	1,647,920	concrete	good	Yes
Davao-Bukidnon Road	0.5601	40,000,000	22,405,360	concrete	good	Yes
Davao-Bukidnon Road	4.9508	40,000,000	198,032,400	concrete	good	Yes
Davao-Bukidnon Road	0.3442	40,000,000	13,767,360	concrete	good	Yes
Davao-Bukidnon Road	0.3309	40,000,000	13,237,880	concrete	good	Yes
Davao-Bukidnon Road	2.0777	40,000,000	83,107,600	concrete	good	Yes
Davao-Bukidnon Road	1.6613	40,000,000	66,450,400	concrete	good	Yes
Davao-Bukidnon Road	0.2861	40,000,000	11,445,040	concrete	good	Yes
Davao-Bukidnon Road	2.4449	40,000,000	97,797,600	concrete	good	Yes
Davao - Agusan Highway	0.0825	56,000,000	4,621,092	concrete	good	Yes
Davao - Agusan Highway	0.0331	56,000,000	1,851,041	concrete	good	Yes
Davao - Agusan Highway	0.0126	56,000,000	704,346	concrete	good	Yes
Davao - Agusan Highway	0.0604	56,000,000	3,381,454	concrete	good	Yes
Davao - Agusan Highway	0.1787	56,000,000	10,009,720	concrete	good	Yes
Davao - Agusan Highway	0.2037	56,000,000	11,408,544	concrete	good	Yes
Davao - Agusan Highway	0.1551	56,000,000	8,688,064	concrete	good	Yes

Table LU– 35. Lifeline Utilities, Roads, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY		
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Libby Road	1.7755	25,000,000	44,387,750	concrete	good	Yes
Maa Radio Station St.	0.1871	28,000,000	5,238,352	concrete	good	Yes
Maa Radio Station St.	0.1576	28,000,000	4,411,904	concrete	good	Yes
Maa Radio Station St.	0.0746	28,000,000	2,087,901	concrete	good	Yes
Maa Radio Station St.	0.0545	28,000,000	1,527,128	concrete	good	Yes
Mabuhay-Pañalum-Paquibato Road	0.2632	44,000,000	11,582,604	concrete	good	Yes
Mabuhay-Pañalum-Paquibato Road	0.1382	44,000,000	6,081,108	concrete	good	Yes
Manggahan St.	0.5772	25,000,000	14,431,225	concrete	good	Yes
Manggahan St.	1.4078	25,000,000	35,194,750	concrete	good	Yes
Mc. Arthur Highway	0.0730	56,000,000	4,087,412	concrete	good	Yes
Mc. Arthur Highway	0.1741	56,000,000	9,750,720	concrete	good	Yes
Mc. Arthur Highway	0.7103	56,000,000	39,776,016	concrete	good	Yes
Mc. Arthur Highway	0.1954	56,000,000	10,942,848	concrete	good	Yes
Mc. Arthur Highway	0.2950	56,000,000	16,518,208	concrete	good	Yes
Mc. Arthur Highway	0.7051	56,000,000	39,485,432	concrete	good	Yes
Mc. Arthur Highway	0.1347	56,000,000	7,544,768	concrete	good	Yes
Mc. Arthur Highway	0.2224	56,000,000	12,452,832	concrete	good	Yes
Mc. Arthur Highway	0.1283	56,000,000	7,186,872	concrete	good	Yes
Mc. Arthur Highway	0.2059	56,000,000	11,531,912	concrete	good	Yes
Mc. Arthur Highway	0.4105	56,000,000	22,990,352	concrete	good	Yes
Mc. Arthur Highway	0.1620	56,000,000	9,074,576	concrete	good	Yes
Mc. Arthur Highway	0.7807	56,000,000	43,717,856	concrete	good	Yes
Mc. Arthur Highway	0.6079	56,000,000	34,042,960	concrete	good	Yes
Mc. Arthur Highway	0.8323	56,000,000	46,609,640	concrete	good	Yes
Mc. Arthur Highway	8.0360	56,000,000	450,016,560	concrete	good	Yes
Mc. Arthur Highway	3.2213	56,000,000	180,392,800	concrete	good	Yes
Mc. Arthur Highway	0.4010	56,000,000	22,458,464	concrete	good	Yes
Mc. Arthur Highway	0.1792	56,000,000	10,035,200	concrete	good	Yes
Mc. Arthur Highway	0.2129	56,000,000	11,922,904	concrete	good	Yes
Mc. Arthur Highway	0.4510	56,000,000	25,258,128	concrete	good	Yes
Mc. Arthur Highway	0.2950	56,000,000	16,520,392	concrete	good	Yes
Mc. Arthur Highway	1.1842	56,000,000	66,314,080	concrete	good	Yes

Table LU– 35. Lifeline Utilities, Roads, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY		
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Pakiputan Wharf Road	0.4554	56,000,000	25,500,328	concrete	good	Yes
Pichon St.	0.1014	56,000,000	5,677,560	concrete	good	Yes
Pichon St.	0.8439	56,000,000	47,256,440	concrete	good	Yes
Quezon Boulevard	4.2215	86,000,000	363,048,140	concrete	good	Yes
Quimpo Boulevard	0.5484	50,000,000	27,422,300	concrete	good	Yes
Quimpo Boulevard	0.0351	50,000,000	1,756,095	concrete	good	Yes
Quimpo Boulevard	0.3839	50,000,000	19,194,450	concrete	good	Yes
Quimpo Boulevard	3.3481	50,000,000	167,403,000	concrete	good	Yes
Quimpo Boulevard	3.3481	50,000,000	167,403,000	concrete	good	Yes
Quimpo Boulevard	0.1155	50,000,000	5,773,100	concrete	good	Yes
Quimpo Boulevard	0.4730	50,000,000	23,650,750	concrete	good	Yes
Quirino Avenue	1.8125	40,000,000	72,500,400	concrete	good	Yes
Quirino Avenue	0.2199	40,000,000	8,794,920	concrete	good	Yes
Rafael Castillo St.	0.4003	86,000,000	34,426,144	concrete	good	Yes
Rafael Castillo St.	0.8161	86,000,000	70,183,224	concrete	good	Yes
Rafael Castillo St.	1.2702	86,000,000	109,240,640	concrete	good	Yes
Ramon Magsaysay Ave.	1.3741	60,000,000	82,446,600	concrete	good	Yes
Sta. Ana Ave.	1.2910	60,000,000	77,460,600	concrete	good	Yes
Toril-Bayabas-Eden Road	0.2472	30,000,000	7,414,650	concrete	good	Yes
Toril-Bayabas-Eden Road	0.2321	30,000,000	6,962,490	concrete	good	Yes
Toril-Bayabas-Eden Road	0.0626	30,000,000	1,877,580	concrete	good	Yes
Toril-Bayabas-Eden Road	0.2519	30,000,000	7,555,530	concrete	good	Yes
Toril-Bayabas-Eden Road	0.1764	30,000,000	5,292,540	concrete	good	Yes
Toril-Bayabas-Eden Road	0.4906	30,000,000	14,717,310	concrete	good	Yes
Toril-Bayabas-Eden Road	0.7113	30,000,000	21,340,200	concrete	good	Yes
Carlos P. Garcia Highway	0.0003	60,000,000	17,217	concrete	good	Yes
Carlos P. Garcia Highway	0.0003	60,000,000	17,217	concrete	good	Yes
Davao-Bukidnon Road	0.0002	40,000,000	8,169	concrete	good	Yes
Davao-Bukidnon Road	0.0002	40,000,000	8,169	concrete	good	Yes
J.P. Cabaguio Avenue	0.0001	56,000,000	6,043	concrete	good	Yes
J.P. Cabaguio Avenue	0.0001	56,000,000	6,043	concrete	good	Yes
Pichon St.	0.0005	56,000,000	28,962	concrete	good	Yes

Table LU– 35. Lifeline Utilities, Roads, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY		
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Pichon St.	0.0005	56,000,000	28,962	concrete	good	Yes
Quimpo Boulevard	0.0001	50,000,000	5,460	concrete	good	Yes
Quimpo Boulevard	0.0001	50,000,000	5,460	concrete	good	Yes
Quimpo Boulevard	0.0001	50,000,000	4,624	concrete	good	Yes
Quimpo Boulevard	0.0001	50,000,000	4,624	concrete	good	Yes
Quimpo Boulevard	0.0008	50,000,000	38,908	concrete	good	Yes
Quimpo Boulevard	0.0008	50,000,000	38,908	concrete	good	Yes
Quirino Avenue	0.0001	40,000,000	3,889	concrete	good	Yes
Quirino Avenue	0.0001	40,000,000	3,889	concrete	good	Yes
Rafael Castillo St.	0.0003	86,000,000	25,057	concrete	good	Yes
Rafael Castillo St.	0.0003	86,000,000	25,057	concrete	good	Yes
Rafael Castillo St.	0.0003	86,000,000	26,521	concrete	good	Yes
Rafael Castillo St.	0.0003	86,000,000	26,521	concrete	good	Yes

Exposure Estimation for Bridges

Bolton Bridge 2 has the highest value with a total cost of ₱236, 256,000. It is followed by Bolton Bridge 1 with the total value of ₱222,360,000. Davao River Bridge has the third highest value at ₱169, 332,000.

Table LU– 36. Lifeline Utilities, Bridges, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Agdao Flyover	382.98	1,200,000	459,576,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Angalan Br. I	12.10	1,200,000	14,520,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Angalan Br. II	11.92	1,200,000	14,304,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.

Table LU– 36. Lifeline Utilities, Bridges, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Angalan Br. III	48.88	1,200,000	58,656,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Angalan Br. IV	15.90	1,200,000	19,080,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Angalan Br. V	18.00	1,200,000	21,600,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Table LU– 36. Lifeline Utilities, Bridges, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Angalan Br. VI	45.00	1,200,000	54,000,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Bago Br.	31.21	1,200,000	37,452,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Bato Br.	20.70	1,200,000	24,840,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Table LU– 36. Lifeline Utilities, Bridges, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Bolton Br. 1	185.30	1,200,000	222,360,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Bolton Br. 2	196.88	1,200,000	236,256,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Buhangin Flyover	488.07	1,200,000	585,684,000		Good	Yes	All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Table LU– 36. Lifeline Utilities, Bridges, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY		
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RE-SISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RE-SOURCES	
Bunawan Br. 1	49.76	1,200,000	59,712,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	
Bunawan Br. 2	47.79	1,200,000	57,348,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	
Davao River Br.	141.11	1,200,000	169,332,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	

Table LU– 36. Lifeline Utilities, Bridges, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Generoso Br. 1	89.94	1,200,000	107,928,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Generoso Br. 2	87.60	1,200,000	105,120,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Libby Br.	24.69	1,200,000	29,628,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Table LU– 36. Lifeline Utilities, Bridges, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY		
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RE-SOURCES	
Nalum Br.	23.54	1,200,000	28,248,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	
Pagan Grande	45.48	1,200,000	54,576,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	
Pagan Pequeño	89.93	1,200,000	107,916,000	Steel	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	

Table LU– 36. Lifeline Utilities, Bridges, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Panacan Br.	23.53	1,200,000	28,236,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Pangi Br.	121.69	1,200,000	146,028,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Piedad Br.	47.82	1,200,000	57,384,000	Steel	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Table LU– 36. Lifeline Utilities, Bridges, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Sasa Br.	18.43	1,200,000	22,116,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Suawan Br.	45.00	1,200,000	54,000,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Tagurano Br.	12.46	1,200,000	14,952,000	Bailey	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Table LU– 36. Lifeline Utilities, Bridges, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Talomo Br. 1	48.10	1,200,000	57,720,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Talomo Br. 2	48.11	1,200,000	57,732,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Tamugan Br.	104.96	1,200,000	125,952,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Table LU– 36. Lifeline Utilities, Bridges, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Talomo Br. 1	48.10	1,200,000	57,720,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Talomo Br. 2	48.11	1,200,000	57,732,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Tamugan Br.	104.96	1,200,000	125,952,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH XI has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Exposure Estimation for Power

A total of three (3) substations are located in high flood- susceptibility area, Calinan Substation, Tugbok Substation, Matina Substation. Among the three (3) substations, Calinan Substation has the highest value with ₱140 million. It is followed by Tugbok Substation with ₱130 million. While Matina Substation has the third highest value with the replacement cost/value of ₱120 Million.

Table LU– 37. Lifeline Utilities, Power Substations, Exposure Estimation for Flood, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Calinan Substation	1,000.00	140 Million	140 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; with Roofdeck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Tugbok Substation	1,809.00	130 Million	130 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside b) Control Building: Pre-painted Metal Sheet Cladding Wall and Concrete Floor ; Pre-painted Roofing Sheet. c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Matina Substation	1,000.00	120 Million	120 Million	a) Perimeter Fence : Concrete Fence (3.0m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Pampanga Substation	1,031.00	118 Million	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

Exposure Estimation for Level I Water System

The value of exposed lifeline remains the same per spring and well sources. The estimated value of the exposed lifeline for spring is ₱41,586.32, as to wells, the estimated value is ₱5,000,000. Eight spring sources in Tibungco, Panacan, Lizada and Binugao all have the same estimated value of ₱41,586.32.

Table LU-38. Lifeline Utilities, Level I, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY	
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFE-LINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
TIBUNGCO	SPRING	41,586.32	41,586.32	GOOD	NONE
TIBUNGCO	SPRING	41,586.32	41,586.32	GOOD	NONE
TIBUNGCO	SPRING	41,586.32	41,586.32	GOOD	NONE
PANACAN	SPRING	41,586.32	41,586.32	GOOD	NONE
PANACAN	SPRING	41,586.32	41,586.32	GOOD	NONE
TALOMO RIVER	DEEPWELL	5,000,000	5,000,000	GOOD	NONE
ULA	DEEPWELL	5,000,000	5,000,000	GOOD	NONE
RIVERSIDE	DEEPWELL	5,000,000	5,000,000	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE

Table LU-38. Lifeline Utilities, Level I, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY	
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
BINUGAO	SPRING	41,586.32	41,586.32	GOOD	NONE
BINUGAO	SPRING	41,586.32	41,586.32	GOOD	NONE

Table LU-39. Lifeline Utilities, Level II, Water System, Exposure Estimation Table for Flood, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY		
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Toril	BINUGAO	HF	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	SIRAWAN	HF	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	BINUGAO	MF	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	SIRAWAN	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Toril	SIRAWAN	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Toril	MARAPANGI	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal

Table LU-40. Lifeline Utilities, Level I, Exposure Estimation Table for Flood, Davao City

EXPOSURE					VALUE OF EXPOSED LIFELINE	SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST		EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Toril	SIBULAN	HF	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	MT. APO NATIONAL PARK	HF	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	MT. APO NATIONAL PARK	HF	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	TUNGKALAN	HF	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	TUNGKALAN	HF	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal
Toril	DALIAON PLANTATION	HF	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal
Tugbok	MANUEL GUI-ANGA	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	SIRIB	MF	5HP	82,500.00	82,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	ANGALAN	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Baguio	MT. APO NATIONAL PARK	HF	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal
Tugbok	TAGAKPAN	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is month warranty if the water pump is installed by the supplier	YES. For funding proposal

Table LU-40. Lifeline Utilities, Level I, Exposure Estimation Table for Flood, Davao City

EXPOSURE					VALUE OF EXPOSED LIFELINE	SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST		EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Tugbok	BALENGAENG	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	ANGALAN	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	SIRIB	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	SIRIB	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	SIRIB	MF	3HP	60,500.00	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	TAGAKPAN	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	SUBASTA	HF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Buhangin	WAAN	VHF	18GS20	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal

Table LU-40. Lifeline Utilities, Level I, Exposure Estimation Table for Flood, Davao City

EXPOSURE					VALUE OF EXPOSED LIFELINE	SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST		EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Buhangin	WAAN	VHF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	TAGAKPAN	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Buhangin	TIGATTO	HF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	BALENGAENG	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	MATINA BIAO	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	LOS AMIGOS	MF	3HP	60,500.00	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	SUBASTA	HF	3HP	60,500.00	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	CAWAYAN	MF	3HP	60,500.00	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal

Table LU-40. Lifeline Utilities, Level I, Exposure Estimation Table for Flood, Davao City

EXPOSURE					VALUE OF EXPOSED LIFELINE	SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST		EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Calinan	SUBASTA	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	BIAO ESCUELA	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	LOS AMIGOS	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	LOS AMIGOS	MF	1HP	31,000.00	31,000.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	CAWAYAN	HF	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal
Tugbok	MATINA BIAO	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	BIAO GUI-ANGA	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	BIAO GUI-ANGA	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	BIAO GUI-ANGA	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal

Table LU-40. Lifeline Utilities, Level I, Exposure Estimation Table for Flood, Davao City

EXPOSURE					VALUE OF EXPOSED LIFELINE	SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST		EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Tugbok	BIAO ESCUELA	MF	3HP	60,500.00	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	SUBASTA	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	CAWAYAN	MF	3HP	60,500.00	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	BIAO ESCUELA	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	BIAO GUI-ANGA	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	BIAO ESCUELA	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	BIAO GUI-ANGA	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Baguio	BAGUIO	HF	3HP	60,500.00	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal

Table LU-40. Lifeline Utilities, Level I, Exposure Estimation Table for Flood, Davao City

EXPOSURE					VALUE OF EXPOSED LIFELINE	SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST		EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Calinan	BIAO JOAQUIN	MF	1.5HP	38,500.00	38,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	TALOMO RIVER	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	TALOMO RIVER	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	BIAO JOAQUIN	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Tugbok	TALANDANG	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	BIAO JOAQUIN	MF	1.5HP	38,500.00	38,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	TALOMO RIVER	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	TALOMO RIVER	MF	1.5HP	38,500.00	38,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal

Table LU-40. Lifeline Utilities, Level I, Exposure Estimation Table for Flood, Davao City

EXPOSURE					VALUE OF EXPOSED LIFELINE	SENSITIVITY		ADAPTIVE CAPACITY	
ADMINISTRATIVE DIVISION	BARANGAY	SUSCEPTIBILITY	TYPE	REPLACMENT COST		EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Calinan	TALOMO RIVER	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	TALOMO RIVER	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	TALOMO RIVER	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Calinan	BIAO JOAQUIN	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Baguio	MALAGOS	HF	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal
Calinan	TALOMO RIVER	MF	2HP	46,200.00	46,200.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Baguio	GUMALANG	MF	3HP	60,500.00	60,500.00	FAIR	Yes: casing of the well	None, but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal
Marilog	SALAYSAY	HF	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal

Exposure Estimation for Level III Water Supply

Three barangays with mainline pipes with huge expense in case it would be hit by flood are Mintal, Biao Guianga and Tugbok. In Mintal the total value of exposed 500 mm mainline is P18, 118,752.26. In Biao Guianga the total value of exposed 300 mm main line pipe is 19,818,591.58. Tugbok has the highest value of exposed lifeline at P26, 119,095.17 Databased to the presence of the 786.72 meters of 500 mm diameter pipe in the area.

Table LU-41. Lifeline Utilities, Level III Water System, Exposure Estimation Table for Flood, Davao City

ADMINISTRATIVE DIVISION	BARANGAY	EXPOSURE					SENSITIVITY	
		TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Bunawan	MUDIANG	MLCSP	300	19,100.00	650.63	12,426,970.17	GOOD	YES
Calinan	CALINAN	PVC	150	11,200.00	30.35	339,954.43	GOOD	YES
Calinan	CALINAN	PVC	200	12,500.00	85.89	1,073,606.74	GOOD	YES
Calinan	CALINAN	PVC	200	12,500.00	91.26	1,140,743.07	GOOD	YES
Calinan	WANGAN	PVC	200	12,500.00	20.62	257,799.02	GOOD	YES
Calinan	CALINAN	PVC	200	12,500.00	22.81	285,146.15	GOOD	YES
Calinan	RIVERSIDE	MLCSP	250	17,700.00	47.65	843,361.22	GOOD	YES
Calinan	RIVERSIDE	PVC	150	11,200.00	22.74	254,712.19	GOOD	YES
Poblacion	11-B	PVC	150	11,200.00	164.29	1,840,062.42	GOOD	YES
Agdao	TOMAS MONTEVERDE	PVC	150	11,200.00	11.50	128,789.06	GOOD	YES
Agdao	AGDAO PROPER	PVC	150	11,200.00	57.96	649,165.10	GOOD	YES
Poblacion	15-B	PVC	150	11,200.00	39.81	445,845.33	GOOD	YES
Poblacion	19-B	MLCSP	600	40,100.00	110.12	4,415,865.75	GOOD	YES
Agdao	AGDAO PROPER	MLCSP	400	23600	17.76	419,054.35	GOOD	YES
Poblacion	5-A	MLCSP	300	19,100.00	107.30	2,049,355.34	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	250	17,700.00	64.59	1,143,167.76	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	250	17,700.00	604.49	10,699,497.84	GOOD	YES
Talomo	DUMOY	MLCSP	400	23600	116.44	2,748,061.49	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	300	19,100.00	106.54	2,034,983.29	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	300	19,100.00	69.16	1,320,906.10	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	250	17,700.00	229.30	4,058,617.12	GOOD	YES
Talomo	TALOMO	PVC	150	11,200.00	2.85	31,937.83	GOOD	YES
Talomo	TALOMO	PVC	150	11,200.00	173.39	1,941,938.78	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	61.88	693,038.72	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	750	48,500.00	18.19	882,104.31	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	750	48,500.00	134.30	6,513,362.61	GOOD	YES

Table LU-41. Lifeline Utilities, Level III Water System, Exposure Estimation Table for Flood, Davao City

ADMINISTRATIVE DIVISION	BARANGAY	EXPOSURE					SENSITIVITY	
		TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Talomo	MATINA CROSSING	MLCSP	750	48,500.00	209.23	10,147,632.82	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	96.58	1,081,646.77	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	38.24	428,306.93	GOOD	YES
Talomo	MATINA APLAYA	PVC	150	11,200.00	154.20	1,726,986.01	GOOD	YES
Talomo	TALOMO	MLCSP	700	44,200.00	51.73	2,286,451.14	GOOD	YES
Talomo	TALOMO	MLCSP	700	44,200.00	49.78	2,200,388.79	GOOD	YES
Talomo	TALOMO	MLCSP	750	48,500.00	67.50	3,273,532.41	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	74.05	829,392.67	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	7.28	81,489.35	GOOD	YES
Talomo	TALOMO	PVC	150	11,200.00	102.64	1,149,581.69	GOOD	YES
Talomo	MATINA APLAYA	PVC	150	11,200.00	174.49	1,954,283.52	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	106.03	1,187,564.30	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	2.66	29,766.71	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	750	48,500.00	112.32	5,447,278.09	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	750	48,500.00	153.34	7,436,856.32	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	326.59	3,657,808.07	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	750	48,500.00	8.67	420,653.55	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	250	17,700.00	61.15	1,082,367.49	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	500	33,200.00	134.63	4,469,843.91	GOOD	YES
Poblacion	19-B	MLCSP	400	23600	122.66	2,894,807.13	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	250	17,700.00	480.39	8,502,867.21	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	400	23600	84.52	1,994,773.86	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	400	23600	223.09	5,264,920.18	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	400	23600	99.67	2,352,240.17	GOOD	YES
Talomo	TALOMO	MLCSP	700	44,200.00	231.11	10,215,265.83	GOOD	YES
Talomo	TALOMO	MLCSP	700	44,200.00	4.72	208,671.61	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	500	33,200.00	140.03	4,649,098.04	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	413.54	4,631,636.11	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	250	17,700.00	12.39	219,261.85	GOOD	YES
Talomo	TALOMO	MLCSP	700	44,200.00	21.82	964,632.34	GOOD	YES
Poblacion	39-D	MLCSP	300	19,100.00	23.90	456,494.07	GOOD	YES
Poblacion	18-B	PVC	150	11,200.00	175.92	1,970,298.70	GOOD	YES

Table LU-41. Lifeline Utilities, Level III Water System, Exposure Estimation Table for Flood, Davao City

ADMINISTRATIVE DIVISION	BARANGAY	EXPOSURE					SENSITIVITY	
		TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Agdao	AGDAO PROPER	MLCSP	400	23600	9.02	212,982.05	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	700	44,200.00	7.40	327,140.13	GOOD	YES
Talomo	MA-A	PVC	150	11,200.00	137.90	1,544,529.24	GOOD	YES
Talomo	MA-A	MLCSP	300	19,100.00	626.19	11,960,141.22	GOOD	YES
Talomo	MA-A	MLCSP	300	19,100.00	194.93	3,723,163.40	GOOD	YES
Talomo	BALIOK	MLCSP	300	19,100.00	14.00	267,436.65	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	116.06	1,299,829.84	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	750	48,500.00	72.60	3,521,279.10	GOOD	YES
Talomo	TALOMO	MLCSP	750	48,500.00	4.59	222,529.50	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	750	48,500.00	201.95	9,794,419.92	GOOD	YES
Poblacion	7-A	MLCSP	600	40,100.00	57.59	2,309,336.22	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	18.95	212,247.87	GOOD	YES
Poblacion	2-A	MLCSP	350	20,800.00	100.23	2,084,812.81	GOOD	YES
Talomo	TALOMO	MLCSP	900	56,500.00	78.13	4,414,178.58	GOOD	YES
Talomo	TALOMO	MLCSP	800	52,800.00	248.74	13,133,705.33	GOOD	YES
Talomo	TALOMO	MLCSP	800	52,800.00	45.84	2,420,405.09	GOOD	YES
Agdao	WILFREDO AQUINO	MLCSP	300	19,100.00	234.02	4,469,825.21	GOOD	YES
Talomo	MATINA APLAYA	PVC	150	11,200.00	47.99	537,538.17	GOOD	YES
Talomo	MATINA APLAYA	PVC	150	11,200.00	14.63	163,861.08	GOOD	YES
Talomo	MATINA APLAYA	PVC	150	11,200.00	38.75	433,955.09	GOOD	YES
Talomo	TALOMO	MLCSP	900	56,500.00	73.84	4,171,907.04	GOOD	YES
Poblacion	32-D	MLCSP	300	19,100.00	47.65	910,093.51	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	250	17,700.00	660.23	11,685,984.86	GOOD	YES
Talomo	TALOMO	MLCSP	300	19,100.00	30.23	577,298.64	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	300	19,100.00	122.33	2,336,446.04	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	600	40,100.00	479.92	19,244,641.31	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	600	40,100.00	130.39	5,228,542.68	GOOD	YES
Agdao	TOMAS MONTEVERDE	PVC	150	11,200.00	23.81	266,672.56	GOOD	YES
Agdao	TOMAS MONTEVERDE	PVC	150	11,200.00	169.10	1,893,925.62	GOOD	YES
Agdao	AGDAO PROPER	PVC	150	11,200.00	6.83	76,452.88	GOOD	YES
Agdao	WILFREDO AQUINO	MLCSP	300	19,100.00	37.07	708,072.24	GOOD	YES
Poblacion	2-A	MLCSP	300	19,100.00	55.93	1,068,181.80	GOOD	YES

Table LU-41. Lifeline Utilities, Level III Water System, Exposure Estimation Table for Flood, Davao City

EXPOSURE							SENSITIVITY	
ADMINISTRATIVE DIVISION	BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Talomo	BAGO APLAYA	MLCSP	600	40,100.00	837.34	33,577,164.55	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	600	40,100.00	169.94	6,814,564.07	GOOD	YES
Talomo	TALOMO	MLCSP	250	17,700.00	85.41	1,511,758.40	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	400	23600	47.64	1,124,243.47	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	400	23600	47.27	1,115,617.81	GOOD	YES
Poblacion	6-A	MLCSP	600	40,100.00	101.25	4,060,142.85	GOOD	YES
Talomo	TALOMO	MLCSP	900	56,500.00	119.84	6,771,073.36	GOOD	YES
Talomo	TALOMO	MLCSP	900	56,500.00	10.74	606,908.26	GOOD	YES
Agdao	WILFREDO AQUINO	MLCSP	300	19,100.00	42.46	810,990.85	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	31.66	354,610.44	GOOD	YES
Talomo	MATINA APLAYA	PVC	150	11,200.00	91.74	1,027,477.53	GOOD	YES
Talomo	TALOMO	MLCSP	450	24,300.00	8.64	209,916.38	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	450	24,300.00	39.25	953,864.99	GOOD	YES
Talomo	TALOMO	MLCSP	600	40,100.00	4.63	185,572.61	GOOD	YES
Talomo	BALIOK	MLCSP	300	19,100.00	398.28	7,607,236.67	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	350	20,800.00	819.14	17,038,118.78	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	450	24,300.00	861.61	20,937,007.20	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	450	24,300.00	171.98	4,179,001.54	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	700	44,200.00	13.77	608,726.32	GOOD	YES
Talomo	TALOMO	MLCSP	700	44,200.00	219.87	9,718,130.18	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	250	17,700.00	65.56	1,160,433.36	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	250	17,700.00	405.51	7,177,564.11	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	250	17,700.00	52.93	936,780.25	GOOD	YES
Poblacion	37-D	MLCSP	300	19,100.00	227.02	4,336,136.46	GOOD	YES
Agdao	AGDAO PROPER	MLCSP	300	19,100.00	239.57	4,575,759.49	GOOD	YES
Agdao	AGDAO PROPER	MLCSP	400	23600	53.67	1,266,711.33	GOOD	YES
Agdao	GOV. VICENTE DUTERTE	MLCSP	400	23600	206.29	4,868,352.27	GOOD	YES
Agdao	GOV. VICENTE DUTERTE	MLCSP	400	23600	91.18	2,151,811.02	GOOD	YES
Agdao	GOV. VICENTE DUTERTE	MLCSP	400	23600	20.82	491,366.14	GOOD	YES
Agdao	UBALDE	MLCSP	400	23600	173.79	4,101,527.75	GOOD	YES
Agdao	UBALDE	MLCSP	400	23600	9.54	225,196.59	GOOD	YES
Poblacion	4-A	MLCSP	500	33,200.00	36.32	1,205,767.08	GOOD	YES

Table LU-41. Lifeline Utilities, Level III Water System, Exposure Estimation Table for Flood, Davao City

EXPOSURE							SENSITIVITY	
ADMINISTRATIVE DIVISION	BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Agdao	UBALDE	MLCSP	400	23600	56.80	1,340,392.27	GOOD	YES
Agdao	LAPU - LAPU	MLCSP	400	23600	162.28	3,829,897.70	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	750	48,500.00	134.23	6,510,133.42	GOOD	YES
Talomo	MATINA APLAYA	PVC	150	11,200.00	16.87	188,999.06	GOOD	YES
Talomo	MATINA APLAYA	PVC	150	11,200.00	32.12	359,744.40	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	11.21	125,578.12	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	21.56	241,514.23	GOOD	YES
Talomo	MATINA APLAYA	PVC	150	11,200.00	143.01	1,601,695.69	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	42.88	480,233.29	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	123.86	1,387,193.76	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	100.87	1,129,778.32	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	69.27	775,815.66	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	300	19,100.00	76.88	1,468,438.21	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	66.40	743,650.05	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	73.05	818,111.64	GOOD	YES
Talomo	MATINA APLAYA	PVC	150	11,200.00	38.45	430,616.62	GOOD	YES
Talomo	MATINA APLAYA	PVC	150	11,200.00	42.39	474,764.83	GOOD	YES
Talomo	MATINA APLAYA	PVC	150	11,200.00	43.58	488,151.94	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	300	19,100.00	115.43	2,204,619.25	GOOD	YES
Talomo	TALOMO	MLCSP	250	17,700.00	274.45	4,857,739.13	GOOD	YES
Buhangin	SASA	PVC	200	12,500.00	95.78	1,197,307.55	GOOD	YES
Buhangin	PAMPANGA	MLCSP	300	19,100.00	5.00	95,536.43	GOOD	YES
Buhangin	PAMPANGA	MLCSP	300	19,100.00	14.98	286,066.10	GOOD	YES
Buhangin	PAMPANGA	MLCSP	300	19,100.00	45.71	873,145.47	GOOD	YES
Buhangin	V. HIZON	MLCSP	250	17,700.00	2.85	50,396.49	GOOD	YES
Buhangin	PAMPANGA	MLCSP	250	17,700.00	12.43	220,059.13	GOOD	YES
Buhangin	SASA	MLCSP	250	17,700.00	75.16	1,330,375.08	GOOD	YES
Buhangin	PAMPANGA	MLCSP	250	17,700.00	13.90	246,040.60	GOOD	YES
Buhangin	PAMPANGA	MLCSP	250	17,700.00	209.85	3,714,415.17	GOOD	YES
Buhangin	SASA	PVC	200	12,500.00	61.06	763,277.77	GOOD	YES
Buhangin	V. HIZON	MLCSP	250	17,700.00	386.94	6,848,893.63	GOOD	YES
Buhangin	PAMPANGA	MLCSP	250	17,700.00	23.61	417,867.81	GOOD	YES

Table LU-41. Lifeline Utilities, Level III Water System, Exposure Estimation Table for Flood, Davao City

EXPOSURE							SENSITIVITY	
ADMINISTRATIVE DIVISION	BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Buhangin	PAMPANGA	MLCSP	250	17,700.00	23.06	408,076.97	GOOD	YES
Talomo	MA-A	MLCSP	300	19,100.00	15.65	298,879.41	GOOD	YES
Buhangin	SASA	MLCSP	250	17,700.00	87.14	1,542,450.63	GOOD	YES
Talomo	MA-A	MLCSP	350	20,800.00	348.23	7,243,095.80	GOOD	YES
Talomo	MA-A	MLCSP	350	20,800.00	137.11	2,851,902.57	GOOD	YES
Talomo	MA-A	MLCSP	800	52,800.00	194.54	10,271,615.79	GOOD	YES
Talomo	MA-A	MLCSP	800	52,800.00	10.29	543,552.17	GOOD	YES
Poblacion	19-B	MLCSP	300	19,100.00	152.65	2,915,635.50	GOOD	YES
Buhangin	V. HIZON	MLCSP	250	17,700.00	5.00	88,523.32	GOOD	YES
Buhangin	CABANTIAN	MLCSP	400	23600	5.59	132,013.54	GOOD	YES
Buhangin	CABANTIAN	MLCSP	350	20,800.00	5.20	108,112.63	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	350	20,800.00	13.07	271,817.00	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	350	20,800.00	542.95	11,293,323.80	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	350	20,800.00	177.14	3,684,613.76	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	350	20,800.00	798.81	16,615,288.96	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	350	20,800.00	274.94	5,718,853.86	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	350	20,800.00	516.07	10,734,313.79	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	350	20,800.00	177.17	3,685,130.25	GOOD	YES
Poblacion	19-B	MLCSP	600	40,100.00	78.68	3,155,219.81	GOOD	YES
Poblacion	19-B	MLCSP	600	40,100.00	16.18	648,684.70	GOOD	YES
Poblacion	19-B	MLCSP	600	40,100.00	10.58	424,069.21	GOOD	YES
Poblacion	19-B	MLCSP	600	40,100.00	191.74	7,688,611.26	GOOD	YES
Poblacion	16-B	PVC	150	11,200.00	172.80	1,935,357.85	GOOD	YES
Agdao	PACIANO BANGOY	PVC	150	11,200.00	25.58	286,538.24	GOOD	YES
Poblacion	16-B	PVC	150	11,200.00	0.97	10,809.50	GOOD	YES
Agdao	PACIANO BANGOY	PVC	150	11,200.00	171.17	1,917,049.11	GOOD	YES
Agdao	WILFREDO AQUINO	MLCSP	300	19,100.00	3.66	69,828.95	GOOD	YES
Poblacion	5-A	MLCSP	300	19,100.00	115.18	2,199,845.15	GOOD	YES
Poblacion	14-B	MLCSP	400	23600	59.98	1,415,483.32	GOOD	YES
Agdao	AGDAO PROPER	PVC	200	12,500.00	20.10	251,279.71	GOOD	YES
Poblacion	40-D	MLCSP	250	17,700.00	283.77	5,022,804.49	GOOD	YES
Poblacion	2-A	MLCSP	250	17,700.00	7.32	129,588.49	GOOD	YES

Table LU-41. Lifeline Utilities, Level III Water System, Exposure Estimation Table for Flood, Davao City

ADMINISTRATIVE DIVISION	BARANGAY	EXPOSURE					SENSITIVITY	
		TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Buhangin	BUHANGIN	MLCSP	400	23600	38.73	913,952.90	GOOD	YES
Agdao	WILFREDO AQUINO	PVC	150	11,200.00	15.86	177,609.43	GOOD	YES
Agdao	PACIANO BANGOY	PVC	150	11,200.00	5.45	61,000.44	GOOD	YES
Agdao	AGDAO PROPER	MLCSP	400	23600	421.48	9,947,033.00	GOOD	YES
Talomo	MA-A	MLCSP	750	48,500.00	37.27	1,807,495.21	GOOD	YES
Talomo	MA-A	MLCSP	750	48,500.00	126.08	6,114,738.65	GOOD	YES
Poblacion	2-A	MLCSP	750	48,500.00	2.51	121,618.06	GOOD	YES
Poblacion	2-A	MLCSP	750	48,500.00	100.64	4,881,152.37	GOOD	YES
Talomo	BUCANA	MLCSP	750	48,500.00	145.29	7,046,671.07	GOOD	YES
Talomo	BUCANA	MLCSP	750	48,500.00	162.06	7,860,024.19	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	208.98	2,340,545.48	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	350	20,800.00	23.71	493,220.95	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	350	20,800.00	206.38	4,292,659.76	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	350	20,800.00	339.14	7,054,117.92	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	300	19,100.00	4.41	84,321.31	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	300	19,100.00	8.71	166,445.55	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	48.42	542,262.94	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	250	17,700.00	470.59	8,329,408.68	GOOD	YES
Buhangin	CABANTIAN	MLCSP	350	20,800.00	6.12	127,307.73	GOOD	YES
Buhangin	BUHANGIN	MLCSP	350	20,800.00	15.38	319,860.68	GOOD	YES
Buhangin	A. ANGLIONGTO	MLCSP	350	20,800.00	13.91	289,354.82	GOOD	YES
Buhangin	A. ANGLIONGTO	MLCSP	350	20,800.00	7.64	158,946.15	GOOD	YES
Talomo	MA-A	MLCSP	350	20,800.00	178.52	3,713,236.87	GOOD	YES
Talomo	MA-A	MLCSP	400	23600	40.19	948,374.19	GOOD	YES
Talomo	MA-A	MLCSP	450	24,300.00	35.26	856,782.33	GOOD	YES
Talomo	MA-A	MLCSP	500	33,200.00	22.76	755,489.19	GOOD	YES
Buhangin	PAMPANGA	MLCSP	300	19,100.00	40.83	779,759.84	GOOD	YES
Buhangin	SASA	MLCSP	250	17,700.00	212.79	3,766,457.38	GOOD	YES
Buhangin	SASA	MLCSP	250	17,700.00	61.19	1,082,991.95	GOOD	YES
Buhangin	BUHANGIN	MLCSP	600	40,100.00	21.48	861,155.67	GOOD	YES
Poblacion	35-D	PVC	200	12,500.00	10.88	135,940.35	GOOD	YES
Talomo	MA-A	MLCSP	800	52,800.00	124.31	6,563,342.88	GOOD	YES

Table LU-41. Lifeline Utilities, Level III Water System, Exposure Estimation Table for Flood, Davao City

EXPOSURE							SENSITIVITY	
ADMINISTRATIVE DIVISION	BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Talomo	MATINA PANGI	MLCSP	800	52,800.00	163.78	8,647,760.47	GOOD	YES
Talomo	MATINA PANGI	MLCSP	800	52,800.00	644.38	34,023,354.13	GOOD	YES
Talomo	MATINA PANGI	MLCSP	800	52,800.00	65.99	3,484,287.76	GOOD	YES
Talomo	MATINA PANGI	MLCSP	800	52,800.00	158.75	8,381,934.80	GOOD	YES
Talomo	MATINA PANGI	MLCSP	800	52,800.00	9.89	522,181.24	GOOD	YES
Talomo	MATINA PANGI	MLCSP	800	52,800.00	186.78	9,861,865.53	GOOD	YES
Buhangin	PAMPANGA	MLCSP	300	19,100.00	43.80	836,568.99	GOOD	YES
Poblacion	12-B	PVC	100	11,000.00	0.78	8,573.57	GOOD	YES
Talomo	TALOMO	MLCSP	450	24,300.00	5.47	132,904.86	GOOD	YES
Talomo	TALOMO	MLCSP	450	24,300.00	88.89	2,160,046.41	GOOD	YES
Talomo	TALOMO	MLCSP	450	24,300.00	2.35	57,077.72	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	350	20,800.00	524.62	10,912,108.86	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	350	20,800.00	99.60	2,071,647.35	GOOD	YES
Talomo	MATINA APLAYA	MLCSP	350	20,800.00	98.18	2,042,215.47	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	350	20,800.00	7.81	162,453.17	GOOD	YES
Buhangin	TIGATTO	MLCSP	400	23600	64.00	1,510,483.69	GOOD	YES
Buhangin	TIGATTO	MLCSP	400	23600	458.47	10,819,788.44	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	250	17,700.00	5.64	99,843.41	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	250	17,700.00	8.63	152,770.88	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	250	17,700.00	11.23	198,832.14	GOOD	YES
Buhangin	PAMPANGA	MLCSP	300	19,100.00	3.45	65,948.62	GOOD	YES
Toril	LUBOGAN	MLCSP	250	17,700.00	257.48	4,557,482.68	GOOD	YES
Toril	LUBOGAN	MLCSP	250	17,700.00	47.96	848,958.43	GOOD	YES
Toril	LUBOGAN	MLCSP	250	17,700.00	12.19	215,693.75	GOOD	YES
Toril	LUBOGAN	MLCSP	250	17,700.00	137.93	2,441,444.09	GOOD	YES
Baguio	MALAGOS	MLCSP	250	17,700.00	136.91	2,423,311.85	GOOD	YES
Buhangin	SASA	MLCSP	250	17,700.00	28.84	510,430.02	GOOD	YES
Buhangin	SASA	MLCSP	250	17,700.00	24.48	433,259.68	GOOD	YES
Bunawan	PANACAN	MLCSP	250	17,700.00	152.17	2,693,321.57	GOOD	YES
Bunawan	PANACAN	MLCSP	250	17,700.00	3.35	59,246.14	GOOD	YES
Buhangin	SASA	MLCSP	250	17,700.00	1.65	29,120.39	GOOD	YES
Bunawan	PANACAN	MLCSP	250	17,700.00	33.39	590,916.81	GOOD	YES

Table LU-41. Lifeline Utilities, Level III Water System, Exposure Estimation Table for Flood, Davao City

EXPOSURE							SENSITIVITY	
ADMINISTRATIVE DIVISION	BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Bunawan	PANACAN	MLCSP	250	17,700.00	85.39	1,511,413.01	GOOD	YES
Bunawan	PANACAN	MLCSP	250	17,700.00	95.73	1,694,338.97	GOOD	YES
Bunawan	PANACAN	MLCSP	250	17,700.00	75.91	1,343,694.52	GOOD	YES
Toril	LUBOGAN	MLCSP	250	17,700.00	227.10	4,019,597.92	GOOD	YES
Toril	CROSSING BAYABAS	MLCSP	250	17,700.00	127.65	2,259,349.96	GOOD	YES
Tugbok	TUGBOK	MLCSP	500	33,200.00	248.99	8,266,620.36	GOOD	YES
Tugbok	TUGBOK	MLCSP	250	17,700.00	79.53	1,407,668.34	GOOD	YES
Tugbok	TUGBOK	MLCSP	250	17,700.00	207.01	3,664,051.20	GOOD	YES
Tugbok	MINTAL	MLCSP	350	20,800.00	88.59	1,842,749.98	GOOD	YES
Tugbok	MINTAL	MLCSP	350	20,800.00	24.58	511,194.16	GOOD	YES
Tugbok	MINTAL	MLCSP	350	20,800.00	22.63	470,717.04	GOOD	YES
Tugbok	MINTAL	MLCSP	350	20,800.00	159.72	3,322,197.39	GOOD	YES
Talomo	CATALUNAN GRANDE	MLCSP	350	20,800.00	41.16	856,087.73	GOOD	YES
Talomo	CATALUNAN GRANDE	MLCSP	350	20,800.00	272.28	5,663,500.28	GOOD	YES
Talomo	CATALUNAN GRANDE	MLCSP	350	20,800.00	100.91	2,098,930.41	GOOD	YES
Talomo	CATALUNAN GRANDE	MLCSP	350	20,800.00	14.04	292,068.32	GOOD	YES
Tugbok	TUGBOK	MLCSP	500	33,200.00	156.72	5,203,127.42	GOOD	YES
Tugbok	TUGBOK	MLCSP	500	33,200.00	505.59	16,785,479.32	GOOD	YES
Tugbok	TUGBOK	MLCSP	500	33,200.00	308.15	10,230,710.59	GOOD	YES
Talomo	CATALUNAN GRANDE	MLCSP	350	20,800.00	12.54	260,847.13	GOOD	YES
Tugbok	MINTAL	MLCSP	500	33,200.00	545.75	18,118,752.26	GOOD	YES
Tugbok	MINTAL	MLCSP	500	33,200.00	10.49	348,357.30	GOOD	YES
Tugbok	STO. NIÑERO	MLCSP	350	20,800.00	163.39	3,398,553.28	GOOD	YES
Tugbok	STO. NIÑERO	MLCSP	350	20,800.00	279.44	5,812,349.43	GOOD	YES
Tugbok	MINTAL	MLCSP	350	20,800.00	91.03	1,893,510.62	GOOD	YES
Tugbok	MINTAL	MLCSP	350	20,800.00	540.72	11,246,887.38	GOOD	YES
Tugbok	MINTAL	MLCSP	500	33,200.00	11.85	393,442.70	GOOD	YES
Talomo	CATALUNAN GRANDE	MLCSP	350	20,800.00	118.21	2,458,763.58	GOOD	YES
Talomo	CATALUNAN GRANDE	MLCSP	350	20,800.00	8.91	185,268.38	GOOD	YES
Tugbok	TUGBOK	MLCSP	250	17,700.00	79.26	1,402,971.03	GOOD	YES
Tugbok	TUGBOK	MLCSP	250	17,700.00	20.77	367,714.98	GOOD	YES
Tugbok	TUGBOK	MLCSP	500	33,200.00	304.69	10,115,780.21	GOOD	YES

Table LU-41. Lifeline Utilities, Level III Water System, Exposure Estimation Table for Flood, Davao City

EXPOSURE							SENSITIVITY	
ADMINISTRATIVE DIVISION	BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Tugbok	TUGBOK	MLCSP	500	33,200.00	77.19	2,562,798.95	GOOD	YES
Tugbok	TUGBOK	MLCSP	500	33,200.00	214.48	7,120,694.94	GOOD	YES
Tugbok	TUGBOK	PVC	150	11,200.00	36.45	408,196.63	GOOD	YES
Tugbok	MINTAL	PVC	200	12,500.00	101.31	1,266,313.19	GOOD	YES
Tugbok	MINTAL	PVC	200	12,500.00	310.22	3,877,728.55	GOOD	YES
Tugbok	MINTAL	PVC	200	12,500.00	192.23	2,402,869.93	GOOD	YES
Tugbok	STO. NIÑO	PVC	150	11,200.00	7.81	87,457.21	GOOD	YES
Tugbok	TUGBOK	PVC	150	11,200.00	5.07	56,766.60	GOOD	YES
Buhangin	TIGATTO	MLCSP	400	23600	169.84	4,008,210.45	GOOD	YES
Buhangin	TIGATTO	MLCSP	400	23600	733.65	17,314,053.37	GOOD	YES
Buhangin	BUHANGIN	MLCSP	1000	62,400.00	33.44	2,086,452.19	GOOD	YES
Bunawan	PANACAN	MLCSP	250	17,700.00	35.82	633,934.48	GOOD	YES
Bunawan	PANACAN	MLCSP	250	17,700.00	44.03	779,381.95	GOOD	YES
Poblacion	6-A	MLCSP	600	40,100.00	9.89	396,689.78	GOOD	YES
Buhangin	PAMPANGA	MLCSP	300	19,100.00	18.37	350,812.53	GOOD	YES
Buhangin	SASA	MLCSP	300	19,100.00	73.23	1,398,724.05	GOOD	YES
Buhangin	SASA	MLCSP	300	19,100.00	96.55	1,844,190.05	GOOD	YES
Buhangin	PAMPANGA	MLCSP	300	19,100.00	65.98	1,260,178.77	GOOD	YES
Talomo	TALOMO	MLCSP	450	24,300.00	95.44	2,319,147.22	GOOD	YES
Talomo	TALOMO	MLCSP	450	24,300.00	159.31	3,871,332.57	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	450	24,300.00	35.31	858,112.28	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	450	24,300.00	186.83	4,539,970.42	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	450	24,300.00	62.16	1,510,400.83	GOOD	YES
Tugbok	LOS AMIGOS	MLCSP	350	20,800.00	51.37	1,068,510.91	GOOD	YES
Tugbok	BIAO GUIANGA	MLCSP	350	20,800.00	21.19	440,854.58	GOOD	YES
Calinan	RIVERSIDE	MLCSP	350	20,800.00	839.64	17,464,409.89	GOOD	YES
Tugbok	ULA	MLCSP	250	17,700.00	1,363.58	24,135,298.00	GOOD	YES
Tugbok	ULA	MLCSP	250	17,700.00	383.69	6,791,392.57	GOOD	YES
Tugbok	TACUNAN	MLCSP	250	17,700.00	148.72	2,632,342.13	GOOD	YES
Tugbok	TACUNAN	MLCSP	250	17,700.00	239.96	4,247,245.77	GOOD	YES
Tugbok	BIAO ESCUELA	MLCSP	300	19,100.00	3.29	62,878.28	GOOD	YES
Tugbok	BIAO GUIANGA	MLCSP	300	19,100.00	1,037.62	19,818,591.58	GOOD	YES

Table LU-41. Lifeline Utilities, Level III Water System, Exposure Estimation Table for Flood, Davao City

EXPOSURE							SENSITIVITY	
ADMINISTRATIVE DIVISION	BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Tugbok	BIAO ESCUELA	MLCSP	300	19,100.00	139.87	2,671,471.29	GOOD	YES
Tugbok	BIAO ESCUELA	MLCSP	300	19,100.00	956.66	18,272,186.55	GOOD	YES
Tugbok	BIAO ESCUELA	MLCSP	300	19,100.00	18.93	361,573.30	GOOD	YES
Tugbok	BIAO ESCUELA	MLCSP	350	20,800.00	3.96	82,416.41	GOOD	YES
Tugbok	BIAO ESCUELA	MLCSP	350	20,800.00	19.93	414,456.62	GOOD	YES
Tugbok	BIAO ESCUELA	MLCSP	350	20,800.00	251.49	5,230,935.92	GOOD	YES
Talomo	MATINA PANGI	MLCSP	250	17,700.00	223.69	3,959,348.95	GOOD	YES
Talomo	MATINA PANGI	MLCSP	250	17,700.00	231.79	4,102,767.12	GOOD	YES
Poblacion	19-B	MLCSP	600	40,100.00	26.82	1,075,388.38	GOOD	YES
Tugbok	MINTAL	MLCSP	500	33,200.00	34.60	1,148,758.95	GOOD	YES
Bunawan	PANACAN	MLCSP	300	19,100.00	0.85	16,278.91	GOOD	YES
Bunawan	PANACAN	MLCSP	300	19,100.00	23.39	446,753.87	GOOD	YES
Bunawan	PANACAN	MLCSP	300	19,100.00	189.45	3,618,584.15	GOOD	YES
Talomo	MATINA APLAYA	PVC	150	11,200.00	18.07	202,382.31	GOOD	YES
Talomo	MATINA APLAYA	PVC	150	11,200.00	24.03	269,095.96	GOOD	YES
Buhangin	MANDUG	MLCSP	300	19,100.00	71.39	1,363,508.51	GOOD	YES
Buhangin	TIGATTO	MLCSP	400	23600	25.15	593,437.36	GOOD	YES
Buhangin	TIGATTO	MLCSP	400	23600	52.58	1,240,867.61	GOOD	YES
Buhangin	MANDUG	MLCSP	400	23600	90.74	2,141,406.19	GOOD	YES
Buhangin	MANDUG	MLCSP	400	23600	555.14	13,101,236.85	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	400	23600	93.70	2,211,295.05	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	400	23600	45.16	1,065,798.62	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	400	23600	215.61	5,088,289.75	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	400	23600	163.75	3,864,400.08	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	400	23600	79.14	1,867,760.13	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	600	40,100.00	83.62	3,353,318.39	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	600	40,100.00	64.71	2,594,857.85	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	600	40,100.00	228.65	9,168,990.18	GOOD	YES
Talomo	BAGO APLAYA	MLCSP	600	40,100.00	158.54	6,357,490.38	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	250	17,700.00	467.45	8,273,886.01	GOOD	YES
Talomo	MATINA APLAYA	MLCSP	250	17,700.00	576.96	10,212,176.05	GOOD	YES
Talomo	MATINA APLAYA	MLCSP	250	17,700.00	875.00	15,487,428.48	GOOD	YES

Table LU-41. Lifeline Utilities, Level III Water System, Exposure Estimation Table for Flood, Davao City

EXPOSURE							SENSITIVITY	
ADMINISTRATIVE DIVISION	BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Talomo	MATINA APLAYA	MLCSP	250	17,700.00	45.78	810,386.24	GOOD	YES
Buhangin	COMMUNAL	MLCSP	350	20,800.00	4.28	89,079.81	GOOD	YES
Buhangin	CABANTIAN	MLCSP	450	24,300.00	21.56	523,983.85	GOOD	YES
Tugbok	TUGBOK	MLCSP	500	33,200.00	786.72	26,119,095.17	GOOD	YES
Tugbok	MINTAL	MLCSP	500	33,200.00	103.31	3,429,775.79	GOOD	YES
Bunawan	PANACAN	MLCSP	400	23600	61.10	1,441,904.93	GOOD	YES
Bunawan	ILANG	MLCSP	400	23600	32.40	764,634.75	GOOD	YES
Bunawan	ILANG	MLCSP	400	23600	19.49	459,886.66	GOOD	YES
Bunawan	TIBUNGCO	MLCSP	400	23600	25.62	604,638.28	GOOD	YES
Talomo	CATALUNAN GRANDE	MLCSP	350	20,800.00	6.88	143,111.50	GOOD	YES
Talomo	CATALUNAN GRANDE	MLCSP	350	20,800.00	46.53	967,901.25	GOOD	YES
Talomo	CATALUNAN GRANDE	MLCSP	350	20,800.00	47.91	996,577.17	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	250	17,700.00	277.55	4,912,575.30	GOOD	YES
Talomo	MATINA CROSSING	MLCSP	250	17,700.00	244.28	4,323,730.43	GOOD	YES
Tugbok	TUGBOK	MLCSP	250	17,700.00	177.45	3,140,926.42	GOOD	YES
Tugbok	TUGBOK	MLCSP	250	17,700.00	630.04	11,151,705.86	GOOD	YES
Tugbok	TUGBOK	MLCSP	250	17,700.00	91.68	1,622,817.75	GOOD	YES
Calinan	CALINAN	PVC	200	12,500.00	47.96	599,502.55	GOOD	YES
Calinan	CALINAN	PVC	200	12,500.00	16.51	206,343.98	GOOD	YES
Calinan	CALINAN	PVC	200	12,500.00	79.38	992,298.79	GOOD	YES
Calinan	CALINAN	PVC	200	12,500.00	169.11	2,113,890.18	GOOD	YES
Toril	BANKAS HEIGHTS	MLCSP	250	17,700.00	21.49	380,349.78	GOOD	YES
Toril	BANKAS HEIGHTS	MLCSP	250	17,700.00	4.69	82,972.29	GOOD	YES
Buhangin	TIGATTO	MLCSP	400	23600	368.62	8,699,321.27	GOOD	YES
Buhangin	TIGATTO	MLCSP	400	23600	478.61	11,295,116.96	GOOD	YES
Tugbok	MINTAL	MLCSP	250	17,700.00	414.87	7,343,195.66	GOOD	YES
Tugbok	MINTAL	MLCSP	250	17,700.00	440.61	7,798,877.67	GOOD	YES
Poblacion	6-A	MLCSP	300	19,100.00	83.45	1,593,830.87	GOOD	YES
Tugbok	BIAO GUIANGA	MLCSP	350	20,800.00	1,037.20	21,573,840.20	GOOD	YES
Talomo	TALOMO	MLCSP	750	48,500.00	150.92	7,319,424.21	GOOD	YES
Talomo	TALOMO	MLCSP	750	48,500.00	277.64	13,465,694.50	GOOD	YES
Talomo	TALOMO	MLCSP	750	48,500.00	111.56	5,410,901.81	GOOD	YES

Table LU-41. Lifeline Utilities, Level III Water System, Exposure Estimation Table for Flood, Davao City

EXPOSURE							SENSITIVITY	
ADMINISTRATIVE DIVISION	BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Talomo	TALOMO	MLCSP	750	48,500.00	3.04	147,497.48	GOOD	YES
Talomo	TALOMO	MLCSP	350	20,800.00	39.38	819,088.14	GOOD	YES
Talomo	TALOMO	MLCSP	350	20,800.00	569.71	11,850,023.60	GOOD	YES
Talomo	TALOMO	MLCSP	250	17,700.00	16.21	287,004.35	GOOD	YES
Talomo	TALOMO	MLCSP	350	20,800.00	5.75	119,647.21	GOOD	YES
Talomo	TALOMO	MLCSP	350	20,800.00	437.34	9,096,746.13	GOOD	YES
Talomo	TALOMO	MLCSP	250	17,700.00	328.00	5,805,524.72	GOOD	YES
Talomo	TALOMO	MLCSP	250	17,700.00	0.61	10,821.60	GOOD	YES
Tugbok	BIAO GUIANGA	MLCSP	350	20,800.00	417.93	8,692,862.11	GOOD	YES
Tugbok	BIAO ESCUELA	MLCSP	350	20,800.00	139.93	2,910,443.47	GOOD	YES
Tugbok	BIAO ESCUELA	MLCSP	350	20,800.00	625.51	13,010,643.41	GOOD	YES
Bunawan	PANACAN	MLCSP	300	19,100.00	29.37	560,922.08	GOOD	YES
Talomo	CATALUNAN PEQUEÑO	MLCSP	350	20,800.00	2.29	47,612.33	GOOD	YES
Talomo	MA-A	MLCSP	800	52,800.00	120.09	6,340,703.79	GOOD	YES
Buhangin	TIGATTO	MLCSP	800	52,800.00	83.03	4,383,792.77	GOOD	YES
Buhangin	TIGATTO	MLCSP	800	52,800.00	97.57	5,151,941.35	GOOD	YES
Buhangin	BUHANGIN	MLCSP	800	52,800.00	34.49	1,821,190.71	GOOD	YES
Talomo	MA-A	MLCSP	800	52,800.00	87.21	4,604,804.58	GOOD	YES
Talomo	TALOMO	MLCSP	700	44,200.00	92.24	4,077,082.59	GOOD	YES
Talomo	TALOMO	MLCSP	350	20,800.00	977.52	20,332,371.06	GOOD	YES
Buhangin	BUHANGIN	MLCSP	400	23600	245.65	5,797,296.62	GOOD	YES
Agdao	PACIANO BANGOY	PVC	150	11,200.00	71.18	797,268.43	GOOD	YES
Agdao	PACIANO BANGOY	PVC	150	11,200.00	2.02	22,571.60	GOOD	YES
Agdao	AGDAO PROPER	MLCSP	400	23600	24.87	586,835.02	GOOD	YES
Poblacion	19-B	MLCSP	600	40,100.00	0.36	14,561.44	GOOD	YES
Buhangin	BUHANGIN	MLCSP	1000	62,400.00	30.90	1,928,263.28	GOOD	YES
Talomo	MATINA APLAYA	MLCSP	250	17,700.00	341.23	6,039,772.22	GOOD	YES
Tugbok	STO. NIÑO	MLCSP	350	20,800.00	520.74	10,831,464.74	GOOD	YES
Tugbok	LOS AMIGOS	MLCSP	250	17,700.00	8.80	155,795.50	GOOD	YES
Tugbok	LOS AMIGOS	MLCSP	250	17,700.00	2.67	47,241.74	GOOD	YES
Tugbok	LOS AMIGOS	MLCSP	250	17,700.00	2.22	39,310.16	GOOD	YES
Tugbok	LOS AMIGOS	MLCSP	250	17,700.00	260.44	4,609,772.90	GOOD	YES

Table LU-41. Lifeline Utilities, Level III Water System, Exposure Estimation Table for Flood, Davao City

EXPOSURE							SENSITIVITY	
ADMINISTRATIVE DIVISION	BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Tugbok	LOS AMIGOS	MLCSP	250	17,700.00	2.08	36,790.58	GOOD	YES
Tugbok	LOS AMIGOS	MLCSP	250	17,700.00	553.20	9,791,610.28	GOOD	YES
Tugbok	LOS AMIGOS	MLCSP	250	17,700.00	359.81	6,368,712.51	GOOD	YES
Talomo	BAGO GALLERA	MLCSP	250	17,700.00	0.03	448.70	GOOD	YES
Poblacion	39-D	MLCSP	300	19,100.00	0.51	9,760.61	GOOD	YES
Agdao	WILFREDO AQUINO	MLCSP	300	19,100.00	0.37	6,983.75	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	0.41	4,612.83	GOOD	YES
Talomo	MATINA CROSSING	PVC	150	11,200.00	0.41	4,612.83	GOOD	YES
Agdao	GOV. VICENTE DUTERTE	MLCSP	400	23600	0.31	7,208.82	GOOD	YES
Poblacion	2-A	MLCSP	750	48,500.00	0.06	3,073.25	GOOD	YES
Poblacion	2-A	MLCSP	750	48,500.00	0.06	3,073.25	GOOD	YES
Tugbok	TACUNAN	MLCSP	250	17,700.00	1.87	33,145.93	GOOD	YES
Tugbok	TACUNAN	MLCSP	250	17,700.00	1.87	33,145.93	GOOD	YES
Bunawan	PANACAN	MLCSP	300	19,100.00	1.22	23,271.84	GOOD	YES
Buhangin	MANDUG	MLCSP	400	23600	2.89	68,126.58	GOOD	YES
Buhangin	MANDUG	MLCSP	400	23600	2.89	68,126.58	GOOD	YES
Buhangin	COMMUNAL	MLCSP	350	20,800.00	26.77	556,909.62	GOOD	YES
Buhangin	COMMUNAL	MLCSP	350	20,800.00	26.77	556,909.62	GOOD	YES
Buhangin	COMMUNAL	MLCSP	350	20,800.00	33.32	693,001.54	GOOD	YES

Exposure Estimation for DCWD Production Wells

Six wells are highly susceptible to flood which individually cost ₱6,500,000.00. Majority of these wells have vertical turbine pump with good condition and an existing hazard resistant design.

Table LU-42. Lifeline Utilities, Level III DCWD Production Wells, Exposure Estimation Table for Flood, Davao City

EXPOSURE				SENSITIVITY		
LOCATION	FLOOD	PUMP TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Km. 7, Talomo Sump Bangkal, Brgy. Talomo	HF	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
UUHSA, Brgy. Talomo	MF	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Km. 8 Ulas, Brgy. Talomo	MF	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Puan Junction, Brgy. Talomo	MF	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	HF	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Catotal Subdivision near Block 22, Brgy. Bago Aplaya	HF	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Gallera de Oro Subdivision near Block 8, Brgy. Bago Aplaya	MF	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Purok 6, Sta Cruz Bago Gallera Road fronting Spring Valley, Brgy. Bago Gallera	MF	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Reldo Village, Acacia St., Brgy. Bago Gallera	MF	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Along Apo Golf Road, Brgy. Bago Aplaya	MF	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Along Libby Road in front of San Lorenzo Village, Brgy. Bago Gallera	MF	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Farland Extension near Block 2, Brgy. Dumoy	MF	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Purok 6, Brgy. Baliok	MF	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES
Mangahan Bridge Alambre, Toril	HF	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Bangcas Heights Lubogan, Toril	MF	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES
Sitio Mahayahay, Brgy. Tugbok	MF	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES
Sitio Mahayahay, Brgy. Tugbok	MF	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES
Tugbok Quarry, Along Davao Bukidnon Road, Brgy. Tugbok	HF	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Davao - Bukidnon Road, Upper Riverside	MF	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES
Los Amigos	VHF	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES

Exposure Estimation for Cell Sites

All cell sites has an estimated value of ₱12-15 million. The area occupied is 300 square meters.

Table LU-43. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Flood, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
GLOBE TELECOM, INC.	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Centerpoint Mall, Brgy. Matina Crossing,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Peralta Property, Seminary Rd., Brgy Catalunan Grande Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Mc Arthur Hiway, Brgy. 74 -A, Matina Crossing	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Magno Prop., No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-43. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Flood, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
DIGITEL MOBILE PHILIPPINES, INC.	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Centerpoint Mall, Brgy. Matina Crossing,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Peralta Property, Seminary Rd., Brgy Catalunan Grande Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Mc Arthur Hiway, Brgy. 74 -A, Matina Crossing	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Magno Prop., No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	#88 Maya St., Brgy. 76A, Ecoland, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Crossing Puan, McArthur Highway, Brgy. Bago Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-43. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Flood, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
DIGITEL MOBILE PHILIPPINES, INC.	Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Village, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Village, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Ortis Road, Ulas, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Ortis Road, Ulas, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Upper Rapnaga, Bago Gallera Talumo Dist.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Purok 16, Sitio Durian, Brgy. Bago Gallera	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Upper Rapnaga, Bago Gallera Talumo Dist.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Sandawa, McArthur Highway, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Sandawa, McArthur Highway, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Km 12.5, Talomo Dist, Brgy. Catalunan Pequeño, Davao City, Davao del Sur	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Exposure Estimation for Roads

Out of all the road segments, Calinan-Baguio-Cadalian Road has the highest value worth Php 583,079 attributed to the Php 35,000,000 replacement cost and the exposed length of 16.65 kilometers. Other roads which have segments identified with high value of replacement cost is the Carlos P. Garcia Highway, Davao Bukidnon Road, Eden-Tagurano Road, Fatima-Malabog Road, Mabuhay-Pañalum Paquibato Road and Toril Bayabas-Eden Road.

Table LU– 44. Lifeline Utilities, Roads, Exposure Estimation Table for Landslide, Davao City

EXPOSURE				SENSITIVITY		
Road Name	Exposed length (Linear Kilometers)	Replacement Cost per Linear Kilometer	Value of Exposed Lifeline	Surface Type	Existing Condition	Hazard Resistant Design
2nd Avenue	0.2056	60,000,000	12,337,800	concrete	good	Yes
5th Ave.	0.2043	60,000,000	12,260,640	concrete	good	Yes
Agdao Flyover	0.4734	56,000,000	26,508,216	concrete	good	Yes
Bonifacio Rotonda	0.0839	56,000,000	4,697,403	concrete	good	Yes
Buhangin Road	1.5150	56,000,000	84,839,440	concrete	good	Yes
Calinan-Baguio-Cadalian Road	0.8466	35,000,000	29,632,050	concrete	good	Yes
Calinan-Baguio-Cadalian Road	16.6594	35,000,000	583,079,000	concrete	good	Yes
Carlos P. Garcia Highway	4.9353	60,000,000	296,118,000	concrete	good	Yes
Carlos P. Garcia Highway	0.6098	60,000,000	36,587,100	concrete	good	Yes
Carlos P. Garcia Highway	12.7329	60,000,000	763,974,000	concrete	good	Yes
Claro M. Recto St.	1.2152	56,000,000	68,050,080	concrete	good	Yes
Dacudao Avenue	1.6653	56,000,000	93,256,800	concrete	good	Yes
Davao-Bukidnon Road	0.1525	40,000,000	6,100,120	concrete	good	Yes
Davao-Bukidnon Road	0.0305	40,000,000	1,219,384	concrete	good	Yes
Davao-Bukidnon Road	0.1419	40,000,000	5,676,080	concrete	good	Yes
Davao-Bukidnon Road	0.0376	40,000,000	1,505,592	concrete	good	Yes
Davao-Bukidnon Road	0.1442	40,000,000	5,769,840	concrete	good	Yes
Davao-Bukidnon Road	0.0636	40,000,000	2,544,348	concrete	good	Yes
Davao-Bukidnon Road	15.1655	40,000,000	606,620,000	concrete	good	Yes
Davao-Bukidnon Road	17.5150	40,000,000	700,600,000	concrete	good	Yes
Davao-Bukidnon Road	31.0101	40,000,000	1,240,404,000	concrete	good	Yes
Davao - Agusan Highway	20.4034	56,000,000	1,142,590,400	concrete	good	Yes
Don Julian Rodriguez Ave. (Maa Road)	4.9536	28,000,000	138,699,400	concrete	good	Yes
Dumanlas Rd.	0.3559	56,000,000	19,931,128	concrete	good	Yes
Eden-Tagurano Road	0.1042	35,000,000	3,646,895	concrete	good	Yes

Table LU-44. Lifeline Utilities, Roads, Exposure Estimation Table for Landslide, Davao City

EXPOSURE				SENSITIVITY		
Road Name	Exposed length (Linear Kilometers)	Replacement Cost per Linear Kilometer	Value of Exposed Lifeline	Surface Type	Existing Condition	Hazard Resistant Design
Eden-Tagurano Road	0.3792	35,000,000	13,273,470	concrete	good	Yes
Eden-Tagurano Road	1.0984	35,000,000	38,444,700	concrete	good	Yes
Fatima-Malabog Road	8.8631	54,000,000	478,604,700	concrete	good	Yes
Fatima-Malabog Road	8.7231	54,000,000	471,045,780	concrete	good	Yes
Fatima-Malabog Road	0.3998	54,000,000	21,589,740	concrete	good	Yes
Florentino Torres St	1.6838	65,000,000	109,443,750	concrete	good	Yes
Friendship Rd.	0.1742	60,000,000	10,453,740	concrete	good	Yes
Inawayan-Baracatan Road	1.8346	35,000,000	64,212,050	concrete	good	Yes
Inawayan-Baracatan Road	5.2520	35,000,000	183,818,600	concrete	good	Yes
Inawayan-Baracatan Road	6.0943	35,000,000	213,299,100	concrete	good	Yes
J.P. Cabaguio Avenue	1.4184	56,000,000	79,428,720	concrete	good	Yes
Jose P. Laurel Avenue	6.1138	56,000,000	342,370,000	concrete	good	Yes
Leon Garcia St.	0.6511	49,000,000	31,904,733	concrete	good	Yes
Libby Road	6.8076	25,000,000	170,191,000	concrete	good	Yes
Maa Radio Station St.	0.4738	28,000,000	13,265,280	concrete	good	Yes
Mabuhay-Pañalum-Paquibato Road	0.4214	44,000,000	18,542,700	concrete	good	Yes
Mabuhay-Pañalum-Paquibato Road	1.4726	44,000,000	64,793,080	concrete	good	Yes
Mabuhay-Pañalum-Paquibato Road	5.0892	44,000,000	223,923,920	concrete	good	Yes
Manggahan St.	1.9850	25,000,000	49,626,000	concrete	good	Yes
Mc. Arthur Highway	21.4158	56,000,000	1,199,284,800	concrete	good	Yes
Old Airport Road	1.6949	60,000,000	101,694,000	concrete	good	Yes
Pakiputan Wharf Road	0.5062	56,000,000	28,345,632	concrete	good	Yes
Pichon St.	0.9460	56,000,000	52,974,208	concrete	good	Yes
Quezon Boulevard	4.2215	86,000,000	363,048,140	concrete	good	Yes
Quimpo Boulevard	4.4443	50,000,000	222,214,000	concrete	good	Yes
Quirino Avenue	2.0325	40,000,000	81,299,200	concrete	good	Yes
Rafael Castillo St.	3.1795	86,000,000	273,439,580	concrete	good	Yes
Ramon Magsaysay Ave.	1.3741	60,000,000	82,446,600	concrete	good	Yes
Sta. Ana Ave.	1.2910	60,000,000	77,460,600	concrete	good	Yes
Toril-Bayabas-Eden Road	0.8748	30,000,000	26,245,020	concrete	good	Yes
Toril-Bayabas-Eden Road	4.3880	30,000,000	131,640,600	concrete	good	Yes
Toril-Bayabas-Eden Road	7.3193	30,000,000	219,579,900	concrete	good	Yes

Exposure Estimation for Bridges

Agdao Flyover has the highest value with a total cost of Php 754, 57,000 for an exposed length of 382.98 meters. The second highest is the Buhangin Flyover with a total value of Php 585,684,000 for an exposed length of 488.07 meters. Bolton Bridge 2 is the third highest with the value of Php 236,256,000 for an exposed length of 196.80 meters.

Agdao Flyover has the highest value with a total cost of Php 754, 57,000 for an exposed length of 382.98 meters. The second highest is the Buhangin Flyover with a total value of Php 585,684,000 for an exposed length of 488.07 meters. Bolton Bridge 2 is the third highest with the value of Php 236,256,000 for an exposed length of 196.80 meters.

Table LU-45. Lifeline Utilities, Bridges, Exposure Estimation Table for Landslide, Davao City

Name	EXPOSURE			SENSITIVITY			ADAPTIVE CAPACITY	
	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Value of Exposed Lifeline	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Agdao Flyover	382.98	1,200,000	459,576,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Angalan Br. I	12.10	1,200,000	14,520,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Angalan Br. II	11.92	1,200,000	14,304,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.

Table LU-45. Lifeline Utilities, Bridges, Exposure Estimation Table for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Name	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Value of Exposed Lifeline	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Angalan Br. III	48.88	1,200,000	58,656,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Angalan Br. IV	15.90	1,200,000	19,080,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Angalan Br. V	18.00	1,200,000	21,600,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Angalan Br. VI	45.00	1,200,000	54,000,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.

Table LU-45.Lifeline Utilities, Bridges, Exposure Estimation Table for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Name	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Value of Exposed Lifeline	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Bago Br.	31.21	1,200,000	37,452,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Baracatan Br.	22.20	1,200,000	26,640,000	Bailey	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Bato Br.	20.70	1,200,000	24,840,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Bolton Br. 1	185.30	1,200,000	222,360,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.

Table LU-45. Lifeline Utilities, Bridges, Exposure Estimation Table for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Name	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Value of Exposed Lifeline	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Bolton Br. 2	196.88	1,200,000	236,256,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Buhangin Flyover	488.07	1,200,000	585,684,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Buhangin Underpass	23.83	1,200,000	28,596,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Generoso Br. 1	89.94	1,200,000	107,928,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Table LU-45. Lifeline Utilities, Bridges, Exposure Estimation Table for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Name	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Value of Exposed Lifeline	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Generoso Br. 2	87.60	1,200,000	105,120,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Ilang Br.	25.70	1,200,000	30,840,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Libby Br.	24.69	1,200,000	29,628,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Lipadas Br. I	37.80	1,200,000	45,360,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Table LU-45. Lifeline Utilities, Bridges, Exposure Estimation Table for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Name	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Value of Exposed Lifeline	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Lipadas Br. II	40.00	1,200,000	48,000,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Matina Br.	38.66	1,200,000	46,392,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Nalum Br.	23.54	1,200,000	28,248,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Pagan Grande	45.48	1,200,000	54,576,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Table LU-45. Lifeline Utilities, Bridges, Exposure Estimation Table for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Name	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Value of Exposed Lifeline	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Pagan Pequeño	89.93	1,200,000	107,916,000	Steel	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Panacan Br.	23.53	1,200,000	28,236,000		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Pañalum Br.	96.80	1,200,000	116,160,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Pangi Br.	121.69	1,200,000	146,028,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.

Table LU-45. Lifeline Utilities, Bridges, Exposure Estimation Table for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Name	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Value of Exposed Lifeline	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Piedad Br.	47.82	1,200,000	57,384,000	Steel	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Sasa Br.	18.43	1,200,000	22,116,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Suawan Br.	45.00	1,200,000	54,000,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Tagurano Br.	12.46	1,200,000	14,952,000	Bailey	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.

Table LU-45. Lifeline Utilities, Bridges, Exposure Estimation Table for Landslide, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
Name	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Value of Exposed Lifeline	Surface Type	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
Talomo Br. 1	48.10	2,053,000	98,749,300	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Talomo Br. 2	48.11	2,053,000	98,769,830	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.
Tamugan Br.	104.96	1,200,000	125,952,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.

Exposure Estimation for Power Substations

The estimated value of Tibungco Power Substation is 118 Million, for 2,626 square meters area it occupies.

The estimated value of Tibungco Power Substation is 118 Million, for 2,626 square meters area it occupies.

Table LU-46. Lifeline Utilities Exposure to Landslide, Power Substations, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY		Ln
Name	Area Occupied (sq.m)	Replacement Cost	Value of exposed Lifeline	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources	
Tibungco Substation	2,626.00	118 Million	118 Million	a) Perimeter Fence :CHB Fence with top Guard Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: P.U. Panel walls and roof. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	M

Exposure Estimation for Level I Water Supply System

Each spring source has a value of P41, 586.32.

Table LU-47. Lifeline Utilities, Level I Water Supply, Exposure Estimation for Landslide, Davao City

EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
BUNAWAN	SPRING	41,586.32	41,586.32	Fair	None	None	Yes, for funding proposal
CABANTIAN	SPRING	41,586.32	41,586.32	Fair	None	None	Yes, for funding proposal
DALIAO	SPRING	41,586.32	41,586.32	Fair	None	None	Yes, for funding proposal
DALIAO	SPRING	41,586.32	41,586.32	Fair	None	None	Yes, for funding proposal
DALIAO	SPRING	41,586.32	41,586.32	Fair	None	None	Yes, for funding proposal
DALIAO	SPRING	41,586.32	41,586.32	Fair	None	None	Yes, for funding proposal
ILANG	SPRING	41,586.32	41,586.32	Fair	None	None	Yes, for funding proposal

Exposure Estimation for Level II

The well with the highest value is the 3 HP (horsepower) well found in Paradise Embac with the total cost of P 60,500. Other wells cost lower at P46,200, meanwhile, spring wells have an estimated value of 41,586.32.

Table LU-48. Lifeline Utilities, Level II Water System, Exposure Estimation Table for Landslide, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
BINUGAO	M	2HP	46,600	46,600	FAIR	NONE	None, but there is 1 month warranty if the waterpump	YES. For funding proposal
SIRAWAN	M	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
SIBULAN	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
SIBULAN	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
SIBULAN	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
SIBULAN	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
BAYABAS	M	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
MT. APO NATIONAL PARK	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
MT. APO NATIONAL PARK	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
MT. APO NATIONAL PARK	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
TUNGKALAN	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
TUNGKALAN	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
DALIAON PLANTATION	M	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
TUNGKALAN	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
TUNGKALAN	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
MT. APO NATIONAL PARK	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
CAMANSI	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal

Table LU-48. Lifeline Utilities, Level II Water System, Exposure Estimation Table for Landslide, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
CAMANSI	M	3HP	60,500.00	60,500.00	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
DALIAON PLANTATION	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
MAGTUOD	M	2HP	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
MAGTUOD	M	3HP	60,500.00	60,500.00	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
MT. APO NATIONAL PARK	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
MAGTUOD	M	3HP	60,500.00	60,500.00	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
CARMEN	H	SPRING	41,586.32	41,586.32	FAIR	NONE	None	YES. For funding proposal
MAGTUOD	M	2HP	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
MAGTUOD	M	2HP	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
NEW CARMEN	H	2HP	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
NEW CARMEN	H	3HP	60500	60500	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
NEW CARMEN	M	3HP	60500	60500	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal

Table LU-48. Lifeline Utilities, Level II Water System, Exposure Estimation Table for Landslide, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MUDIANG	H	2HP	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
MUDIANG	M	2HP	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
MUDIANG	M	2HP	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
ACACIA	M	256S18	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
MUDIANG	M	2HP	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
ACACIA	M	33GS20	60500	60500	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
SUAWAN	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
ACACIA	M	18GS20	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
ACACIA	M	3HP	60500	60500	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
ACACIA	M	3HP	60500	60500	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
TIBUNGCO	M	2HP	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal

Table LU-48. Lifeline Utilities, Level II Water System, Exposure Estimation Table for Landslide, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
TALANDANG	M	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
ACACIA	H	25GS20	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
TIBUNGCO	M	2HP	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
GATUNGAN	H	25GS20	60500	60500	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
TAMBOBONG	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
GATUNGAN	M	3HP	60500	60500	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
CALLAWA	M	18GS15	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
DALAG LUMOT	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
LAMPIANAO	H	2HP	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump is installed by the supplier	YES. For funding proposal
SUAWAN	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
SALAYSAY	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
SUAWAN	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
GUMALANG	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
SALAYSAY	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
SUAWAN	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
MARILOG	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
MALAMBA	M	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
MALAMBA	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
MARILOG	M	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal

Table LU-48. Lifeline Utilities, Level II Water System, Exposure Estimation Table for Landslide, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MALAMBA	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
MEGKAWAYAN	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
MALABOG	M	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
MALABOG	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
PAQUIBATO	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
PARADISE EMBAC	H	3HP	60500	60500	FAIR	NONE	None, but there is 1 month warranty if the waterpump	YES. For funding proposal
LUMIAD	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
GUMITAN	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
LUMIAD	M	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
LUMIAD	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
LUMIAD	M	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
LUMIAD	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
LUMIAD	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
LUMIAD	M	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
PANDAITAN	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
PANDAITAN	H	2HP	46200	46200	FAIR	NONE	None, but there is 1 month warranty if the waterpump	YES. For funding proposal
PANDAITAN	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
MAPULA	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
MARILOG	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
GUMITAN	M	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
MARILOG	M	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
SALAPAWAN	M	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
MARILOG	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
TAPAK	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
BANTOL	M	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
MARILOG	M	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal

Table LU-48. Lifeline Utilities, Level II Water System, Exposure Estimation Table for Landslide, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MALABOG	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
BANTOL	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
MARILOG	M	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
MALABOG	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
SALOY	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal
MAGSAYSAY	H	SPRING	41586.32	41586.32	FAIR	NONE	None	YES. For funding proposal

Exposure Estimation for Level III Water System

The highest value of exposed lifeline for Level III Water System is located at Barangay Ma-a with an exposed value of Php 60,893,836.31.

Table LU-49. Lifeline Utilities, Level III Water System ,Exposure Estimation for Landslide, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
19-B	MLCSP	600	40,100.00	23.31	934,586.10	GOOD	YES
MA-A	MLCSP	800	52,800.00	0.72	38,197.31	GOOD	YES
BUHANGIN	MLCSP	600	40,100.00	338.29	13,565,406.52	GOOD	YES
19-B	MLCSP	600	40,100.00	15.04	603,120.75	GOOD	YES
MA-A	PVC	150	11,200.00	158.36	1,773,660.28	GOOD	YES
MATINA PANGI	PVC	150	11,200.00	546.53	6,121,133.67	GOOD	YES
MATINA PANGI	PVC	150	11,200.00	378.56	4,239,843.29	GOOD	YES
BUHANGIN	MLCSP	600	40,100.00	41.27	1,654,764.08	GOOD	YES
BUHANGIN	MLCSP	600	40,100.00	60.97	2,445,063.47	GOOD	YES
MA-A	MLCSP	800	52,800.00	1,153.29	60,893,836.31	GOOD	YES
MA-A	MLCSP	800	52,800.00	294.93	15,572,258.33	GOOD	YES
MATINA PANGI	MLCSP	800	52,800.00	62.67	3,308,834.58	GOOD	YES
MATINA PANGI	MLCSP	800	52,800.00	804.92	42,499,546.42	GOOD	YES
LANGUB	MLCSP	800	52,800.00	551.65	29,126,895.54	GOOD	YES
MATINA PANGI	MLCSP	800	52,800.00	144.78	7,644,328.46	GOOD	YES
MA-A	MLCSP	800	52,800.00	33.58	1,772,995.35	GOOD	YES
MAGTUOD	MLCSP	800	52,800.00	97.35	5,139,854.85	GOOD	YES
MAGTUOD	MLCSP	800	52,800.00	22.24	1,174,049.93	GOOD	YES
TALOMO	MLCSP	800	52,800.00	20.23	1,068,243.32	GOOD	YES
PANACAN	MLCSP	350	20,800.00	67.56	1,405,303.91	GOOD	YES
TIBUNGCO	MLCSP	350	20,800.00	268.19	5,578,333.36	GOOD	YES
CABANTIAN	MLCSP	450	24,300.00	354.52	8,614,792.54	GOOD	YES
CABANTIAN	MLCSP	450	24,300.00	10.65	258,857.13	GOOD	YES
CABANTIAN	MLCSP	450	24,300.00	10.88	264,444.73	GOOD	YES

Table LU-49. Lifeline Utilities, Level III Water System ,Exposure Estimation for Landslide, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
CABANTIAN	MLCSP	450	24,300.00	150.43	3,655,470.92	GOOD	YES
CABANTIAN	MLCSP	450	24,300.00	90.51	2,199,289.51	GOOD	YES
CABANTIAN	MLCSP	450	24,300.00	53.14	1,291,375.82	GOOD	YES
CABANTIAN	MLCSP	450	24,300.00	42.79	1,039,840.77	GOOD	YES
BUHANGIN	MLCSP	1000	62,400.00	113.10	7,057,346.30	GOOD	YES
BUHANGIN	MLCSP	1000	62,400.00	19.25	1,200,930.86	GOOD	YES
CATALUNAN GRANDE	MLCSP	250	17,700.00	474.80	8,403,921.24	GOOD	YES
CATALUNAN GRANDE	MLCSP	250	17,700.00	479.85	8,493,305.25	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	1.97	22,086.96	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	282.18	3,160,378.98	GOOD	YES
CABANTIAN	MLCSP	450	24,300.00	0.89	21,613.94	GOOD	YES
TALOMO	MLCSP	250	17,700.00	649.36	11,493,698.93	GOOD	YES
MATINA PANGI	MLCSP	250	17,700.00	94.92	1,680,046.81	GOOD	YES
CATALUNAN GRANDE	MLCSP	250	17,700.00	29.34	519,326.44	GOOD	YES
MATINA PANGI	PVC	150	11,200.00	174.12	1,950,089.90	GOOD	YES
MATINA PANGI	PVC	150	11,200.00	402.42	4,507,147.99	GOOD	YES
MATINA PANGI	PVC	150	11,200.00	8.16	91,381.32	GOOD	YES
MA-A	PVC	150	11,200.00	644.74	7,221,053.47	GOOD	YES
MA-A	PVC	150	11,200.00	333.65	3,736,893.23	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	346.67	3,882,752.30	GOOD	YES
TIGATTO	MLCSP	400	23,600.00	18.87	445,348.77	GOOD	YES
PANACAN	MLCSP	300	19,100.00	125.15	2,390,363.37	GOOD	YES
PANACAN	MLCSP	300	19,100.00	398.24	7,606,383.78	GOOD	YES
MA-A	MLCSP	800	52,800.00	36.20	1,911,143.74	GOOD	YES
MA-A	MLCSP	800	52,800.00	50.01	2,640,716.00	GOOD	YES
BUHANGIN	MLCSP	800	52,800.00	148.86	7,859,597.43	GOOD	YES
CABANTIAN	MLCSP	350	20,800.00	207.79	4,321,928.38	GOOD	YES
BUHANGIN	MLCSP	1000	62,400.00	300.11	18,726,800.49	GOOD	YES

Exposure Estimation for DCWD Wells

All submersible wells have a replacement cost of Php 6, 500,000.

Table LU-50. Lifeline Utilities, Level III Water System, DCWD Production Wells, Exposure Estimation Table for Landslide, Davao City

EXPOSURE				VALUE OF EXISTING LIFELINE	SENSITIVITY	
LOCATION	SUSCEPTIBILITY	PUMP TYPE	REPLACEMENT COST		EXISTING CON-DITION	HAZARD RESISTANT DESIGN
Davao Molave Homes, Brgy. Indangan	M	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES
Purok 27, Malagamot, Brgy. Panacan	M	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES
Purok 24, Malagamot, Brgy. Panacan	H	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES
Tibungco Relocation, Brgy. Tibungco	M	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES

Exposure Estimation of Cell Sites

A total of 13 cell site towers are highly susceptible to landslide. Each of the towers has the value of Php 12-15 million.

Table LU-51. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Location	Area Occupied (ha)	Replacement Cost	Value of exposed Lifeline	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
GLOBE TELECOM, INC.	Lloueras Bldg., McArthur Highway, Talomo (Pob.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Telstar St., GSIS Subdivision, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Diversion Road, Bangkal,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Matina Shrine, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-51. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Location	Area Occupied (ha)	Replacement Cost	Value of exposed Lifeline	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Shrine Hill, Matina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Matina RS,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	lot 19 blk 17 Bacaca road El Rio Vista Buhangin (Pob.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	796 Tigatto, Buhangin	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Brgy. Panorama,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Diversion Road, Brgy. Cati-tipan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Communal Road, Buhangin District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Water Tank, Palos Verdes Golf Course & Subd., Mandug,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Brgy. Malabog, Paquibato District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Eden Nature Park, Brgy. Eden, Toril District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Shrine Hill Matina RS	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Maa Rd., Sitio Bugac, Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Maa Rd., Sitio Bugac, Brgy. Maa,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Brgy. Sirib, Calinan District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Brgy. Mandug,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-51. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
Name of Cell Site	Location	Area Occupied (ha)	Replacement Cost	Value of exposed Lifeline	Construction Materials Used	Existing Condition	Hazard Resistant Design	Insurance Coverage	Available Government Resources
SMART COMMUNICATIONS, INC.	Carnoustie St., Palos Verdes Compound Golf Club, Mandug	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Buhisan St., Brgy. Tibungco,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Sitio Lumondao,, Brgy. Marilog Proper, Marilog	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Exposure Estimation for Roads

Davao-Agusan Highway has the highest replacement cost of ₱637, 291,200, followed by Quezon Boulevard with the replacement cost of P363,048,140, McArthur Highway which has the replacement cost of ₱286,273,680, Rafael Castillo St. with ₱273,439,580 and Quimpo Boulevard, ₱195,551,000.

Davao-Agusan Highway has the highest replacement cost of ₱637, 291,200, followed by Quezon Boulevard with the replacement cost of P363,048,140, McArthur Highway which has the replacement cost of ₱286,273,680, Rafael Castillo St. with ₱273,439,580 and Quimpo Boulevard, ₱195,551,000.

Table LU-52. Lifeline Utilities, Roads, Exposure Estimation Table for Liquefaction, Davao City

ROAD NAME	EXPOSURE			SENSITIVITY		
	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT
2nd Avenue	0.2056	60,000,000	12,337,800	concrete	good	Yes
5th Ave.	0.2043	60,000,000	12,260,640	concrete	good	Yes
Agdao Flyover	0.4734	56,000,000	26,508,216	concrete	good	Yes
Bonifacio Rotonda	0.0839	56,000,000	4,697,403	concrete	good	Yes
Calinan-Baguio-Cadalian Road	1.4846	35,000,000	51,962,050	concrete	good	Yes
Carlos P. Garcia Highway	0.9844	60,000,000	59,065,380	concrete	good	Yes
Carlos P. Garcia Highway	0.3141	60,000,000	18,847,080	concrete	good	Yes
Carlos P. Garcia Highway	0.1466	60,000,000	8,793,780	concrete	good	Yes
Carlos P. Garcia Highway	0.6716	60,000,000	40,295,160	concrete	good	Yes
Carlos P. Garcia Highway	0.1867	60,000,000	11,200,080	concrete	good	Yes
Carlos P. Garcia Highway	1.5282	60,000,000	91,689,600	concrete	good	Yes
Claro M. Recto St.	1.2152	56,000,000	68,050,080	concrete	good	Yes
Dacudao Avenue	0.7526	56,000,000	42,144,480	concrete	good	Yes
Dacudao Avenue	0.7785	56,000,000	43,597,064	concrete	good	Yes
Davao-Bukidnon Road	0.0092	40,000,000	366,574	concrete	good	Yes
Davao-Bukidnon Road	11.9684	40,000,000	478,736,000	concrete	good	Yes
Davao-Bukidnon Road	0.2438	40,000,000	9,752,200	concrete	good	Yes
Davao - Agusan Highway	0.0202	56,000,000	1,131,284	concrete	good	Yes
Davao - Agusan Highway	11.3802	56,000,000	637,291,200	concrete	good	Yes
Davao - Agusan Highway	0.7390	56,000,000	41,383,216	concrete	good	Yes
Davao - Agusan Highway	2.2014	56,000,000	123,277,280	concrete	good	Yes
Davao - Agusan Highway	1.0639	56,000,000	59,577,840	concrete	good	Yes
Davao - Agusan Highway	1.2081	56,000,000	67,654,720	concrete	good	Yes
Don Julian Rodriguez Ave. (Maa Road)	1.0931	28,000,000	30,607,080	concrete	good	Yes
Don Julian Rodriguez Ave. (Maa Road)	1.8371	28,000,000	51,438,240	concrete	good	Yes
Don Julian Rodriguez Ave. (Maa Road)	0.7840	28,000,000	21,950,908	concrete	good	Yes
Don Julian Rodriguez Ave. (Maa Road)	0.0394	28,000,000	1,103,600	concrete	good	Yes

Table LU-52. Lifeline Utilities, Roads, Exposure Estimation Table for Liquefaction, Davao City

ROAD NAME	EXPOSURE			SENSITIVITY		
	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT
Don Julian Rodriguez Ave. (Maa Road)	0.3266	28,000,000	9,144,156	concrete	good	Yes
Florentino Torres St	1.3493	65,000,000	87,707,100	concrete	good	Yes
Inawayan-Baracatan Road	0.0439	35,000,000	1,537,851	concrete	good	Yes
J.P. Cabaguio Avenue	0.6968	56,000,000	39,023,432	concrete	good	Yes
J.P. Cabaguio Avenue	0.3525	56,000,000	19,741,960	concrete	good	Yes
Jose P. Laurel Avenue	2.4896	56,000,000	139,418,160	concrete	good	Yes
Jose P. Laurel Avenue	1.0490	56,000,000	58,741,760	concrete	good	Yes
Leon Garcia St.	0.6511	49,000,000	31,904,733	concrete	good	Yes
Libby Road	0.3655	25,000,000	9,136,700	concrete	good	Yes
Libby Road	0.1741	25,000,000	4,352,375	concrete	good	Yes
Maa Radio Station St.	0.1010	28,000,000	2,828,644	concrete	good	Yes
Maa Radio Station St.	0.3727	28,000,000	10,436,636	concrete	good	Yes
Manggahan St.	0.3774	25,000,000	9,435,425	concrete	good	Yes
Mc. Arthur Highway	5.1120	56,000,000	286,273,680	concrete	good	Yes
Mc. Arthur Highway	1.3155	56,000,000	73,666,320	concrete	good	Yes
Mc. Arthur Highway	8.1776	56,000,000	457,946,160	concrete	good	Yes
Mc. Arthur Highway	6.6191	56,000,000	370,666,800	concrete	good	Yes
Old Airport Road	0.1267	60,000,000	7,602,180	concrete	good	Yes
Old Airport Road	0.1236	60,000,000	7,416,540	concrete	good	Yes
Pakiputan Wharf Road	0.5062	56,000,000	28,345,632	concrete	good	Yes
Pichon St.	0.9460	56,000,000	52,974,208	concrete	good	Yes
Quezon Boulevard	4.2215	86,000,000	363,048,140	concrete	good	Yes
Quimpo Boulevard	3.9110	50,000,000	195,551,000	concrete	good	Yes
Quimpo Boulevard	0.4167	50,000,000	20,834,200	concrete	good	Yes
Quimpo Boulevard	0.3944	50,000,000	19,720,750	concrete	good	Yes
Quirino Avenue	2.0325	40,000,000	81,299,200	concrete	good	Yes
Rafael Castillo St.	3.1795	86,000,000	273,439,580	concrete	good	Yes
Ramon Magsaysay Ave.	1.3741	60,000,000	82,446,600	concrete	good	Yes
Sta. Ana Ave.	1.2910	60,000,000	77,460,600	concrete	good	Yes
Toril-Bayabas-Eden Road	0.6280	30,000,000	18,838,980	concrete	good	Yes
Davao - Agusan Highway	0.0351	56,000,000	1,967,594	concrete	good	Yes
Davao - Agusan Highway	0.0351	56,000,000	1,967,594	concrete	good	Yes

Exposure Estimation for Bridges

Agdao Flyover has the highest value among the bridges exposed to the high liquefaction susceptibility at ₱459,576,000 followed by Bunawan Bridge 1 with ₱59,712,000, Bunawan Bridge 2 with ₱57,348,000, Matina Bridge ₱46,392,000, and Bago Bridge with ₱37,452,000.

Agdao Flyover has the highest value among the bridges exposed to the high liquefaction susceptibility at ₱459,576,000 followed by Bunawan Bridge 1 with ₱59,712,000, Bunawan Bridge 2 with ₱57,348,000, Matina Bridge ₱46,392,000, and Bago Bridge with ₱37,452,000.

Table LU-53. Lifeline Utilities, Bridges, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Agdao Flyover	382.98	1,200,000	459,576,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.
Angalan Br. I	12.10	1,200,000	14,520,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.

Table LU-53. Lifeline Utilities, Bridges, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Angalan Br. II	11.92	1,200,000	14,304,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.
Angalan Br. III	48.88	1,200,000	58,656,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.
Angalan Br. IV	15.90	1,200,000	19,080,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.

Table 1.3.2b Lifeline Utilities, Bridges, Exposure Estimation Table for Liquefaction

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Angalan Br. V	18.00	1,200,000	21,600,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.
Angalan Br. VI	45.00	1,200,000	54,000,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.
Bago Br.	31.21	1,200,000	37,452,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.

Table LU-53. Lifeline Utilities, Bridges, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Bunawan Br. 1	49.76	1,200,000	59,712,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.
Bunawan Br. 2	47.79	1,200,000	57,348,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.
Ilang Br.	25.70	1,200,000	30,840,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.

Table LU-53. Lifeline Utilities, Bridges, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Lipadas Br. I	37.80	1,200,000	45,360,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.
Lipadas Br. II	40.00	1,200,000	48,000,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes..
Matina Br.	38.66	1,200,000	46,392,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.

Table LU-53. Lifeline Utilities, Bridges, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Panacan Br.	23.53	1,200,000	28,236,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.
Pangi Br.	121.69	1,200,000	146,028,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.
Piedad Br.	47.82	1,200,000	57,384,000	Steel	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes.

Table LU-53. Lifeline Utilities, Bridges, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Sasa Br.	18.43	1,200,000	22,116,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to

Exposure Estimation for Power Substation

For Exposure Database, Don Ramon Substation has the highest replacement cost of ₱575 million, followed by Sta.Ana Substation with the values of ₱135 million, and R. Castillo Substation with 125 million.

For Exposure Database, Don Ramon Substation has the highest replacement cost of ₱575 million, followed by Sta.Ana Substation with the values of ₱135 million, and R. Castillo Substation with 125 million.

Table LU-54. Lifeline Utilities, Power Substation, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Dumoy Substation	1,322	118 Million	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Puan Substation	803	85 Million	85 Million	a) Perimeter Fence : Concrete Fence b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Matina Substation	1,000.00	120 Million	120 Million	a) Perimeter Fence : Concrete Fence (3.0m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Ecoland Substation	1,547.00	120 Million	120 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

Table LU-54. Lifeline Utilities, Power Substation, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
P.Reyes Sub-station	825.86	85 Million	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : Concrete Pole and Steel Beams	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Gaisano Substation	454.00	85 Million	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Sta. Ana Substation	607.00	135 Million	135 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) & Bended Metal Sheets b) Control Building: Concrete Wall and Floor ; with Roof deck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Victoria Substation	595.00	120 Million	120 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
R.Castillo Sub-station	852.00	125 Million	125 Million	a) Perimeter Fence : Concrete High Wall Fence (3.5m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

Table LU-54. Lifeline Utilities, Power Substation, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Pampanga Substation	1,031.00	118 Million	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Panacan Substation	858.00	85 Million	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: Concrete wall and Floor, PU Panel Roof. c) Equipment Support :Concrete POle and Steel Beams	a) Operational b) Last upgraded 10 yrs ago.	Recommended for relocation or Reconstruction	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Don Ramon Substation	15,540.00	570 Million	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel Structures	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE
Bunawan Substation	1,085.00	110 Million	110 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside b) Control Building: Concrete wall and floor, ; Prepainted Roofing Sheet. c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE

Exposure Estimation for Level II Water Supply System

For Level 2, Barangays Sirawan and Waan have two wells highly susceptible to liquefaction. These wells costs up to ₱46,200 each.

Table LU-56. Lifeline Utilities, Level II Water System, Exposure Estimation Table for Liquefaction, Davao City

ADMINISTRATIVE DIVISION	BARANGAY	EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
		SUSCEPTIBILITY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Toril	BINUGAO	Moderate	2HP	46,200	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the waterpump is installed by the supplier	Yes. Subject to fund proposal
Toril	SIRAWAN	High	2HP	46,200	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the waterpump is installed by the supplier	Yes. Subject to fund proposal
Toril	SIRAWAN	High	2HP	46,200	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the waterpump is installed by the supplier	Yes. Subject to fund proposal
Toril	SIRAWAN	Moderate	2HP	46,200	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the waterpump is installed by the supplier	Yes. Subject to fund proposal
Buhangin	WAAN	High	18GS20	46,200	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the waterpump is installed by the supplier	Yes. Subject to fund proposal
Buhangin	WAAN	High	2HP	46,200	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the waterpump is installed by the supplier	Yes. Subject to fund proposal

Exposure Estimation for Level III Water Supply System

Bago Aplaya is the area with the longest pipeline highly susceptible to liquefaction, at 1,084 meters in length. The total replacement cost for such pipeline is ₱43, 472,139.91. Meanwhile, Tigatto has second most expensive exposed waterline with a total value of ₱20, 967,744.19. Each well has a replacement cost/value of exposed lifeline of ₱6, 500,000.

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
5-A	MLCSP	300	19,100.00	42.36	809,092.22	GOOD	YES
10-A	PVC	150	11,200.00	160.52	1,797,824.51	GOOD	YES
10-A	PVC	150	11,200.00	162.51	1,820,057.21	GOOD	YES
12-B	PVC	150	11,200.00	365.93	4,098,444.20	GOOD	YES
TALOMO	PVC	150	11,200.00	164.29	1,840,062.42	GOOD	YES
39-D	MLCSP	300	19,100.00	156.23	2,983,943.30	GOOD	YES
37-D	MLCSP	300	19,100.00	76.08	1,453,107.53	GOOD	YES
32-D	MLCSP	300	19,100.00	236.99	4,526,549.21	GOOD	YES
24-C	MLCSP	300	19,100.00	2.96	56,571.49	GOOD	YES
24-C	PVC	150	11,200.00	187.67	2,101,952.85	GOOD	YES
32-D	MLCSP	300	19,100.00	222.24	4,244,697.29	GOOD	YES
30-C	MLCSP	300	19,100.00	10.29	196,522.94	GOOD	YES
11-B	MLCSP	300	19,100.00	117.30	2,240,440.79	GOOD	YES
28-C	PVC	150	11,200.00	165.94	1,858,570.13	GOOD	YES
28-C	PVC	150	11,200.00	164.76	1,845,318.03	GOOD	YES
30-C	PVC	150	11,200.00	117.93	1,320,869.33	GOOD	YES
28-C	PVC	150	11,200.00	6.71	75,149.44	GOOD	YES
32-D	MLCSP	300	19,100.00	67.83	1,295,463.98	GOOD	YES
32-D	MLCSP	400	23,600.00	31.07	733,367.96	GOOD	YES
30-C	MLCSP	400	23,600.00	500.92	11,821,817.46	GOOD	YES
12-B	MLCSP	400	23,600.00	40.79	962,675.47	GOOD	YES
30-C	PVC	150	11,200.00	34.82	389,960.36	GOOD	YES
11-B	MLCSP	300	19,100.00	91.64	1,750,369.51	GOOD	YES
15-B	MLCSP	400	23,600.00	8.27	195,092.42	GOOD	YES
14-B	MLCSP	400	23,600.00	63.08	1,488,614.64	GOOD	YES
18-B	MLCSP	300	19,100.00	194.44	3,713,791.04	GOOD	YES
19-B	MLCSP	300	19,100.00	2.43	46,338.25	GOOD	YES
18-B	MLCSP	300	19,100.00	3.62	69,180.49	GOOD	YES
19-B	MLCSP	300	19,100.00	115.53	2,206,580.11	GOOD	YES
12-B	PVC	150	11,200.00	58.01	649,704.65	GOOD	YES
19-B	PVC	150	11,200.00	37.77	422,973.72	GOOD	YES
18-B	MLCSP	300	19,100.00	13.35	254,979.58	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
13-B	MLCSP	300	19,100.00	42.75	816,561.22	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	18.93	211,972.98	GOOD	YES
18-B	PVC	150	11,200.00	34.32	384,373.33	GOOD	YES
18-B	PVC	150	11,200.00	10.91	122,190.85	GOOD	YES
32-D	MLCSP	300	19,100.00	26.31	502,483.31	GOOD	YES
30-C	MLCSP	300	19,100.00	12.67	242,069.81	GOOD	YES
28-C	PVC	150	11,200.00	8.52	95,441.31	GOOD	YES
28-C	PVC	150	11,200.00	110.26	1,234,908.77	GOOD	YES
28-C	PVC	150	11,200.00	59.34	664,640.14	GOOD	YES
28-C	PVC	150	11,200.00	15.83	177,264.67	GOOD	YES
28-C	PVC	150	11,200.00	54.80	613,747.55	GOOD	YES
26-C	PVC	150	11,200.00	6.50	72,760.69	GOOD	YES
28-C	PVC	150	11,200.00	59.36	664,817.41	GOOD	YES
30-C	PVC	150	11,200.00	114.89	1,286,753.79	GOOD	YES
14-B	PVC	150	11,200.00	0.45	5,094.56	GOOD	YES
14-B	PVC	150	11,200.00	100.83	1,129,278.98	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	2.87	32,113.48	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	123.65	1,384,874.77	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	119.84	1,342,241.26	GOOD	YES
15-B	MLCSP	400	23,600.00	160.75	3,793,736.45	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	11.50	128,789.06	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	175.51	4,141,923.89	GOOD	YES
AGDAO PROPER	PVC	150	11,200.00	57.96	649,165.10	GOOD	YES
AGDAO PROPER	PVC	150	11,200.00	131.04	1,467,699.19	GOOD	YES
AGDAO PROPER	PVC	150	11,200.00	25.00	280,044.67	GOOD	YES
15-B	PVC	150	11,200.00	39.81	445,845.33	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	49.80	951,268.73	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	51.94	991,993.69	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	111.40	2,127,806.12	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	2.57	28,828.05	GOOD	YES
18-B	PVC	150	11,200.00	213.68	2,393,247.09	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	58.49	1,117,180.95	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
MATINA CROSSING	PVC	150	11,200.00	255.23	2,858,538.79	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	54.75	613,191.98	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	69.38	777,040.94	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	67.38	754,615.01	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	72.51	812,103.24	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	8.42	408,328.52	GOOD	YES
BUCANA	PVC	150	11,200.00	67.51	756,094.38	GOOD	YES
BUCANA	PVC	150	11,200.00	69.38	777,019.81	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	246.01	2,755,311.17	GOOD	YES
BUCANA	PVC	150	11,200.00	2.79	31,253.99	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	73.68	825,221.08	GOOD	YES
BUCANA	PVC	150	11,200.00	8.29	92,858.27	GOOD	YES
MATINA CROSSING	MLCSP	300	19,100.00	7.81	149,217.10	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	69.00	772,846.99	GOOD	YES
11-B	MLCSP	300	19,100.00	65.48	1,250,680.34	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	8.09	154,479.07	GOOD	YES
19-B	MLCSP	300	19,100.00	38.01	725,975.69	GOOD	YES
10-A	MLCSP	300	19,100.00	13.62	260,088.57	GOOD	YES
19-B	MLCSP	300	19,100.00	39.23	749,359.63	GOOD	YES
11-B	MLCSP	300	19,100.00	50.70	968,452.91	GOOD	YES
2-A	MLCSP	300	19,100.00	113.84	2,174,414.03	GOOD	YES
32-D	MLCSP	300	19,100.00	201.85	3,855,266.99	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	64.28	1,227,797.30	GOOD	YES
5-A	PVC	150	11,200.00	171.57	1,921,563.50	GOOD	YES
19-B	MLCSP	300	19,100.00	96.96	1,851,843.76	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	17.76	419,054.35	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	63.34	1,494,814.43	GOOD	YES
5-A	MLCSP	300	19,100.00	107.30	2,049,355.34	GOOD	YES
BAGO APLAYA	MLCSP	300	19,100.00	55.49	1,059,851.50	GOOD	YES
BAGO APLAYA	MLCSP	300	19,100.00	141.31	2,698,926.61	GOOD	YES
DUMOY	MLCSP	300	19,100.00	529.87	10,120,606.62	GOOD	YES
BAGO APLAYA	MLCSP	300	19,100.00	69.16	1,320,906.10	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
MATINA CROSSING	PVC	150	11,200.00	87.34	978,217.74	GOOD	YES
TALOMO	MLCSP	900	56,500.00	36.87	2,083,095.53	GOOD	YES
TALOMO	MLCSP	900	56,500.00	96.56	5,455,896.79	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	61.88	693,038.72	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	66.72	3,235,775.30	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	212.13	10,288,514.45	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	146.85	7,122,117.80	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	108.73	5,273,446.37	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	96.58	1,081,646.77	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	38.24	428,306.93	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	154.20	1,726,986.01	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	149.77	1,677,406.35	GOOD	YES
TALOMO	MLCSP	750	48,500.00	177.49	8,608,073.09	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	227.31	2,545,885.94	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	74.65	836,121.39	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	174.49	1,954,283.52	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	109.92	1,231,106.90	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	265.80	12,891,066.08	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	326.59	3,657,808.07	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	9.95	482,572.69	GOOD	YES
MATINA CROSSING	MLCSP	250	17,700.00	89.61	1,586,072.77	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	132.25	6,414,037.13	GOOD	YES
MATINA CROSSING	MLCSP	250	17,700.00	62.30	1,102,700.44	GOOD	YES
MATINA CROSSING	MLCSP	250	17,700.00	61.15	1,082,367.49	GOOD	YES
TALOMO	MLCSP	600	40,100.00	560.60	22,480,047.27	GOOD	YES
BAGO APLAYA	MLCSP	500	33,200.00	134.63	4,469,843.91	GOOD	YES
TALOMO	MLCSP	900	56,500.00	44.85	2,534,226.64	GOOD	YES
TALOMO	MLCSP	900	56,500.00	128.39	7,253,809.64	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	125.17	1,401,886.96	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	124.31	1,392,288.88	GOOD	YES
BUCANA	PVC	150	11,200.00	69.95	783,459.03	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	90.43	2,134,058.68	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
BAGO GALLERA	MLCSP	250	17,700.00	86.86	1,537,480.69	GOOD	YES
BAGO APLAYA	MLCSP	250	17,700.00	11.53	204,124.90	GOOD	YES
BAGO APLAYA	MLCSP	250	17,700.00	231.91	4,104,855.57	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	407.29	9,611,934.21	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	301.54	14,624,619.12	GOOD	YES
BAGO APLAYA	MLCSP	500	33,200.00	140.03	4,649,098.04	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	474.04	5,309,250.31	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	60.62	678,978.46	GOOD	YES
39-D	MLCSP	300	19,100.00	23.90	456,494.07	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	95.18	1,065,981.85	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	111.11	1,244,379.26	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	163.40	1,830,061.64	GOOD	YES
BUCANA	PVC	150	11,200.00	79.00	884,814.42	GOOD	YES
BUCANA	PVC	150	11,200.00	12.02	134,666.78	GOOD	YES
BUCANA	PVC	150	11,200.00	14.21	159,182.97	GOOD	YES
BUCANA	PVC	150	11,200.00	95.76	1,072,480.46	GOOD	YES
BUCANA	PVC	150	11,200.00	37.24	417,134.63	GOOD	YES
7-A	MLCSP	600	40,100.00	59.90	2,401,860.30	GOOD	YES
2-A	MLCSP	350	20,800.00	214.03	4,451,861.01	GOOD	YES
BUCANA	PVC	150	11,200.00	80.03	896,346.00	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	1.01	11,336.02	GOOD	YES
BUCANA	PVC	150	11,200.00	78.94	884,165.95	GOOD	YES
18-B	PVC	150	11,200.00	175.92	1,970,298.70	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	9.02	212,982.05	GOOD	YES
15-B	MLCSP	400	23,600.00	339.50	8,012,228.43	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	62.93	704,844.56	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	71.10	796,288.01	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	67.73	758,621.22	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	456.04	5,107,670.39	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	346.36	16,798,324.97	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	78.22	3,793,689.42	GOOD	YES
MA-A	MLCSP	700	44,200.00	97.50	4,309,455.88	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
MATINA CROSSING	MLCSP	700	44,200.00	7.40	327,140.13	GOOD	YES
MA-A	MLCSP	750	48,500.00	249.82	12,116,124.54	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	424.59	20,592,685.46	GOOD	YES
MA-A	PVC	150	11,200.00	229.10	2,565,940.54	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	8.13	91,078.27	GOOD	YES
MA-A	PVC	150	11,200.00	137.90	1,544,529.24	GOOD	YES
17-B	MLCSP	300	19,100.00	13.23	252,628.93	GOOD	YES
16-B	MLCSP	300	19,100.00	3.58	68,391.62	GOOD	YES
16-B	MLCSP	300	19,100.00	34.10	651,226.44	GOOD	YES
13-B	MLCSP	300	19,100.00	2.10	40,150.22	GOOD	YES
13-B	MLCSP	300	19,100.00	49.44	944,323.05	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	101.35	1,135,174.09	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	71.97	806,118.58	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	70.12	785,318.94	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	123.94	1,388,108.88	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	70.95	794,591.61	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	75.38	844,218.47	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	74.97	839,661.43	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	62.80	703,320.12	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	74.07	829,606.08	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	65.52	733,838.39	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	76.59	857,782.61	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	96.92	1,085,480.79	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	200.67	2,247,532.69	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	62.98	705,424.60	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	169.54	1,898,839.38	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	56.27	630,270.78	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	64.45	721,863.90	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	69.02	773,029.16	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	116.06	1,299,829.84	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	25.53	1,238,150.03	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	47.07	2,283,129.07	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
TALOMO	MLCSP	750	48,500.00	4.59	222,529.50	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	221.24	10,730,043.20	GOOD	YES
11-B	PVC	150	11,200.00	13.05	146,151.52	GOOD	YES
10-A	PVC	150	11,200.00	142.32	1,593,947.40	GOOD	YES
11-B	MLCSP	300	19,100.00	54.95	1,049,635.03	GOOD	YES
11-B	MLCSP	300	19,100.00	64.27	1,227,484.08	GOOD	YES
11-B	MLCSP	300	19,100.00	12.45	237,746.06	GOOD	YES
11-B	MLCSP	300	19,100.00	39.02	745,361.12	GOOD	YES
7-A	MLCSP	600	40,100.00	57.59	2,309,336.22	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	20.09	225,061.96	GOOD	YES
9-A	MLCSP	600	40,100.00	11.89	476,913.94	GOOD	YES
7-A	MLCSP	600	40,100.00	47.21	1,893,091.61	GOOD	YES
7-A	MLCSP	600	40,100.00	40.64	1,629,576.68	GOOD	YES
7-A	MLCSP	600	40,100.00	17.51	702,276.68	GOOD	YES
10-A	PVC	150	11,200.00	47.41	531,047.67	GOOD	YES
10-A	PVC	150	11,200.00	13.28	148,725.40	GOOD	YES
10-A	PVC	150	11,200.00	98.24	1,100,330.19	GOOD	YES
9-A	PVC	150	11,200.00	78.36	877,610.09	GOOD	YES
9-A	PVC	150	11,200.00	46.61	521,999.52	GOOD	YES
10-A	PVC	150	11,200.00	2.36	26,429.65	GOOD	YES
9-A	PVC	150	11,200.00	190.27	2,131,064.09	GOOD	YES
10-A	PVC	150	11,200.00	9.56	107,043.37	GOOD	YES
9-A	PVC	150	11,200.00	183.82	2,058,830.69	GOOD	YES
7-A	MLCSP	600	40,100.00	150.53	6,036,264.83	GOOD	YES
7-A	MLCSP	500	33,200.00	140.13	4,652,214.03	GOOD	YES
7-A	MLCSP	600	40,100.00	7.69	308,558.94	GOOD	YES
6-A	MLCSP	600	40,100.00	80.98	3,247,312.07	GOOD	YES
7-A	MLCSP	500	33,200.00	3.52	116,735.06	GOOD	YES
4-A	MLCSP	500	33,200.00	182.25	6,050,796.94	GOOD	YES
6-A	MLCSP	350	20,800.00	1.74	36,240.76	GOOD	YES
5-A	MLCSP	350	20,800.00	11.53	239,791.51	GOOD	YES
2-A	MLCSP	350	20,800.00	100.23	2,084,812.81	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
WILFREDO AQUINO	MLCSP	300	19,100.00	169.74	3,241,945.60	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	64.29	1,227,879.61	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	47.99	537,538.17	GOOD	YES
2-A	MLCSP	350	20,800.00	173.02	3,598,876.31	GOOD	YES
TALOMO	MLCSP	900	56,500.00	73.84	4,171,907.04	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	28.56	319,903.47	GOOD	YES
28-C	PVC	150	11,200.00	0.83	9,309.35	GOOD	YES
24-C	PVC	150	11,200.00	84.43	945,644.14	GOOD	YES
30-C	MLCSP	400	23,600.00	65.86	1,554,375.42	GOOD	YES
32-D	MLCSP	300	19,100.00	47.65	910,093.51	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	34.89	390,739.44	GOOD	YES
11-B	PVC	150	11,200.00	12.97	145,317.47	GOOD	YES
10-A	PVC	150	11,200.00	142.86	1,600,015.98	GOOD	YES
BAGO APLAYA	MLCSP	300	19,100.00	307.29	5,869,332.91	GOOD	YES
26-C	PVC	150	11,200.00	3.71	41,565.11	GOOD	YES
27-C	PVC	150	11,200.00	155.64	1,743,222.27	GOOD	YES
27-C	PVC	150	11,200.00	150.89	1,689,965.87	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	10.44	116,973.89	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	56.38	631,432.79	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	51.40	575,676.99	GOOD	YES
LEON GARCIA SR.	PVC	150	11,200.00	9.75	109,219.59	GOOD	YES
32-D	MLCSP	300	19,100.00	118.33	2,260,119.58	GOOD	YES
32-D	MLCSP	300	19,100.00	86.96	1,660,942.09	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	148.22	5,943,632.11	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	198.94	7,977,441.29	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	411.37	16,495,742.69	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	177.11	1,983,590.35	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	169.10	1,893,925.62	GOOD	YES
AGDAO PROPER	PVC	150	11,200.00	6.83	76,452.88	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	46.10	516,307.00	GOOD	YES
20-B	PVC	150	11,200.00	52.02	582,595.78	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	12.10	135,544.04	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
20-B	PVC	150	11,200.00	41.11	460,410.20	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	1.20	13,457.29	GOOD	YES
18-B	PVC	150	11,200.00	48.43	542,369.89	GOOD	YES
20-B	PVC	150	11,200.00	1.49	16,717.27	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	5.98	66,987.83	GOOD	YES
18-B	PVC	150	11,200.00	170.17	1,905,953.37	GOOD	YES
18-B	PVC	150	11,200.00	278.99	3,124,719.66	GOOD	YES
19-B	PVC	150	11,200.00	2.77	30,968.45	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	37.07	708,072.24	GOOD	YES
2-A	MLCSP	300	19,100.00	127.25	2,430,539.53	GOOD	YES
39-D	MLCSP	300	19,100.00	5.37	102,529.57	GOOD	YES
DUMOY	MLCSP	600	40,100.00	461.42	18,503,027.95	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	513.65	20,597,197.85	GOOD	YES
31-D	MLCSP	300	19,100.00	9.14	174,539.38	GOOD	YES
37-D	MLCSP	300	19,100.00	63.83	1,219,140.20	GOOD	YES
9-A	PVC	150	11,200.00	26.58	297,748.92	GOOD	YES
7-A	PVC	150	11,200.00	6.79	76,009.06	GOOD	YES
9-A	PVC	150	11,200.00	156.68	1,754,767.47	GOOD	YES
9-A	MLCSP	600	40,100.00	59.42	2,382,731.76	GOOD	YES
7-A	MLCSP	600	40,100.00	32.72	1,312,096.83	GOOD	YES
7-A	MLCSP	600	40,100.00	131.91	5,289,469.45	GOOD	YES
7-A	MLCSP	600	40,100.00	78.89	3,163,605.59	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	570.45	22,874,942.06	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	47.27	1,115,617.81	GOOD	YES
6-A	MLCSP	600	40,100.00	101.25	4,060,142.85	GOOD	YES
BUCANA	PVC	150	11,200.00	124.24	1,391,498.68	GOOD	YES
DUMOY	MLCSP	500	33,200.00	404.49	13,428,992.53	GOOD	YES
DUMOY	MLCSP	500	33,200.00	421.94	14,008,393.04	GOOD	YES
DUMOY	MLCSP	500	33,200.00	94.17	3,126,438.19	GOOD	YES
DUMOY	MLCSP	250	17,700.00	27.30	483,233.44	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	39.52	754,899.06	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
WILFREDO AQUINO	MLCSP	300	19,100.00	42.46	810,990.85	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	31.66	354,610.44	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	91.74	1,027,477.53	GOOD	YES
TALOMO	MLCSP	450	24,300.00	8.64	209,916.38	GOOD	YES
BAGO APLAYA	MLCSP	450	24,300.00	39.25	953,864.99	GOOD	YES
TALOMO	MLCSP	600	40,100.00	4.63	185,572.61	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	41.60	1,668,190.99	GOOD	YES
BUCANA	PVC	150	11,200.00	360.06	4,032,669.72	GOOD	YES
BUCANA	PVC	150	11,200.00	61.17	685,154.06	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	13.10	146,718.52	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
BUCANA	PVC	150	11,200.00	1.49	16,735.47	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	358.81	4,018,644.53	GOOD	YES
5-A	PVC	150	11,200.00	49.36	552,880.15	GOOD	YES
BAGO APLAYA	MLCSP	450	24,300.00	645.07	15,675,314.09	GOOD	YES
BAGO APLAYA	MLCSP	450	24,300.00	388.51	9,440,694.65	GOOD	YES
BAGO APLAYA	MLCSP	700	44,200.00	13.77	608,726.32	GOOD	YES
TALOMO	MLCSP	700	44,200.00	219.87	9,718,130.18	GOOD	YES
BAGO APLAYA	MLCSP	700	44,200.00	7.87	347,705.99	GOOD	YES
BUCANA	PVC	150	11,200.00	63.07	706,375.75	GOOD	YES
7-A	MLCSP	600	40,100.00	74.86	3,001,696.22	GOOD	YES
31-D	MLCSP	300	19,100.00	33.02	630,763.79	GOOD	YES
37-D	MLCSP	300	19,100.00	104.48	1,995,635.82	GOOD	YES
31-D	MLCSP	300	19,100.00	12.87	245,805.21	GOOD	YES
37-D	MLCSP	300	19,100.00	97.71	1,866,187.23	GOOD	YES
38-D	MLCSP	300	19,100.00	13.57	259,281.73	GOOD	YES
37-D	MLCSP	300	19,100.00	227.02	4,336,136.46	GOOD	YES
AGDAO PROPER	MLCSP	300	19,100.00	239.57	4,575,759.49	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	53.67	1,266,711.33	GOOD	YES
GOV. VICENTE DUTERTE	MLCSP	400	23,600.00	206.29	4,868,352.27	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
GOV. VICENTE DUTERTE	MLCSP	400	23,600.00	116.45	2,748,245.19	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
GOV. VICENTE DUTERTE	MLCSP	400	23,600.00	20.82	491,366.14	GOOD	YES
GOV. VICENTE DUTERTE	MLCSP	400	23,600.00	66.75	1,575,388.38	GOOD	YES
GOV. VICENTE DUTERTE	MLCSP	400	23,600.00	124.74	2,943,831.36	GOOD	YES
UBALDE	MLCSP	400	23,600.00	173.79	4,101,527.75	GOOD	YES
UBALDE	MLCSP	400	23,600.00	21.83	515,083.85	GOOD	YES
GOV. VICENTE DUTERTE	MLCSP	400	23,600.00	368.65	8,700,114.47	GOOD	YES
SAN ANTONIO	MLCSP	400	23,600.00	196.92	4,647,376.77	GOOD	YES
UBALDE	MLCSP	400	23,600.00	9.54	225,196.59	GOOD	YES
LAPU - LAPU	MLCSP	400	23,600.00	180.35	4,256,323.16	GOOD	YES
LAPU - LAPU	MLCSP	400	23,600.00	490.41	11,573,583.68	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	37.02	707,013.31	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	39.11	747,037.21	GOOD	YES
32-D	MLCSP	500	33,200.00	19.37	642,939.30	GOOD	YES
10-A	MLCSP	500	33,200.00	173.65	5,765,196.36	GOOD	YES
4-A	MLCSP	500	33,200.00	147.97	4,912,514.35	GOOD	YES
10-A	PVC	150	11,200.00	169.02	1,893,002.50	GOOD	YES
4-A	PVC	150	11,200.00	2.89	32,394.30	GOOD	YES
4-A	MLCSP	500	33,200.00	263.63	8,752,620.07	GOOD	YES
4-A	MLCSP	500	33,200.00	36.32	1,205,767.08	GOOD	YES
UBALDE	MLCSP	400	23,600.00	56.80	1,340,392.27	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
LAPU - LAPU	MLCSP	400	23,600.00	162.28	3,829,897.70	GOOD	YES
CENTRO	MLCSP	400	23,600.00	93.79	2,213,390.46	GOOD	YES
MA-A	PVC	100	11,000.00	11.77	129,427.01	GOOD	YES
MA-A	MLCSP	750	48,500.00	117.14	5,681,136.30	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	228.64	11,088,847.04	GOOD	YES
MATINA CROSSING	MLCSP	750	48,500.00	134.23	6,510,133.42	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	16.87	188,999.06	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	32.12	359,744.40	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	11.21	125,578.12	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	21.56	241,514.23	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	143.01	1,601,695.69	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
MATINA CROSSING	PVC	150	11,200.00	42.88	480,233.29	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	224.73	2,516,972.08	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	69.27	775,815.66	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	40.60	454,761.77	GOOD	YES
MATINA CROSSING	MLCSP	300	19,100.00	72.23	1,379,609.00	GOOD	YES
MATINA CROSSING	MLCSP	300	19,100.00	76.88	1,468,438.21	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	67.98	761,374.01	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	98.64	1,104,743.58	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	66.40	743,650.05	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	73.05	818,111.64	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	38.45	430,616.62	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	42.39	474,764.83	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	43.58	488,151.94	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	52.77	590,990.62	GOOD	YES
AGDAO PROPER	PVC	150	11,200.00	72.06	807,034.52	GOOD	YES
SASA	PVC	200	12,500.00	172.47	2,155,827.94	GOOD	YES
SASA	PVC	200	12,500.00	287.63	3,595,360.67	GOOD	YES
SASA	PVC	200	12,500.00	158.22	1,977,768.09	GOOD	YES
SASA	PVC	200	12,500.00	116.91	1,461,381.13	GOOD	YES
SASA	PVC	200	12,500.00	706.36	8,829,483.05	GOOD	YES
V. HIZON	MLCSP	250	17,700.00	130.50	2,309,875.75	GOOD	YES
A. ANGLIONGTO	MLCSP	250	17,700.00	45.55	806,305.05	GOOD	YES
V. HIZON	MLCSP	300	19,100.00	15.35	293,108.08	GOOD	YES
PAMPANGA	MLCSP	300	19,100.00	118.53	2,263,831.95	GOOD	YES
PAMPANGA	MLCSP	300	19,100.00	45.71	873,145.47	GOOD	YES
V. HIZON	MLCSP	250	17,700.00	2.88	50,907.09	GOOD	YES
PAMPANGA	MLCSP	250	17,700.00	12.43	220,059.13	GOOD	YES
SASA	MLCSP	250	17,700.00	75.16	1,330,375.08	GOOD	YES
PAMPANGA	MLCSP	250	17,700.00	223.75	3,960,455.77	GOOD	YES
SASA	PVC	200	12,500.00	96.35	1,204,373.15	GOOD	YES
SASA	PVC	200	12,500.00	14.44	180,552.25	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
SASA	MLCSP	250	17,700.00	261.04	4,620,366.65	GOOD	YES
SASA	MLCSP	250	17,700.00	167.70	2,968,309.81	GOOD	YES
SASA	PVC	200	12,500.00	15.76	197,040.68	GOOD	YES
SASA	PVC	200	12,500.00	178.68	2,233,513.31	GOOD	YES
SASA	PVC	200	12,500.00	55.47	693,347.97	GOOD	YES
SASA	PVC	200	12,500.00	15.42	192,745.37	GOOD	YES
V. HIZON	MLCSP	250	17,700.00	386.97	6,849,391.77	GOOD	YES
PAMPANGA	MLCSP	250	17,700.00	23.61	417,867.81	GOOD	YES
PAMPANGA	MLCSP	250	17,700.00	23.06	408,076.97	GOOD	YES
PAMPANGA	MLCSP	300	19,100.00	336.36	6,424,543.28	GOOD	YES
MA-A	MLCSP	300	19,100.00	22.52	430,209.25	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
SASA	MLCSP	250	17,700.00	178.44	3,158,390.27	GOOD	YES
SASA	MLCSP	250	17,700.00	328.88	5,821,114.33	GOOD	YES
V. HIZON	MLCSP	250	17,700.00	664.01	11,752,995.55	GOOD	YES
V. HIZON	MLCSP	250	17,700.00	107.30	1,899,262.49	GOOD	YES
SASA	PVC	200	12,500.00	149.99	1,874,891.02	GOOD	YES
SASA	PVC	200	12,500.00	155.39	1,942,375.42	GOOD	YES
BAGO GALLERA	MLCSP	350	20,800.00	447.09	9,299,564.29	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	101.39	2,108,852.90	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	180.67	3,757,840.27	GOOD	YES
BAGO GALLERA	MLCSP	350	20,800.00	161.78	3,365,032.28	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	86.72	1,803,737.15	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	468.81	9,751,327.17	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	444.08	9,236,966.91	GOOD	YES
BAGO APLAYA	MLCSP	250	17,700.00	14.99	265,329.26	GOOD	YES
BAGO GALLERA	MLCSP	350	20,800.00	434.15	9,030,303.44	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	88.28	1,836,193.39	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	193.82	4,031,371.86	GOOD	YES
11-B	MLCSP	300	19,100.00	60.43	1,154,117.70	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	190.87	3,645,677.98	GOOD	YES
V. HIZON	MLCSP	300	19,100.00	576.33	11,007,902.74	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
PAMPANGA	MLCSP	300	19,100.00	73.97	1,412,856.15	GOOD	YES
V. HIZON	MLCSP	300	19,100.00	10.52	200,867.92	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
16-B	MLCSP	300	19,100.00	13.62	260,079.03	GOOD	YES
15-B	MLCSP	300	19,100.00	481.76	9,201,654.19	GOOD	YES
16-B	MLCSP	300	19,100.00	50.22	959,266.01	GOOD	YES
16-B	PVC	150	11,200.00	176.25	1,974,027.40	GOOD	YES
16-B	PVC	150	11,200.00	174.06	1,949,526.87	GOOD	YES
16-B	PVC	150	11,200.00	172.80	1,935,357.85	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	25.58	286,538.24	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	82.20	920,679.05	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	264.25	2,959,584.33	GOOD	YES
16-B	PVC	150	11,200.00	0.97	10,809.50	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	171.17	1,917,049.11	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	3.66	69,828.95	GOOD	YES
AGDAO PROPER	MLCSP	300	19,100.00	111.52	2,130,060.54	GOOD	YES
A. ANGLIONGTO	MLCSP	250	17,700.00	498.54	8,824,121.16	GOOD	YES
A. ANGLIONGTO	MLCSP	400	23,600.00	16.33	385,421.37	GOOD	YES
A. ANGLIONGTO	MLCSP	400	23,600.00	7.10	167,462.72	GOOD	YES
RAFAEL CASTILLO	MLCSP	400	23,600.00	203.98	4,813,974.52	GOOD	YES
RAFAEL CASTILLO	MLCSP	400	23,600.00	134.22	3,167,610.65	GOOD	YES
WILFREDO AQUINO	MLCSP	400	23,600.00	84.33	1,990,128.53	GOOD	YES
WILFREDO AQUINO	MLCSP	400	23,600.00	32.46	765,989.87	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	136.87	2,614,228.05	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	37.85	423,879.17	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	107.71	1,206,356.14	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	140.58	1,574,455.55	GOOD	YES
SAN ANTONIO	MLCSP	400	23,600.00	227.24	5,362,980.37	GOOD	YES
RAFAEL CASTILLO	MLCSP	400	23,600.00	157.10	3,707,592.31	GOOD	YES
28-C	PVC	150	11,200.00	41.08	460,145.64	GOOD	YES
30-C	MLCSP	400	23,600.00	85.55	2,018,948.13	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
30-C	PVC	150	11,200.00	159.98	1,791,778.32	GOOD	YES
14-B	MLCSP	400	23,600.00	71.45	1,686,146.38	GOOD	YES
30-C	MLCSP	400	23,600.00	7.64	180,243.27	GOOD	YES
14-B	MLCSP	400	23,600.00	59.98	1,415,483.32	GOOD	YES
AGDAO PROPER	PVC	200	12,500.00	20.10	251,279.71	GOOD	YES
40-D	MLCSP	250	17,700.00	283.77	5,022,804.49	GOOD	YES
2-A	MLCSP	250	17,700.00	7.32	129,588.49	GOOD	YES
39-D	MLCSP	250	17,700.00	196.26	3,473,756.88	GOOD	YES
19-B	MLCSP	300	19,100.00	254.95	4,869,484.34	GOOD	YES
WILFREDO AQUINO	PVC	150	11,200.00	15.86	177,609.43	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	5.45	61,000.44	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	421.48	9,947,033.00	GOOD	YES
MA-A	MLCSP	750	48,500.00	163.35	7,922,233.86	GOOD	YES
MA-A	MLCSP	750	48,500.00	16.15	783,164.31	GOOD	YES
5-A	MLCSP	750	48,500.00	196.61	9,535,727.04	GOOD	YES
2-A	MLCSP	750	48,500.00	103.21	5,005,843.67	GOOD	YES
BUCANA	MLCSP	750	48,500.00	224.13	10,870,219.28	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	208.98	2,340,545.48	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
BAGO GALLERA	MLCSP	350	20,800.00	23.71	493,220.95	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	493.05	10,255,539.73	GOOD	YES
BAGO GALLERA	MLCSP	300	19,100.00	4.41	84,321.31	GOOD	YES
BAGO APLAYA	MLCSP	300	19,100.00	8.71	166,445.55	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	294.00	3,292,806.31	GOOD	YES
WILFREDO AQUINO	MLCSP	400	23,600.00	7.72	182,170.09	GOOD	YES
MA-A	MLCSP	350	20,800.00	224.84	4,676,573.82	GOOD	YES
MA-A	MLCSP	400	23,600.00	40.19	948,374.19	GOOD	YES
MA-A	MLCSP	450	24,300.00	35.26	856,782.33	GOOD	YES
MA-A	MLCSP	500	33,200.00	22.76	755,489.19	GOOD	YES
MA-A	MLCSP	600	40,100.00	319.83	12,824,983.66	GOOD	YES
MA-A	MLCSP	600	40,100.00	137.98	5,532,912.49	GOOD	YES
MA-A	MLCSP	600	40,100.00	132.34	5,306,647.17	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
MA-A	MLCSP	300	19,100.00	2.23	42,629.08	GOOD	YES
MA-A	MLCSP	300	19,100.00	336.29	6,423,084.59	GOOD	YES
MA-A	MLCSP	300	19,100.00	13.96	266,595.84	GOOD	YES
MA-A	MLCSP	300	19,100.00	46.39	886,031.60	GOOD	YES
MA-A	MLCSP	300	19,100.00	175.78	3,357,430.68	GOOD	YES
MA-A	MLCSP	300	19,100.00	118.72	2,267,602.93	GOOD	YES
MA-A	MLCSP	300	19,100.00	32.27	616,274.86	GOOD	YES
MA-A	MLCSP	300	19,100.00	63.45	1,211,818.11	GOOD	YES
MA-A	PVC	150	11,200.00	33.21	371,946.33	GOOD	YES
2-A	MLCSP	300	19,100.00	13.62	260,119.16	GOOD	YES
SASA	MLCSP	250	17,700.00	317.51	5,619,859.14	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
31-D	MLCSP	300	19,100.00	105.93	2,023,249.31	GOOD	YES
31-D	PVC	150	11,200.00	16.42	183,945.89	GOOD	YES
35-D	PVC	200	12,500.00	10.88	135,940.35	GOOD	YES
MATINA PANGI	MLCSP	800	52,800.00	710.84	37,532,296.41	GOOD	YES
MATINA PANGI	MLCSP	800	52,800.00	168.64	8,904,116.03	GOOD	YES
MATINA PANGI	MLCSP	800	52,800.00	71.59	3,780,034.93	GOOD	YES
18-B	PVC	150	11,200.00	347.83	3,895,707.99	GOOD	YES
39-D	MLCSP	300	19,100.00	135.63	2,590,616.76	GOOD	YES
38-D	MLCSP	300	19,100.00	7.79	148,701.54	GOOD	YES
39-D	MLCSP	300	19,100.00	18.93	361,557.71	GOOD	YES
26-C	PVC	150	11,200.00	156.73	1,755,370.92	GOOD	YES
23-C	PVC	150	11,200.00	4.57	51,130.98	GOOD	YES
26-C	PVC	150	11,200.00	3.84	43,037.65	GOOD	YES
23-C	PVC	150	11,200.00	3.90	43,640.80	GOOD	YES
32-D	MLCSP	300	19,100.00	10.20	194,857.25	GOOD	YES
31-D	MLCSP	300	19,100.00	8.38	160,065.60	GOOD	YES
31-D	MLCSP	300	19,100.00	150.78	2,879,809.34	GOOD	YES
32-D	MLCSP	300	19,100.00	85.03	1,624,027.16	GOOD	YES
24-C	MLCSP	300	19,100.00	18.13	346,261.27	GOOD	YES
31-D	MLCSP	300	19,100.00	3.56	67,944.76	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
27-C	PVC	200	12,500.00	18.97	237,124.89	GOOD	YES
MA-A	MLCSP	300	19,100.00	233.32	4,456,490.64	GOOD	YES
SASA	MLCSP	250	17,700.00	178.33	3,156,377.03	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
12-B	PVC	100	11,000.00	0.78	8,573.57	GOOD	YES
MATINA CROSSING	MLCSP	350	20,800.00	625.57	13,011,838.55	GOOD	YES
MATINA APLAYA	MLCSP	350	20,800.00	98.18	2,042,215.47	GOOD	YES
MATINA APLAYA	MLCSP	300	19,100.00	665.27	12,706,576.48	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	7.81	162,453.17	GOOD	YES
TIGATTO	MLCSP	400	23,600.00	823.75	19,440,390.24	GOOD	YES
BAGO APLAYA	MLCSP	250	17,700.00	7.69	136,195.64	GOOD	YES
DUMOY	MLCSP	250	17,700.00	15.00	265,470.51	GOOD	YES
BAGO APLAYA	MLCSP	250	17,700.00	5.64	99,843.41	GOOD	YES
BAGO APLAYA	MLCSP	250	17,700.00	28.02	495,998.17	GOOD	YES
BAGO GALLERA	MLCSP	250	17,700.00	6.99	123,788.54	GOOD	YES
PAMPANGA	MLCSP	300	19,100.00	3.45	65,948.62	GOOD	YES
V. HIZON	MLCSP	250	17,700.00	2.68	47,364.76	GOOD	YES
V. HIZON	MLCSP	250	17,700.00	8.89	157,408.34	GOOD	YES
PANACAN	MLCSP	250	17,700.00	43.61	771,973.13	GOOD	YES
PANACAN	MLCSP	250	17,700.00	182.18	3,224,503.74	GOOD	YES
PANACAN	MLCSP	250	17,700.00	359.55	6,364,103.03	GOOD	YES
PANACAN	MLCSP	250	17,700.00	313.82	5,554,698.28	GOOD	YES
PANACAN	MLCSP	250	17,700.00	505.50	8,947,321.99	GOOD	YES
MATINA CROSSING	MLCSP	300	19,100.00	182.35	3,482,793.05	GOOD	YES
TIGATTO	MLCSP	400	23,600.00	796.06	18,786,995.93	GOOD	YES
TIGATTO	MLCSP	400	23,600.00	280.23	6,613,424.56	GOOD	YES
PANACAN	MLCSP	250	17,700.00	40.33	713,903.86	GOOD	YES
PANACAN	MLCSP	250	17,700.00	1,040.48	18,416,564.14	GOOD	YES
SASA	MLCSP	300	19,100.00	79.92	1,526,436.01	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
6-A	MLCSP	600	40,100.00	90.17	3,615,732.24	GOOD	YES
5-A	MLCSP	600	40,100.00	9.16	367,394.43	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
6-A	MLCSP	600	40,100.00	9.89	396,689.78	GOOD	YES
PAMPANGA	MLCSP	300	19,100.00	18.37	350,812.53	GOOD	YES
SASA	MLCSP	300	19,100.00	169.79	3,242,914.10	GOOD	YES
PAMPANGA	MLCSP	300	19,100.00	276.83	5,287,533.77	GOOD	YES
TALOMO	MLCSP	450	24,300.00	34.79	845,301.72	GOOD	YES
BAGO APLAYA	MLCSP	450	24,300.00	199.17	4,839,833.48	GOOD	YES
BAGO APLAYA	MLCSP	450	24,300.00	62.16	1,510,400.83	GOOD	YES
PANACAN	MLCSP	250	17,700.00	180.38	3,192,672.19	GOOD	YES
PANACAN	MLCSP	250	17,700.00	0.71	12,539.41	GOOD	YES
MATINA PANGI	MLCSP	250	17,700.00	455.49	8,062,116.07	GOOD	YES
CATALUNAN GRANDE	MLCSP	250	17,700.00	243.39	4,308,037.35	GOOD	YES
11-B	MLCSP	300	19,100.00	11.72	223,799.69	GOOD	YES
19-B	MLCSP	300	19,100.00	108.19	2,066,488.28	GOOD	YES
19-B	MLCSP	300	19,100.00	45.56	870,242.26	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	18.07	202,382.31	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	24.03	269,095.96	GOOD	YES
TIGATTO	MLCSP	400	23,600.00	979.68	23,120,547.44	GOOD	YES
TIGATTO	MLCSP	400	23,600.00	465.86	10,994,406.99	GOOD	YES
TIGATTO	MLCSP	400	23,600.00	495.13	11,684,992.49	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	215.20	5,078,781.72	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	458.49	10,820,449.96	GOOD	YES
BAGO APLAYA	MLCSP	250	17,700.00	39.30	695,588.26	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	223.51	8,962,818.49	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	463.42	18,583,248.77	GOOD	YES
BUCANA	MLCSP	250	17,700.00	184.63	3,267,936.70	GOOD	YES
MATINA APLAYA	MLCSP	250	17,700.00	922.60	16,330,062.61	GOOD	YES
MATINA APLAYA	MLCSP	250	17,700.00	1,041.85	18,440,658.14	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
20-B	PVC	150	11,200.00	82.14	920,020.71	GOOD	YES
20-B	PVC	150	11,200.00	41.02	459,446.30	GOOD	YES
10-A	PVC	150	11,200.00	3.91	43,819.50	GOOD	YES
10-A	PVC	150	11,200.00	58.32	653,147.99	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
PANACAN	MLCSP	400	23,600.00	118.38	2,793,747.24	GOOD	YES
PANACAN	MLCSP	400	23,600.00	532.14	12,558,404.14	GOOD	YES
ILANG	MLCSP	400	23,600.00	407.33	9,612,967.08	GOOD	YES
ILANG	MLCSP	400	23,600.00	31.69	747,910.07	GOOD	YES
ILANG	MLCSP	400	23,600.00	988.28	23,323,436.17	GOOD	YES
ILANG	MLCSP	400	23,600.00	268.48	6,336,021.60	GOOD	YES
MATINA CROSSING	MLCSP	250	17,700.00	92.29	1,633,549.48	GOOD	YES
TIGATTO	MLCSP	400	23,600.00	333.61	7,873,247.02	GOOD	YES
TIGATTO	MLCSP	400	23,600.00	654.51	15,446,335.51	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	54.26	1,036,373.39	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	59.75	1,141,164.05	GOOD	YES
TALOMO	MLCSP	350	20,800.00	70.52	1,466,777.12	GOOD	YES
TALOMO	MLCSP	350	20,800.00	479.16	9,966,477.43	GOOD	YES
TALOMO	MLCSP	250	17,700.00	16.21	287,004.35	GOOD	YES
TALOMO	MLCSP	350	20,800.00	5.75	119,647.21	GOOD	YES
TALOMO	MLCSP	350	20,800.00	437.34	9,096,746.13	GOOD	YES
TALOMO	MLCSP	250	17,700.00	328.00	5,805,524.72	GOOD	YES
TALOMO	MLCSP	250	17,700.00	0.61	10,821.60	GOOD	YES
MA-A	MLCSP	800	52,800.00	157.45	8,313,285.79	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
TIGATTO	MLCSP	800	52,800.00	397.12	20,967,744.19	GOOD	YES
BUHANGIN	MLCSP	800	52,800.00	19.46	1,027,385.04	GOOD	YES
MA-A	MLCSP	800	52,800.00	55.05	2,906,526.66	GOOD	YES
TALOMO	MLCSP	700	44,200.00	353.39	15,619,726.82	GOOD	YES
TALOMO	MLCSP	700	44,200.00	28.93	1,278,602.41	GOOD	YES
TALOMO	MLCSP	350	20,800.00	5.19	107,957.09	GOOD	YES
WILFREDO AQUINO	MLCSP	400	23,600.00	12.17	287,181.99	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	71.18	797,268.43	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	2.02	22,571.60	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	24.87	586,835.02	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	5.86	138,379.33	GOOD	YES
SAN ANTONIO	MLCSP	400	23,600.00	3.88	91,465.59	GOOD	YES

Table LU-56. Lifeline Utilities, Level III Water System Exposure to Liquefaction, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
A. ANGLIONGTO	MLCSP	300	19,100.00	348.93	6,664,507.18	GOOD	YES
LAPU - LAPU	MLCSP	300	19,100.00	5.08	96,966.61	GOOD	YES
V. HIZON	MLCSP	300	19,100.00	162.74	3,108,246.39	GOOD	YES
A. ANGLIONGTO	MLCSP	300	19,100.00	23.08	440,807.98	GOOD	YES
MATINA APLAYA	MLCSP	250	17,700.00	341.23	6,039,772.22	GOOD	YES
MATINA APLAYA	MLCSP	250	17,700.00	266.89	4,723,879.54	GOOD	YES
BUCANA	MLCSP	250	17,700.00	434.23	7,685,833.08	GOOD	YES
AGDAO PROPER	PVC	150	11,200.00	55.96	626,712.34	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	8.86	99,243.20	GOOD	YES
AGDAO PROPER	PVC	150	11,200.00	37.93	424,821.24	GOOD	YES
15-B	PVC	150	11,200.00	19.13	214,291.63	GOOD	YES
SAN ANTONIO	MLCSP	400	23,600.00	78.61	1,855,148.70	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
WILFREDO AQUINO	MLCSP	400	23,600.00	58.48	1,380,062.83	GOOD	YES
WILFREDO AQUINO	MLCSP	400	23,600.00	64.24	1,516,087.12	GOOD	YES
SAN ANTONIO	MLCSP	400	23,600.00	367.39	8,670,341.39	GOOD	YES
ILANG	MLCSP	400	23,600.00	21.96	518,195.21	GOOD	YES
ILANG	MLCSP	400	23,600.00	21.96	518,195.21	GOOD	YES

Exposure Estimation for DCWD Wells

For Level III, DCWD Wells, a total of six (6) wells are highly susceptible to liquefaction. These wells are found in Lower Rapnaga, Puan, Barangay Bago Aplaya, Crossing Bago Aplaya, Barangay Bago Aplaya, Km 10, Bago Aplaya, fronting Ideal Subdivision, Barangay Bago Aplaya, Davao-Cotabao Road, near Bago Bridge, Barangay Bago Aplaya, and Km 11, Dumoy, near the entrance of the Distal, Barangay Dumoy

Table LU-57. Lifeline Utilities Level III DCWD Production Wells Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY		
LOCATION	Liquefaction	PUMP TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
UUHSA, Brgy. Talomo	Moderate	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Km. 8 Ulas, Brgy. Talomo	Moderate	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Puan Junction, Brgy. Talomo	Moderate	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES
Lower Rapnaga, Puan, Brgy. Bago Aplaya	Moderate	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES
Lower Rapnaga, Puan, Brgy. Bago Aplaya	High	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Lower Rapnaga, Puan, Brgy. Bago Aplaya	High	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Crossing Bago Aplaya, Brgy. Bago Aplaya	High	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Km. 10 Bago Aplaya fronting Ideal Subdivision, Brgy. Bago Aplaya	High	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	High	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Km. 11 Dumoy near the entrance to Dusnai, Brgy. Dumoy	High	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Bago Galleria Road near Galleria De Oro Subd., Brgy. Bago Galleria	Moderate	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Km. 9, Puan along Davao Cotabato Road Brgy. Bago Aplaya	Moderate	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Catotal Subdivision near Block 22, Brgy. Bago Aplaya	Moderate	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Entrance to Greenland Subdivision, along Davao Cotabato Road, Brgy. Dumoy	Moderate	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES

Exposure Estimation for Cell Sites

Each cell site with an area of 300 sq. m, has a value of ₱12-P15 million.

Table LU-58. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
GLOBE TELECOM, INC.	Brgy. Daliao, Toril,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Lorenzo Manuel St., San Vicente Daliao, Toril, Davao City,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Brgy. Daliao, Toril	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Mac Arthur Highway, Dumoy,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Barangay Bago Aplaya, Talomo District, Davao City Golf Country Club	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Doña Luisa Subdivision, Phase 2, Brgy. Matina Aplaya	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Matina Aplaya Road, Brgy. Pagasa, Matina Aplaya	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-58. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Matina Aplaya (near Lanzano Subd.)	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	JMS Bldg., #88 Maya Street, Barangay 76A, Ecoland,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	University Ave., Juna Subd., Martina	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Abarquez Prop., University Ave., Juna Subd., Martina,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Matina Aplaya	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Mc Arthur Hiway, Brgy. 74-A, Matina,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Bago Gallera, Talomo District,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	NCC Mall Maa	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-58. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
DIGITEL MOBILE PHILIPPINES, INC.	109 Piapi, Quezon Blvd,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Santiago's Lot, Brgy. Sasa Buhangin,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Erlinda Reyes Bldg., 19-Piapi Quezon Blvd.,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	5/F Gaisano Ilustre St.	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Ilustre St.,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	J.S. Gaisano Mall, Ilustre St., cor. Gen. Luna St.,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	General Malvar St.	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	D. Ponce St.,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Chippens Bldg., 368 Padre Gomez St.,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Chippens Bldg., 368 Padre Gomez St.	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Davao Doctors Hospital, Malvar St.	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Legaspi St. Cor. Bonifacio St.,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Baguio (Pob.),	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-58. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Centerpoint Mall, Brgy. Matina Crossing,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Magno Prop., No. 64 V. Mapa St.,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	No. 64 V. Mapa St.	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	JVALL Bldg., McArthur Hi-way, (Maa Crossing)	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Sandawa, McArthur Hi-Way, Matina,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Sandawa, McArthur Hi-way, Matina	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Magallanes St.	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro corner Quimpo Blvd.	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	NCCC Mall, Maa,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Matina Hi-way cor. MAA Rd.	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	#88 Maya St., Brgy. 76A, Ecoland,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro cor. Quimpo Blvd.	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Ponciano Reyes St. (crooked Rd.)	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Magno Bldg., Ponciano Reyes St. (crooked rd.),	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Bonifacio St., cor M.L. Quezon Blvd	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-58. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
DIGITEL MOBILE PHILIPPINES, INC.	Km.12, National Highway, Barangay Catalunan Pequeno,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Ponciano, PLDT Bldg., Ponciano St.	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Regency Inn, Villa Abrille St.,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Gov. Sales St., Brgy. 27	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Jose Co Bldg., Gov. Sales St., Brgy. 27,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	NCC Mall Uyanguren	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	NCC Mall Unaguren	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PBCOM Bldg., Monteverde cor. Bangoy St.,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Post fronting Chimes Store, Sales St.,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Holy Cross College, Sta. Ana Ave. Cor Guerero	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	J.P. Laurel Ave., Bajada	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	J.P Laurel Ave., Bajada	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	San Pedro Hospital Guzman St., Brgy. Gov. Vicente Duterte	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Brgy. Gov. Vicente Duterte,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-58. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSUR-ANCE COV-ERAGE	AVAILABLE GOVERNMENT RESOURCES
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Gov. Vicente Duterte	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Lapu Lapu corner Bangoy Sts., Agdao,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Lapu-lapu St., cor. Bangoy Agdao,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Banco Filipino Bldg., Lapu-lapu St., cor. Dacudao Ave.,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Wescon Suites Cmpd., R. Castillo, Agdao	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Peralta Property, Seminary Rd., Brgy Catalunan Grande Talomo District,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Llanes Prop 1, Cabaguio Ave., Agdao,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Cabaguio Ave., Agdao	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	R. Castillo St., Otero Compound, Lapu-Lapu	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Leonor Property, Camia St., Ubalde Subd., Brgy. Ubalde,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Camia St., Ubalde Subd., Brgy. Ubalde	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-58. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Avenue	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	SM Lanang, Km. 6 Lanang	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	SM Lanang, Km 6, Lanang,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	SM Lanang Former Lanang Golf and Country Club, J.P. Laurel Ave., Lanang District, Brgy. San Antonio	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	J.P. Laurel Ave., Monark Compound, Brgy. Rafael Castillo	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-58. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	SM Davao Ecoland	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	SM Davao Ecoland,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Waterfront Hotel, Lanang,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Doña Asuncion Road, Brgy. Pampanga, Lanang,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Km. 9, KMA, Brgy. Sasa	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Sitio Nahul, Barangay Baliok,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Sitio Nahul, Brgy. Baliok	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	National Highway Panacan	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Lasang	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Barilio Lasang	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Hao Property, Barilio Lasang,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Corner National Highway-Lim Street, Brgy. Toril Proper	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Ferriols Compound, Brgy. Toril Proper	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Sto. Cristo St., cor. Rasay St., Brgy. Toril Proper	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Along National Highway, Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-58. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
DIGITEL MOBILE PHILIPPINES, INC.	Commandante Property, Along National Highway, Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Telstar St., GSIS Subdivision, McArthur Hi-way, Matina	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Crossing Puan, McArthur Highway	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Bago Aplaya, Talomo	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Vega Property, Cariosa St. cor Balitaw st., Lanzona Subd., Matina,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Carinosa St., cor. Balitaw St., Lanzona Subd., Matina	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Ortis Road, Brgy. Ulas	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Ortis road, Brgy. Ulas,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Golden Hardware Bldg.,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Golden Hardware Bldg., Km. 5 McArthur Highway, Matina	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Guardsman, AGT Bldg., Nacilla Street, Brgy. Ma-a	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Guardsman AGT Bldg., Nacilla Street, Brgy. Ma-a,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Maa	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-58. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
GLOBE TELECOM, INC.	Torres St., Brgy. 9-A (Pob.)	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Maa,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Infront of Luisa Avenue Square Bldg., B. Jacinto Ext. St.	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Landco Bldg., JP Laurel St.	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Corner Palma Gil & Cervantes St.	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Billboard on Synchar Hotel, J.P. Laurel Ave., Bajada	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	J.P. Laurel Avenue, Bajada,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	University of Southern Philippines, Trade School Drive	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Opal St., Obrero,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Opal St., Obrero	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St., Barangay 20-B (Pob.)	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St. Acacia,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	JP Laurel St., Barangay 20-B (Pob.),	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Km10 Doña Salud Subd., Sasa	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Km10 Doña Salud Subd., Sasa,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Table LU-58. Lifeline Utilities, Cell Sites, Exposure Estimation Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Pres. Carlos P. Garcia Highway, Brgy. Panacan,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	President Carlos P. Garcia Highway (Diversion Road), Brgy. Panacan	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Cruz Property, President. Carlos P. Garcia Highway (Diversion Road), Brgy. Panacan,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Malagamot Road, Bayani Diaz Compound, Panacan	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Malagamot Road, Panacan,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway, Panacan	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Tefasco Lot, Panacan,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Panacan,	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
DIGITEL MOBILE PHILIPPINES, INC.	Brgy. Bunawan	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
SMART COMMUNICATIONS, INC.	Purok 3, (near Market site), Brgy. Bunawan	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund
GLOBE TELECOM, INC.	Crossing Licanan, Brgy. Alejandra Navarro (Lasang)	300 sq. m	₱12 - ₱15 million	₱12 - ₱15 million	Steel & Concrete	good	Yes	None	No Available Fund

Exposure Estimation for National Roads

Davao-Agusan Highway has the highest value at ₱129, 245,120 out of the total exposed length of 2.4865 kilometers. Mc-Arthur Highway is also the second highest with a total value of ₱117,232, 391 out of the exposed value of 2.0934 kilometers. Values previously mentioned are only for the length susceptible to 5-meter wave.

Table LU-59. Lifeline Utilities, Roads, Exposure Estimation Table for Storm Surge , Davao City

EXPOSURE					SENSITIVITY		
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT
2nd Avenue	2m	0.2056	60,000,000	12,337,800	concrete	good	Yes
5th Ave.	2m	0.1964	60,000,000	11,781,900	concrete	good	Yes
5th Ave.	2m	0.0080	60,000,000	478,753	concrete	good	Yes
Agdao Flyover	2m	0.3327	56,000,000	18,632,152	concrete	good	Yes
Agdao Flyover	2m	0.1406	56,000,000	7,876,064	concrete	good	Yes
Bonifacio Rotonda	3m	0.0839	56,000,000	4,697,403	concrete	good	Yes
Carlos P. Garcia Highway	5m	0.0067	60,000,000	401,819	concrete	good	Yes
Carlos P. Garcia Highway	5m	0.0289	60,000,000	1,731,774	concrete	good	Yes
Carlos P. Garcia Highway	2m	0.0015	60,000,000	91,175	concrete	good	Yes
Carlos P. Garcia Highway	3m	0.3565	60,000,000	21,391,800	concrete	good	Yes
Carlos P. Garcia Highway	4m	0.0289	60,000,000	1,731,720	concrete	good	Yes
Claro M. Recto St.	2m	0.2221	56,000,000	12,436,984	concrete	good	Yes
Claro M. Recto St.	2m	0.2052	56,000,000	11,491,424	concrete	good	Yes
Claro M. Recto St.	2m	0.5195	56,000,000	29,089,592	concrete	good	Yes
Claro M. Recto St.	3m	0.0260	56,000,000	1,457,512	concrete	good	Yes
Claro M. Recto St.	3m	0.1375	56,000,000	7,700,728	concrete	good	Yes
Claro M. Recto St.	2m	0.0158	56,000,000	887,303	concrete	good	Yes
Claro M. Recto St.	3m	0.0891	56,000,000	4,986,834	concrete	good	Yes
Dacudao Avenue	2m	0.2357	56,000,000	13,197,408	concrete	good	Yes
Dacudao Avenue	3m	0.4343	56,000,000	24,319,792	concrete	good	Yes
Dacudao Avenue	4m	0.1959	56,000,000	10,967,936	concrete	good	Yes
Dacudao Avenue	2m	0.3666	56,000,000	20,530,160	concrete	good	Yes
Dacudao Avenue	5m	0.0738	56,000,000	4,133,825	concrete	good	Yes
Dacudao Avenue	4m	0.2062	56,000,000	11,547,872	concrete	good	Yes

Table LU-59. Lifeline Utilities, Roads, Exposure Estimation Table for Storm Surge , Davao City

EXPOSURE					SENSITIVITY		
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT
Davao-Bukidnon Road	5m	0.2152	40,000,000	8,608,040	concrete	good	Yes
Davao-Bukidnon Road	4m	0.0154	40,000,000	616,092	concrete	good	Yes
Davao - Agusan Highway	5m	0.3174	56,000,000	17,772,104	concrete	good	Yes
Davao - Agusan Highway	2m	0.0786	56,000,000	4,403,717	concrete	good	Yes
Davao - Agusan Highway	3m	0.8175	56,000,000	45,777,424	concrete	good	Yes
Davao - Agusan Highway	4m	0.8613	56,000,000	48,230,560	concrete	good	Yes
Davao - Agusan Highway	2m	1.3049	56,000,000	73,071,600	concrete	good	Yes
Davao - Agusan Highway	3m	1.0823	56,000,000	60,606,560	concrete	good	Yes
Davao - Agusan Highway	4m	0.0561	56,000,000	3,140,094	concrete	good	Yes
Davao - Agusan Highway	5m	0.1872	56,000,000	10,481,408	concrete	good	Yes
Davao - Agusan Highway	3m	0.4608	56,000,000	25,806,872	concrete	good	Yes
Davao - Agusan Highway	4m	0.2881	56,000,000	16,130,912	concrete	good	Yes
Davao - Agusan Highway	5m	0.8330	56,000,000	46,649,176	concrete	good	Yes
Davao - Agusan Highway	3m	0.4090	56,000,000	22,906,128	concrete	good	Yes
Davao - Agusan Highway	4m	0.9115	56,000,000	51,041,704	concrete	good	Yes
Davao - Agusan Highway	5m	0.1423	56,000,000	7,967,736	concrete	good	Yes
Davao - Agusan Highway	2m	0.2755	56,000,000	15,430,296	concrete	good	Yes
Davao - Agusan Highway	3m	1.9411	56,000,000	108,703,840	concrete	good	Yes
Davao - Agusan Highway	4m	0.4573	56,000,000	25,608,072	concrete	good	Yes
Davao - Agusan Highway	5m	0.5854	56,000,000	32,781,840	concrete	good	Yes
Davao - Agusan Highway	2m	1.2341	56,000,000	69,110,720	concrete	good	Yes
Davao - Agusan Highway	3m	1.5330	56,000,000	85,848,560	concrete	good	Yes
Davao - Agusan Highway	4m	0.2874	56,000,000	16,095,184	concrete	good	Yes
Davao - Agusan Highway	2m	0.5681	56,000,000	31,814,048	concrete	good	Yes
Davao - Agusan Highway	3m	0.5142	56,000,000	28,797,104	concrete	good	Yes
Davao - Agusan Highway	5m	0.4213	56,000,000	23,592,856	concrete	good	Yes
Davao - Agusan Highway	2m	1.8633	56,000,000	104,342,000	concrete	good	Yes
Davao - Agusan Highway	3m	0.7272	56,000,000	40,724,712	concrete	good	Yes
Davao - Agusan Highway	4m	0.2430	56,000,000	13,608,168	concrete	good	Yes
Davao - Agusan Highway	2m	0.4561	56,000,000	25,540,704	concrete	good	Yes
Florentino Torres St	3m	0.0015	65,000,000	98,565	concrete	good	Yes

Table LU-59. Lifeline Utilities, Roads, Exposure Estimation Table for Storm Surge , Davao City

EXPOSURE					SENSITIVITY		
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT
Florentino Torres St	5m	0.0521	65,000,000	3,388,223	concrete	good	Yes
Florentino Torres St	3m	0.0223	65,000,000	1,446,556	concrete	good	Yes
Florentino Torres St	4m	0.3497	65,000,000	22,733,490	concrete	good	Yes
Florentino Torres St	5m	0.0095	65,000,000	618,499	concrete	good	Yes
Florentino Torres St	4m	0.1677	65,000,000	10,901,410	concrete	good	Yes
Florentino Torres St	5m	0.1291	65,000,000	8,391,110	concrete	good	Yes
Florentino Torres St	4m	0.1745	65,000,000	11,342,630	concrete	good	Yes
Florentino Torres St	3m	0.0396	65,000,000	2,573,922	concrete	good	Yes
J.P. Cabaguio Avenue	5m	0.0846	56,000,000	4,739,330	concrete	good	Yes
J.P. Cabaguio Avenue	2m	0.4031	56,000,000	22,571,248	concrete	good	Yes
J.P. Cabaguio Avenue	3m	0.1827	56,000,000	10,230,752	concrete	good	Yes
J.P. Cabaguio Avenue	4m	0.0910	56,000,000	5,096,890	concrete	good	Yes
J.P. Cabaguio Avenue	2m	0.1908	56,000,000	10,682,000	concrete	good	Yes
Jose P. Laurel Avenue	2m	0.2920	56,000,000	16,353,736	concrete	good	Yes
Jose P. Laurel Avenue	3m	0.2001	56,000,000	11,203,528	concrete	good	Yes
Jose P. Laurel Avenue	4m	0.1927	56,000,000	10,790,304	concrete	good	Yes
Jose P. Laurel Avenue	5m	0.1487	56,000,000	8,328,040	concrete	good	Yes
Jose P. Laurel Avenue	4m	0.1453	56,000,000	8,135,120	concrete	good	Yes
Jose P. Laurel Avenue	3m	0.1008	56,000,000	5,644,800	concrete	good	Yes
Jose P. Laurel Avenue	3m	0.0300	56,000,000	1,682,223	concrete	good	Yes
Jose P. Laurel Avenue	3m	0.3206	56,000,000	17,955,000	concrete	good	Yes
Jose P. Laurel Avenue	3m	0.1157	56,000,000	6,476,624	concrete	good	Yes
Jose P. Laurel Avenue	4m	0.1912	56,000,000	10,704,624	concrete	good	Yes
Jose P. Laurel Avenue	3m	0.1200	56,000,000	6,717,424	concrete	good	Yes
Jose P. Laurel Avenue	4m	0.2159	56,000,000	12,091,016	concrete	good	Yes
Jose P. Laurel Avenue	3m	0.0008	56,000,000	47,255	concrete	good	Yes
Jose P. Laurel Avenue	2m	0.2964	56,000,000	16,598,456	concrete	good	Yes
Jose P. Laurel Avenue	3m	0.2024	56,000,000	11,335,520	concrete	good	Yes
Jose P. Laurel Avenue	4m	0.0609	56,000,000	3,411,822	concrete	good	Yes
Jose P. Laurel Avenue	2m	0.2931	56,000,000	16,416,232	concrete	good	Yes
Jose P. Laurel Avenue	3m	0.2108	56,000,000	11,805,920	concrete	good	Yes

Table LU-59. Lifeline Utilities, Roads, Exposure Estimation Table for Storm Surge , Davao City

EXPOSURE					SENSITIVITY		
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT
Jose P. Laurel Avenue	5m	0.3861	56,000,000	21,621,376	concrete	good	Yes
Jose P. Laurel Avenue	3m	0.2669	56,000,000	14,945,728	concrete	good	Yes
Jose P. Laurel Avenue	4m	0.0942	56,000,000	5,274,114	concrete	good	Yes
Leon Garcia St.	2m	0.2148	49,000,000	10,523,681	concrete	good	Yes
Leon Garcia St.	2m	0.4363	49,000,000	21,381,052	concrete	good	Yes
Libby Road	4m	0.0062	25,000,000	154,660	concrete	good	Yes
Libby Road	5m	0.0605	25,000,000	1,512,675	concrete	good	Yes
Libby Road	4m	0.2532	25,000,000	6,330,975	concrete	good	Yes
Mc. Arthur Highway	5m	0.1441	56,000,000	8,071,896	concrete	good	Yes
Mc. Arthur Highway	3m	0.0807	56,000,000	4,519,889	concrete	good	Yes
Mc. Arthur Highway	4m	0.1227	56,000,000	6,871,760	concrete	good	Yes
Mc. Arthur Highway	5m	0.0201	56,000,000	1,124,990	concrete	good	Yes
Mc. Arthur Highway	4m	0.0113	56,000,000	630,767	concrete	good	Yes
Mc. Arthur Highway	5m	0.0200	56,000,000	1,122,274	concrete	good	Yes
Mc. Arthur Highway	4m	0.0123	56,000,000	691,146	concrete	good	Yes
Mc. Arthur Highway	5m	0.0412	56,000,000	2,309,126	concrete	good	Yes
Mc. Arthur Highway	5m	0.4789	56,000,000	26,815,712	concrete	good	Yes
Mc. Arthur Highway	3m	0.0563	56,000,000	3,152,010	concrete	good	Yes
Mc. Arthur Highway	4m	0.8616	56,000,000	48,251,056	concrete	good	Yes
Mc. Arthur Highway	5m	0.9282	56,000,000	51,977,576	concrete	good	Yes
Mc. Arthur Highway	2m	0.0869	56,000,000	4,868,427	concrete	good	Yes
Mc. Arthur Highway	3m	0.2745	56,000,000	15,370,488	concrete	good	Yes
Mc. Arthur Highway	5m	0.4608	56,000,000	25,807,096	concrete	good	Yes
Mc. Arthur Highway	3m	0.4339	56,000,000	24,296,720	concrete	good	Yes
Mc. Arthur Highway	4m	1.0214	56,000,000	57,199,520	concrete	good	Yes
Old Airport Road	5m	0.0204	60,000,000	1,223,874	concrete	good	Yes
Old Airport Road	2m	0.0616	60,000,000	3,697,902	concrete	good	Yes
Old Airport Road	3m	0.1224	60,000,000	7,343,220	concrete	good	Yes
Old Airport Road	4m	0.0408	60,000,000	2,447,808	concrete	good	Yes
Pakiputan Wharf Road	2m	0.5062	56,000,000	28,345,632	concrete	good	Yes
Pichon St.	5m	0.0019	56,000,000	106,785	concrete	good	Yes
Pichon St.	5m	0.0102	56,000,000	569,285	concrete	good	Yes

Table LU-59. Lifeline Utilities, Roads, Exposure Estimation Table for Storm Surge , Davao City

EXPOSURE					SENSITIVITY		
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT
Pichon St.	5m	0.0467	56,000,000	2,613,458	concrete	good	Yes
Pichon St.	3m	0.4288	56,000,000	24,013,696	concrete	good	Yes
Pichon St.	4m	0.3063	56,000,000	17,152,744	concrete	good	Yes
Pichon St.	3m	0.1521	56,000,000	8,516,032	concrete	good	Yes
Quezon Boulevard	2m	0.2429	86,000,000	20,892,582	concrete	good	Yes
Quezon Boulevard	2m	0.6597	86,000,000	56,732,222	concrete	good	Yes
Quezon Boulevard	2m	1.1526	86,000,000	99,119,300	concrete	good	Yes
Quezon Boulevard	2m	0.4056	86,000,000	34,877,988	concrete	good	Yes
Quezon Boulevard	2m	0.6372	86,000,000	54,801,006	concrete	good	Yes
Quezon Boulevard	2m	1.1235	86,000,000	96,622,720	concrete	good	Yes
Quimpo Boulevard	2m	0.4617	50,000,000	23,083,850	concrete	good	Yes
Quimpo Boulevard	2m	0.0002	50,000,000	11,396	concrete	good	Yes
Quimpo Boulevard	5m	0.1625	50,000,000	8,122,550	concrete	good	Yes
Quimpo Boulevard	4m	0.1923	50,000,000	9,617,350	concrete	good	Yes
Quimpo Boulevard	5m	0.3518	50,000,000	17,590,250	concrete	good	Yes
Quimpo Boulevard	2m	1.2646	50,000,000	63,231,500	concrete	good	Yes
Quimpo Boulevard	3m	0.2471	50,000,000	12,352,500	concrete	good	Yes
Quimpo Boulevard	4m	0.6000	50,000,000	29,999,050	concrete	good	Yes
Quimpo Boulevard	2m	0.1951	50,000,000	9,755,650	concrete	good	Yes
Quimpo Boulevard	3m	0.0372	50,000,000	1,859,645	concrete	good	Yes
Quirino Avenue	3m	0.0546	40,000,000	2,183,380	concrete	good	Yes
Quirino Avenue	3m	0.2223	40,000,000	8,891,360	concrete	good	Yes
Quirino Avenue	3m	0.0084	40,000,000	334,358	concrete	good	Yes
Quirino Avenue	3m	0.2220	40,000,000	8,879,080	concrete	good	Yes
Quirino Avenue	4m	0.1508	40,000,000	6,031,840	concrete	good	Yes
Quirino Avenue	5m	0.0763	40,000,000	3,053,348	concrete	good	Yes
Quirino Avenue	4m	0.2063	40,000,000	8,253,280	concrete	good	Yes
Quirino Avenue	5m	0.1959	40,000,000	7,835,560	concrete	good	Yes
Quirino Avenue	3m	0.0633	40,000,000	2,531,616	concrete	good	Yes
Quirino Avenue	4m	0.1080	40,000,000	4,318,640	concrete	good	Yes
Quirino Avenue	3m	0.3941	40,000,000	15,762,600	concrete	good	Yes
Quirino Avenue	4m	0.1893	40,000,000	7,570,120	concrete	good	Yes

Table LU-59. Lifeline Utilities, Roads, Exposure Estimation Table for Storm Surge , Davao City

EXPOSURE					SENSITIVITY		
ROAD NAME	HAZARD SUSCEPTIBILITY	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT
Quirino Avenue	3m	0.0145	40,000,000	579,612	concrete	good	Yes
Quirino Avenue	4m	0.0555	40,000,000	2,221,916	concrete	good	Yes
Rafael Castillo St.	2m	0.4876	86,000,000	41,932,912	concrete	good	Yes
Rafael Castillo St.	2m	0.2671	86,000,000	22,968,966	concrete	good	Yes
Rafael Castillo St.	2m	0.0173	86,000,000	1,490,131	concrete	good	Yes
Rafael Castillo St.	3m	0.0009	86,000,000	74,717	concrete	good	Yes
Rafael Castillo St.	2m	0.3657	86,000,000	31,452,006	concrete	good	Yes
Rafael Castillo St.	3m	0.0016	86,000,000	136,849	concrete	good	Yes
Rafael Castillo St.	2m	0.8343	86,000,000	71,749,800	concrete	good	Yes
Rafael Castillo St.	2m	0.9058	86,000,000	77,899,746	concrete	good	Yes
Rafael Castillo St.	2m	0.2916	86,000,000	25,076,052	concrete	good	Yes
Ramon Magsaysay Ave.	2m	0.4384	60,000,000	26,304,960	concrete	good	Yes
Ramon Magsaysay Ave.	2m	0.0217	60,000,000	1,301,472	concrete	good	Yes
Ramon Magsaysay Ave.	2m	0.0195	60,000,000	1,170,942	concrete	good	Yes
Ramon Magsaysay Ave.	3m	0.0129	60,000,000	775,980	concrete	good	Yes
Ramon Magsaysay Ave.	2m	0.4035	60,000,000	24,208,140	concrete	good	Yes
Ramon Magsaysay Ave.	2m	0.4781	60,000,000	28,685,100	concrete	good	Yes
Sta. Ana Ave.	2m	0.3457	60,000,000	20,740,680	concrete	good	Yes
Sta. Ana Ave.	3m	0.2241	60,000,000	13,444,140	concrete	good	Yes
Sta. Ana Ave.	2m	0.0213	60,000,000	1,275,942	concrete	good	Yes
Sta. Ana Ave.	2m	0.6951	60,000,000	41,707,080	concrete	good	Yes
Sta. Ana Ave.	2m	0.0049	60,000,000	292,634	concrete	good	Yes
Mc. Arthur Highway	5m	0.0000	56,000,000	1,861	concrete	good	Yes
Mc. Arthur Highway	5m	0.0000	56,000,000	1,861	concrete	good	Yes
Rafael Castillo St.	2m	0.0026	86,000,000	222,664	concrete	good	Yes
Rafael Castillo St.	2m	0.0026	86,000,000	222,664	concrete	good	Yes

Exposure Estimation for National Bridges

Among the four (4) bridges which are exposed to 3-meter wave, the highest value is the Talomo Bridge 2, with a total value of exposed lifeline of ₱98,764,380. Ilang Bridge with a total value of ₱30,840,000.

Table LU-60. Lifeline Utilities, Bridges, Exposure Estimation Table for Storm Surge with 3-meter wave, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Bago Br.	31.21	1,200,000	37,452,000	---	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Ilang Br.	25.70	1,200,000	30,840,000	—	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Talomo Br. 1	48.10	2,053,000	98,749,300	—	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Table LU-60. Lifeline Utilities, Bridges, Exposure Estimation Table for Storm Surge with 3-meter wave, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Talomo Br. 2	48.11	2,053,000	98,769,830	—	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Table LU-60. Lifeline Utilities, Bridges, Exposure Estimation Table for Storm Surge with 2-meter wave, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Agdao Flyover	382.98	1,200,000.00	459,576,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Bago Br.	31.21	1,200,000.00	37,452,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Table LU-60. Lifeline Utilities, Bridges, Exposure Estimation Table for Storm Surge with 2-meter wave, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Bunawan Br. 1	49.76	1,200,000.00	59,712,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Bunawan Br. 2	47.79	1,200,000.00	57,348,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Ilang Br.	25.70	1,200,000.00	30,840,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Panacan Br.	23.53	1,200,000.00	28,236,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Table LU-60. Lifeline Utilities, Bridges, Exposure Estimation Table for Storm Surge with 2-meter wave, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Sasa Br.	18.43	1,200,000.00	22,116,000	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional
Talomo Br. 1	48.10	2,053,000.00	98,749,300	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional
Talomo Br. 2	48.11	2,053,000.00	98,769,830	-	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional

Exposure Estimation for Power Substations

The Don Ramon Substation, which is exposed to all levels of wave, has the highest amount value at ₱70 million. Bajada Substation and ERA Substation both have the value of ₱200 million, while Dumoy Substation has a value of ₱118 million.

Table LU-61. Lifeline Utilities, Power Substations, Exposure Estimation Table for Storm Surge with 2-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Sta Ana Substation	607.00	135 Million	135 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) & Bended Metal Sheets b) Control Building: Concrete Wall and Floor ; with Roofdeck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
R.Castillo Substation	852.00	125 Million	125 Million	a) Perimeter Fence : Concrete High Wall Fence (3.5m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Pampanga Substation	1031.00	118 Million	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last up-graded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Don Ramon Substation	15540.00	570 Million	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel Structures	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE

Table LU-61. Lifeline Utilities, Power Substations, Exposure Estimation Table for Storm Surge with 3-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
P. Reyes Substation	825.86	85 Million	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : Concrete POle and STEel Beams	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Gaisano Substation	454.00	85 Million	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Victoria Substation	595.00	120 Million	120 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Panacan Substation	858.00	85 Million	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: Concrete wall and Floor, PU Panel Roof. c) Equipment Support :Concrete POle and Steel Beams	a) Operational b) Last upgraded 10 yrs ago.	Recommended for relocation or Reconstruction	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Don Ramon Substation	15,540.00	570 Million	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel Structures	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Bunawan Substation	1,085.00	110 Million	110 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside b) Control Building: Concrete wall and floor, ; Prepainted Roofing Sheet. c) Equipment Support : All Steel Struc-	a) Operational b) Upgraded 5 years ago	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE

Table LU-61. Lifeline Utilities, Power Substations, Exposure Estimation Table for Storm Surge with 4-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	AREA OC-CUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Don Ramon Substation	15,540	570 Million	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel Structures	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Bunawan Substation	1085	110 Million	110 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside b) Control Building: Concrete wall and floor, ; Prepainted Roofing Sheet. c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE

Table LU-61. Lifeline Utilities, Power Substations, Exposure Estimation Table for Storm Surge with 5-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	AREA OC-CUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Dumoy Substation	1,322	118 Million	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last up-graded 10 yrs ago.	a) Earthquake Resistance b) Flood Resistance c) Oil Spill Resistance	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Bajada Substation		200 Million	200 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE

Table LU-61. Lifeline Utilities, Power Substations, Exposure Estimation Table for Storm Surge with 5-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
ERA Sub-station	11926	200 Million	200 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE
Don Ramon Sub-station	15,540	570 Million	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel Structures	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE

Exposure Estimation for Level I Water System

Majority of the Level I water system are spring sources with a value of ₱41,536.32 each. The area with most number spring sources are Daliao, Toril.

Table LU-62. Lifeline Utilities, Level I, Exposure Estimation Table for Storm Surge, Davao City

EXPOSURE				SENSITIVITY	
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
MAHAYAG	SPRING	41,586.32	41,586.32	GOOD	NONE
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
TIBUNGCO	SPRING	41,586.32	41,586.32	GOOD	NONE
TIBUNGCO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE

Table LU-62. Lifeline Utilities, Level I, Exposure Estimation Table for Storm Surge, Davao City

EXPOSURE				SENSITIVITY	
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
BINUGAO	SPRING	41,586.32	41,586.32	GOOD	NONE
BINUGAO	SPRING	41,586.32	41,586.32	GOOD	NONE
MAHAYAG	SPRING	41,586.32	41,586.32	GOOD	NONE
TIBUNGCO	SPRING	41,586.32	41,586.32	GOOD	NONE
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE

Exposure Estimation for Level II

Wells found in Sirawan, Toril which are susceptible to 2-meter wave have a value of ₱46,200 each.

Table LU-63. Lifeline Utilities, Level II Water System, Exposure Estimation Table For Storm Surge 2-meter wave, Davao City

ADMINISTRATIVE DIVISION	BARANGAY	EXPOSURE				SENSITIVITY		ADAPTIVE CAPACITY	
		SUSCEPTIBILITY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
Toril	SIRAWAN	2m	2HP	46,200	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the water pump is installed by the supplier	Yes. Subject to proposal
Toril	SIRAWAN	2m	2HP	46,200	46,200	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the water pump is installed by the supplier	Yes. Subject to proposal

Exposure Estimation for Level III Water Supply

For Level 3 lifeline utilities, a total of 101 waterlines are exposed to storm surge with 5-meter wave. Out of all these individual mainline pipes the most costly is the waterline in Dumoy with a total length of 461.42 meters. It has a value of ₱18,503,022.39. This is followed by a main line pipe located in Bago Aplaya with an exposed length of 347.68 meters with a total value of ₱13,942,069.72. Another line in Talomo with total length of 275.23 meters also has high value of ₱12,165,276.16.

Table LU-63. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 2-meter wave, Davao City

BARANGAY	TYPE	SIZE	EXPOSURE			SENSITIVITY	
			REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
37-D	MLCSP	300	19,100.00	76.08	1,453,107.53	GOOD	YES
32-D	MLCSP	300	19,100.00	236.99	4,526,549.21	GOOD	YES
24-C	MLCSP	300	19,100.00	2.96	56,571.49	GOOD	YES
24-C	PVC	150	11,200.00	187.67	2,101,952.85	GOOD	YES
28-C	PVC	150	11,200.00	165.94	1,858,570.13	GOOD	YES
28-C	PVC	150	11,200.00	164.76	1,845,318.03	GOOD	YES
30-C	PVC	150	11,200.00	117.93	1,320,869.33	GOOD	YES

Table LU-63. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 2-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
28-C	PVC	150	11,200.00	6.71	75,149.44	GOOD	YES
32-D	MLCSP	300	19,100.00	67.83	1,295,463.98	GOOD	YES
30-C	MLCSP	400	23,600.00	81.18	1,915,775.23	GOOD	YES
30-C	PVC	150	11,200.00	34.82	389,960.36	GOOD	YES
15-B	MLCSP	400	23,600.00	8.27	195,092.42	GOOD	YES
14-B	MLCSP	400	23,600.00	63.08	1,488,614.64	GOOD	YES
32-D	MLCSP	300	19,100.00	25.83	493,369.58	GOOD	YES
28-C	PVC	150	11,200.00	8.52	95,441.31	GOOD	YES
28-C	PVC	150	11,200.00	110.26	1,234,908.77	GOOD	YES
28-C	PVC	150	11,200.00	59.34	664,640.14	GOOD	YES
28-C	PVC	150	11,200.00	15.83	177,264.67	GOOD	YES
28-C	PVC	150	11,200.00	54.80	613,747.55	GOOD	YES
26-C	PVC	150	11,200.00	6.50	72,760.69	GOOD	YES
28-C	PVC	150	11,200.00	59.36	664,817.41	GOOD	YES
30-C	PVC	150	11,200.00	114.89	1,286,753.79	GOOD	YES
14-B	PVC	150	11,200.00	0.45	5,094.56	GOOD	YES
14-B	PVC	150	11,200.00	100.83	1,129,277.86	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	2.87	32,114.60	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	123.65	1,384,874.77	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	119.84	1,342,241.26	GOOD	YES
15-B	MLCSP	400	23,600.00	160.75	3,793,736.45	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	11.50	128,789.06	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	175.51	4,141,923.89	GOOD	YES
AGDAO PROPER	PVC	150	11,200.00	57.96	649,165.10	GOOD	YES
AGDAO PROPER	PVC	150	11,200.00	131.04	1,467,699.19	GOOD	YES
AGDAO PROPER	PVC	150	11,200.00	25.00	280,046.25	GOOD	YES
15-B	PVC	150	11,200.00	39.81	445,843.76	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	49.80	951,268.73	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	51.94	991,993.69	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	111.40	2,127,806.12	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	58.49	1,117,180.95	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	8.09	154,479.07	GOOD	YES

Table LU-63. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 2-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
32-D	MLCSP	300	19,100.00	201.85	3,855,266.99	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	64.28	1,227,797.30	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	17.76	419,054.35	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	63.34	1,494,814.43	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	154.20	1,726,986.01	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	149.77	1,677,406.35	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	174.49	1,954,283.52	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	125.17	1,401,886.96	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	124.31	1,392,288.88	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	90.43	2,134,058.68	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	95.18	1,065,981.85	GOOD	YES
BUCANA	PVC	150	11,200.00	23.38	261,877.41	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	9.02	212,982.05	GOOD	YES
15-B	MLCSP	400	23,600.00	339.50	8,012,228.43	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	38.75	433,955.09	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	87.81	983,437.05	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	28.56	319,903.47	GOOD	YES
28-C	PVC	150	11,200.00	0.83	9,309.35	GOOD	YES
24-C	PVC	150	11,200.00	84.43	945,644.14	GOOD	YES
30-C	MLCSP	400	23,600.00	65.86	1,554,375.42	GOOD	YES
32-D	MLCSP	300	19,100.00	47.65	910,093.51	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	34.89	390,739.44	GOOD	YES
26-C	PVC	150	11,200.00	3.71	41,565.11	GOOD	YES
27-C	PVC	150	11,200.00	155.64	1,743,222.27	GOOD	YES
27-C	PVC	150	11,200.00	150.89	1,689,965.87	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	10.44	116,973.89	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	56.38	631,432.79	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	51.40	575,676.99	GOOD	YES
LEON GARCIA SR.	PVC	150	11,200.00	9.75	109,219.59	GOOD	YES
32-D	MLCSP	300	19,100.00	118.33	2,260,119.58	GOOD	YES
32-D	MLCSP	300	19,100.00	86.96	1,660,942.09	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	177.11	1,983,590.35	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	169.10	1,893,925.62	GOOD	YES

Table LU-63. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 2-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
AGDAO PROPER	PVC	150	11,200.00	6.83	76,452.88	GOOD	YES
TOMAS MONTEVERDE	PVC	150	11,200.00	46.10	516,307.00	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	37.07	708,072.24	GOOD	YES
31-D	MLCSP	300	19,100.00	9.14	174,539.38	GOOD	YES
37-D	MLCSP	300	19,100.00	63.83	1,219,140.20	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	39.52	754,899.06	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	42.46	810,990.85	GOOD	YES
BUCANA	PVC	150	11,200.00	15.67	175,465.15	GOOD	YES
31-D	MLCSP	300	19,100.00	33.02	630,763.79	GOOD	YES
37-D	MLCSP	300	19,100.00	104.48	1,995,635.82	GOOD	YES
31-D	MLCSP	300	19,100.00	12.87	245,805.21	GOOD	YES
37-D	MLCSP	300	19,100.00	97.71	1,866,187.23	GOOD	YES
38-D	MLCSP	300	19,100.00	13.57	259,281.73	GOOD	YES
37-D	MLCSP	300	19,100.00	227.02	4,336,136.46	GOOD	YES
AGDAO PROPER	MLCSP	300	19,100.00	239.57	4,575,759.49	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	53.67	1,266,711.33	GOOD	YES
GOV. VICENTE DUTERTE	MLCSP	400	23,600.00	206.29	4,868,352.27	GOOD	YES
GOV. VICENTE DUTERTE	MLCSP	400	23,600.00	116.45	2,748,245.19	GOOD	YES
GOV. VICENTE DUTERTE	MLCSP	400	23,600.00	20.82	491,366.14	GOOD	YES
GOV. VICENTE DUTERTE	MLCSP	400	23,600.00	66.75	1,575,388.38	GOOD	YES
GOV. VICENTE DUTERTE	MLCSP	400	23,600.00	124.74	2,943,831.36	GOOD	YES
UBALDE	MLCSP	400	23,600.00	173.79	4,101,527.75	GOOD	YES
UBALDE	MLCSP	400	23,600.00	21.83	515,083.85	GOOD	YES
GOV. VICENTE DUTERTE	MLCSP	400	23,600.00	368.65	8,700,114.47	GOOD	YES
SAN ANTONIO	MLCSP	400	23,600.00	195.03	4,602,793.78	GOOD	YES
UBALDE	MLCSP	400	23,600.00	9.54	225,196.59	GOOD	YES
LAPU - LAPU	MLCSP	400	23,600.00	180.35	4,256,323.16	GOOD	YES
LAPU - LAPU	MLCSP	400	23,600.00	490.41	11,573,583.68	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	22.87	436,777.67	GOOD	YES
UBALDE	MLCSP	400	23,600.00	56.80	1,340,392.27	GOOD	YES
LAPU - LAPU	MLCSP	400	23,600.00	162.28	3,829,897.70	GOOD	YES
CENTRO	MLCSP	400	23,600.00	93.72	2,211,864.47	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	1.58	17,750.67	GOOD	YES

Table LU-63. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 2-meter wave, Davao City

BARANGAY	TYPE	SIZE	EXPOSURE			SENSITIVITY	
			REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
AGDAO PROPER	PVC	150	11,200.00	72.06	807,034.52	GOOD	YES
SASA	PVC	200	12,500.00	87.85	1,098,139.73	GOOD	YES
SASA	PVC	200	12,500.00	49.17	614,617.73	GOOD	YES
SASA	PVC	200	12,500.00	601.31	7,516,400.40	GOOD	YES
A. ANGLIONGTO	MLCSP	250	17,700.00	38.27	677,340.28	GOOD	YES
PAMPANGA	MLCSP	300	19,100.00	118.53	2,263,831.95	GOOD	YES
PAMPANGA	MLCSP	300	19,100.00	45.71	873,145.47	GOOD	YES
V. HIZON	MLCSP	250	17,700.00	2.88	50,907.09	GOOD	YES
PAMPANGA	MLCSP	250	17,700.00	12.43	220,059.13	GOOD	YES
SASA	MLCSP	250	17,700.00	75.16	1,330,375.08	GOOD	YES
PAMPANGA	MLCSP	250	17,700.00	223.75	3,960,455.77	GOOD	YES
SASA	PVC	200	12,500.00	96.35	1,204,373.15	GOOD	YES
SASA	MLCSP	250	17,700.00	154.43	2,733,498.89	GOOD	YES
SASA	PVC	200	12,500.00	15.76	197,040.68	GOOD	YES
SASA	PVC	200	12,500.00	178.68	2,233,513.31	GOOD	YES
SASA	PVC	200	12,500.00	55.47	693,347.97	GOOD	YES
SASA	PVC	200	12,500.00	15.42	192,745.37	GOOD	YES
V. HIZON	MLCSP	250	17,700.00	386.97	6,849,391.77	GOOD	YES
PAMPANGA	MLCSP	250	17,700.00	23.61	417,867.81	GOOD	YES
PAMPANGA	MLCSP	250	17,700.00	23.06	408,076.97	GOOD	YES
PAMPANGA	MLCSP	300	19,100.00	336.36	6,424,543.28	GOOD	YES
SASA	MLCSP	250	17,700.00	152.72	2,703,096.79	GOOD	YES
V. HIZON	MLCSP	250	17,700.00	279.12	4,940,357.34	GOOD	YES
V. HIZON	MLCSP	250	17,700.00	107.30	1,899,262.49	GOOD	YES
SASA	PVC	200	12,500.00	149.99	1,874,891.02	GOOD	YES
SASA	PVC	200	12,500.00	155.39	1,942,375.42	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	190.87	3,645,677.98	GOOD	YES
V. HIZON	MLCSP	300	19,100.00	261.76	4,999,528.47	GOOD	YES
PAMPANGA	MLCSP	300	19,100.00	73.97	1,412,856.15	GOOD	YES
15-B	MLCSP	300	19,100.00	323.39	6,176,772.16	GOOD	YES
16-B	PVC	150	11,200.00	59.10	661,865.65	GOOD	YES
16-B	PVC	150	11,200.00	4.43	49,622.68	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	25.58	286,538.24	GOOD	YES

Table LU-63. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 2-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
PACIANO BANGOY	PVC	150	11,200.00	82.20	920,679.05	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	215.35	2,411,966.90	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	171.17	1,917,049.11	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	3.66	69,828.95	GOOD	YES
AGDAO PROPER	MLCSP	300	19,100.00	111.52	2,130,060.54	GOOD	YES
A. ANGLIONGTO	MLCSP	250	17,700.00	252.42	4,467,918.34	GOOD	YES
RAFAEL CASTILLO	MLCSP	400	23,600.00	124.49	2,938,038.78	GOOD	YES
RAFAEL CASTILLO	MLCSP	400	23,600.00	53.09	1,253,040.66	GOOD	YES
SAN ANTONIO	MLCSP	400	23,600.00	207.81	4,904,237.86	GOOD	YES
RAFAEL CASTILLO	MLCSP	400	23,600.00	113.36	2,675,205.29	GOOD	YES
28-C	PVC	150	11,200.00	41.08	460,145.64	GOOD	YES
30-C	MLCSP	400	23,600.00	85.55	2,018,948.13	GOOD	YES
30-C	PVC	150	11,200.00	159.98	1,791,778.32	GOOD	YES
14-B	MLCSP	400	23,600.00	71.45	1,686,146.38	GOOD	YES
30-C	MLCSP	400	23,600.00	7.64	180,243.27	GOOD	YES
14-B	MLCSP	400	23,600.00	59.98	1,415,483.32	GOOD	YES
AGDAO PROPER	PVC	200	12,500.00	20.10	251,279.71	GOOD	YES
40-D	MLCSP	250	17,700.00	283.77	5,022,804.49	GOOD	YES
39-D	MLCSP	250	17,700.00	45.97	813,699.39	GOOD	YES
WILFREDO AQUINO	PVC	150	11,200.00	15.86	177,609.43	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	5.45	61,000.44	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	421.48	9,947,033.00	GOOD	YES
BUCANA	MLCSP	750	48,500.00	43.90	2,129,159.95	GOOD	YES
SASA	MLCSP	250	17,700.00	317.51	5,619,859.14	GOOD	YES
31-D	MLCSP	300	19,100.00	105.93	2,023,249.31	GOOD	YES
31-D	PVC	150	11,200.00	16.42	183,945.89	GOOD	YES
35-D	PVC	200	12,500.00	10.88	135,940.35	GOOD	YES
39-D	MLCSP	300	19,100.00	70.35	1,343,748.06	GOOD	YES
38-D	MLCSP	300	19,100.00	7.79	148,703.34	GOOD	YES
39-D	MLCSP	300	19,100.00	18.93	361,555.92	GOOD	YES
26-C	PVC	150	11,200.00	156.73	1,755,370.92	GOOD	YES
23-C	PVC	150	11,200.00	4.57	51,130.98	GOOD	YES
26-C	PVC	150	11,200.00	3.84	43,037.65	GOOD	YES

Table LU-63. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 2-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
23-C	PVC	150	11,200.00	3.90	43,640.80	GOOD	YES
32-D	MLCSP	300	19,100.00	10.20	194,857.25	GOOD	YES
31-D	MLCSP	300	19,100.00	8.38	160,065.60	GOOD	YES
31-D	MLCSP	300	19,100.00	150.78	2,879,809.34	GOOD	YES
32-D	MLCSP	300	19,100.00	85.03	1,624,027.16	GOOD	YES
24-C	MLCSP	300	19,100.00	18.13	346,261.27	GOOD	YES
31-D	MLCSP	300	19,100.00	3.56	67,944.76	GOOD	YES
27-C	PVC	200	12,500.00	18.97	237,124.89	GOOD	YES
SASA	MLCSP	250	17,700.00	178.33	3,156,377.03	GOOD	YES
MATINA APLAYA	MLCSP	300	19,100.00	258.46	4,936,657.69	GOOD	YES
BAGO APLAYA	MLCSP	250	17,700.00	26.25	464,677.31	GOOD	YES
PAMPANGA	MLCSP	300	19,100.00	3.45	65,948.62	GOOD	YES
V. HIZON	MLCSP	250	17,700.00	2.68	47,364.76	GOOD	YES
V. HIZON	MLCSP	250	17,700.00	8.89	157,408.34	GOOD	YES
PANACAN	MLCSP	250	17,700.00	43.61	771,973.13	GOOD	YES
PANACAN	MLCSP	250	17,700.00	182.18	3,224,503.74	GOOD	YES
PANACAN	MLCSP	250	17,700.00	20.56	363,875.06	GOOD	YES
PANACAN	MLCSP	250	17,700.00	149.50	2,646,220.94	GOOD	YES
SASA	MLCSP	300	19,100.00	79.92	1,526,436.01	GOOD	YES
PAMPANGA	MLCSP	300	19,100.00	18.37	350,812.53	GOOD	YES
SASA	MLCSP	300	19,100.00	169.79	3,242,914.10	GOOD	YES
PAMPANGA	MLCSP	300	19,100.00	276.83	5,287,533.77	GOOD	YES
PANACAN	MLCSP	250	17,700.00	180.38	3,192,672.19	GOOD	YES
PANACAN	MLCSP	250	17,700.00	0.71	12,539.41	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	18.07	202,382.31	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	24.03	269,095.96	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	3.98	93,861.70	GOOD	YES
BAGO APLAYA	MLCSP	250	17,700.00	16.85	298,228.92	GOOD	YES
MATINA APLAYA	MLCSP	250	17,700.00	922.60	16,330,062.61	GOOD	YES
MATINA APLAYA	MLCSP	250	17,700.00	1,041.85	18,440,658.14	GOOD	YES
PANACAN	MLCSP	400	23,600.00	128.05	3,021,926.55	GOOD	YES
ILANG	MLCSP	400	23,600.00	110.08	2,597,923.00	GOOD	YES
ILANG	MLCSP	400	23,600.00	25.45	600,635.82	GOOD	YES

Table LU-63. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 2-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT	LENGTH	VALUE OF EXPOSED	EXISTING	HAZARD RESISTANT
WILFREDO AQUINO	MLCSP	300	19,100.00	54.26	1,036,373.39	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	59.75	1,141,164.05	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	71.18	797,268.43	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	2.02	22,571.60	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	24.87	586,835.02	GOOD	YES
AGDAO PROPER	MLCSP	400	23,600.00	5.86	138,379.33	GOOD	YES
SAN ANTONIO	MLCSP	400	23,600.00	3.88	91,465.59	GOOD	YES
A. ANGLIONGTO	MLCSP	300	19,100.00	348.51	6,656,596.36	GOOD	YES
LAPU - LAPU	MLCSP	300	19,100.00	5.08	96,966.61	GOOD	YES
V. HIZON	MLCSP	300	19,100.00	37.03	707,316.56	GOOD	YES
A. ANGLIONGTO	MLCSP	300	19,100.00	23.08	440,807.98	GOOD	YES
MATINA APLAYA	MLCSP	250	17,700.00	27.27	482,726.39	GOOD	YES
BUCANA	MLCSP	250	17,700.00	240.33	4,253,898.74	GOOD	YES
AGDAO PROPER	PVC	150	11,200.00	55.96	626,712.34	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	8.48	94,988.71	GOOD	YES
AGDAO PROPER	PVC	150	11,200.00	37.93	424,821.24	GOOD	YES
15-B	PVC	150	11,200.00	19.13	214,290.58	GOOD	YES
SAN ANTONIO	MLCSP	400	23,600.00	79.36	1,872,942.50	GOOD	YES

Table LU-64. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 3-meter wave, Davao City

BARANGAY	TYPE	SIZE	EXPOSURE			SENSITIVITY	
			REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
39-D	MLCSP	300	19,100.00	156.23	2,983,943.30	GOOD	YES
32-D	MLCSP	300	19,100.00	222.24	4,244,694.59	GOOD	YES
30-C	MLCSP	300	19,100.00	10.29	196,522.94	GOOD	YES
11-B	MLCSP	300	19,100.00	117.30	2,240,443.49	GOOD	YES
32-D	MLCSP	400	23,600.00	31.07	733,366.00	GOOD	YES
30-C	MLCSP	400	23,600.00	419.75	9,906,036.73	GOOD	YES
12-B	MLCSP	400	23,600.00	40.79	962,682.93	GOOD	YES
11-B	MLCSP	300	19,100.00	91.64	1,750,369.51	GOOD	YES
18-B	MLCSP	300	19,100.00	194.44	3,713,791.04	GOOD	YES
19-B	MLCSP	300	19,100.00	2.43	46,338.25	GOOD	YES
18-B	MLCSP	300	19,100.00	3.62	69,180.49	GOOD	YES
19-B	MLCSP	300	19,100.00	115.40	2,204,150.10	GOOD	YES
12-B	PVC	150	11,200.00	23.32	261,209.89	GOOD	YES
19-B	PVC	150	11,200.00	37.77	422,973.72	GOOD	YES
18-B	MLCSP	300	19,100.00	13.35	254,979.58	GOOD	YES
13-B	MLCSP	300	19,100.00	42.75	816,561.22	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	18.93	211,972.98	GOOD	YES
18-B	PVC	150	11,200.00	34.32	384,373.33	GOOD	YES
18-B	PVC	150	11,200.00	10.91	122,190.85	GOOD	YES
32-D	MLCSP	300	19,100.00	0.48	9,109.48	GOOD	YES
30-C	MLCSP	300	19,100.00	12.67	242,074.06	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	2.57	28,829.63	GOOD	YES
18-B	PVC	150	11,200.00	213.68	2,393,245.52	GOOD	YES
2-A	MLCSP	300	19,100.00	113.84	2,174,414.03	GOOD	YES
19-B	MLCSP	300	19,100.00	96.96	1,851,843.76	GOOD	YES
BAGO APLAYA	MLCSP	300	19,100.00	104.63	1,998,507.80	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	318.33	7,512,607.18	GOOD	YES
TALOMO	MLCSP	700	44,200.00	150.90	6,669,966.29	GOOD	YES
TALOMO	MLCSP	700	44,200.00	21.82	964,632.34	GOOD	YES
TALOMO	MLCSP	750	48,500.00	18.45	894,896.75	GOOD	YES
39-D	MLCSP	300	19,100.00	23.90	456,494.07	GOOD	YES
BUCANA	PVC	150	11,200.00	79.00	884,814.42	GOOD	YES
BUCANA	PVC	150	11,200.00	12.02	134,666.78	GOOD	YES

Table LU-64. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 3-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
BUCANA	PVC	150	11,200.00	14.21	159,182.97	GOOD	YES
BUCANA	PVC	150	11,200.00	95.76	1,072,480.46	GOOD	YES
BUCANA	PVC	150	11,200.00	13.86	155,257.22	GOOD	YES
18-B	PVC	150	11,200.00	175.92	1,970,298.70	GOOD	YES
17-B	MLCSP	300	19,100.00	13.23	252,628.93	GOOD	YES
16-B	MLCSP	300	19,100.00	37.68	719,618.06	GOOD	YES
13-B	MLCSP	300	19,100.00	2.10	40,150.22	GOOD	YES
13-B	MLCSP	300	19,100.00	49.44	944,323.05	GOOD	YES
11-B	MLCSP	300	19,100.00	29.76	568,322.88	GOOD	YES
TALOMO	MLCSP	750	48,500.00	62.94	3,052,712.53	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	93.07	1,777,644.53	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	47.99	537,538.17	GOOD	YES
2-A	MLCSP	300	19,100.00	39.19	748,500.30	GOOD	YES
2-A	MLCSP	350	20,800.00	134.66	2,800,921.11	GOOD	YES
20-B	PVC	150	11,200.00	52.02	582,595.78	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	12.10	135,544.04	GOOD	YES
20-B	PVC	150	11,200.00	41.11	460,410.20	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	1.20	13,457.29	GOOD	YES
18-B	PVC	150	11,200.00	48.43	542,369.89	GOOD	YES
20-B	PVC	150	11,200.00	0.00	28.69	GOOD	YES
20-B	PVC	150	11,200.00	0.00	28.69	GOOD	YES
20-B	PVC	150	11,200.00	1.49	16,688.58	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	5.98	66,989.41	GOOD	YES
18-B	PVC	150	11,200.00	170.17	1,905,951.79	GOOD	YES
18-B	PVC	150	11,200.00	278.99	3,124,719.66	GOOD	YES
19-B	PVC	150	11,200.00	2.77	30,968.45	GOOD	YES
2-A	MLCSP	300	19,100.00	127.25	2,430,539.53	GOOD	YES
39-D	MLCSP	300	19,100.00	5.37	102,529.57	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	96.40	2,275,132.06	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	29.30	691,375.59	GOOD	YES
BUCANA	PVC	150	11,200.00	58.36	653,583.58	GOOD	YES
BUCANA	PVC	150	11,200.00	344.39	3,857,204.57	GOOD	YES
BUCANA	PVC	150	11,200.00	5.70	63,788.07	GOOD	YES

Table LU-64. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 3-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
WILFREDO AQUINO	MLCSP	300	19,100.00	14.15	270,235.64	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	39.11	747,037.21	GOOD	YES
32-D	MLCSP	500	33,200.00	19.37	642,939	GOOD	YES
10-A	MLCSP	500	33,200.00	173.65	5,765,204	GOOD	YES
4-A	MLCSP	500	33,200.00	147.97	4,912,507	GOOD	YES
10-A	PVC	150	11,200.00	93.24	1,044,332.90	GOOD	YES
4-A	PVC	150	11,200.00	2.89	32,394.30	GOOD	YES
4-A	MLCSP	500	33,200.00	257.51	8,549,232	GOOD	YES
4-A	MLCSP	500	33,200.00	36.32	1,205,767	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	32.12	359,744.40	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	38.45	430,616.62	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	40.80	457,014.17	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	41.65	466,522.99	GOOD	YES
SASA	PVC	200	12,500.00	154.15	1,926,922.77	GOOD	YES
SASA	PVC	200	12,500.00	164.74	2,059,209.19	GOOD	YES
SASA	PVC	200	12,500.00	105.05	1,313,082.65	GOOD	YES
V. HIZON	MLCSP	250	17,700.00	130.50	2,309,878.24	GOOD	YES
A. ANGLIONGTO	MLCSP	250	17,700.00	7.29	128,962.28	GOOD	YES
V. HIZON	MLCSP	300	19,100.00	15.35	293,108.08	GOOD	YES
SASA	MLCSP	250	17,700.00	167.17	2,958,986.59	GOOD	YES
SASA	MLCSP	250	17,700.00	131.40	2,325,792.80	GOOD	YES
V. HIZON	MLCSP	250	17,700.00	384.89	6,812,638.22	GOOD	YES
V. HIZON	MLCSP	300	19,100.00	314.57	6,008,374.27	GOOD	YES
V. HIZON	MLCSP	300	19,100.00	10.52	200,867.92	GOOD	YES
16-B	MLCSP	300	19,100.00	13.62	260,079.03	GOOD	YES
15-B	MLCSP	300	19,100.00	158.37	3,024,882.03	GOOD	YES
16-B	MLCSP	300	19,100.00	50.22	959,266.01	GOOD	YES
16-B	PVC	150	11,200.00	176.25	1,974,027.40	GOOD	YES
16-B	PVC	150	11,200.00	114.97	1,287,661.22	GOOD	YES
16-B	PVC	150	11,200.00	168.37	1,885,735.17	GOOD	YES
PACIANO BANGOY	PVC	150	11,200.00	48.89	547,617.43	GOOD	YES
16-B	PVC	150	11,200.00	0.97	10,809.50	GOOD	YES
A. ANGLIONGTO	MLCSP	250	17,700.00	176.14	3,117,660.18	GOOD	YES

Table LU-64. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 3-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
A. ANGLIONGTO	MLCSP	400	23,600.00	16.33	385,421.37	GOOD	YES
A. ANGLIONGTO	MLCSP	400	23,600.00	6.36	150,142.55	GOOD	YES
RAFAEL CASTILLO	MLCSP	400	23,600.00	78.76	1,858,751.39	GOOD	YES
RAFAEL CASTILLO	MLCSP	400	23,600.00	81.13	1,914,569.98	GOOD	YES
SAN ANTONIO	MLCSP	400	23,600.00	19.44	458,740.24	GOOD	YES
RAFAEL CASTILLO	MLCSP	400	23,600.00	43.75	1,032,389.29	GOOD	YES
2-A	MLCSP	250	17,700.00	7.32	129,588.49	GOOD	YES
39-D	MLCSP	250	17,700.00	150.29	2,660,057.48	GOOD	YES
19-B	MLCSP	300	19,100.00	106.45	2,033,274.99	GOOD	YES
MA-A	MLCSP	750	48,500.00	67.96	3,295,885.98	GOOD	YES
MA-A	MLCSP	750	48,500.00	16.15	783,164.31	GOOD	YES
2-A	MLCSP	750	48,500.00	13.62	660,459.87	GOOD	YES
BUCANA	MLCSP	750	48,500.00	210.73	10,220,181.98	GOOD	YES
2-A	MLCSP	300	19,100.00	13.62	260,119.16	GOOD	YES
18-B	PVC	150	11,200.00	347.83	3,895,707.99	GOOD	YES
39-D	MLCSP	300	19,100.00	65.28	1,246,868.70	GOOD	YES
TALOMO	MLCSP	450	24,300.00	5.47	132,904.86	GOOD	YES
TALOMO	MLCSP	450	24,300.00	23.69	575,714.03	GOOD	YES
MATINA APLAYA	MLCSP	300	19,100.00	180.87	3,454,651.42	GOOD	YES
BAGO APLAYA	MLCSP	250	17,700.00	7.69	136,195.64	GOOD	YES
BAGO APLAYA	MLCSP	250	17,700.00	1.77	31,320.86	GOOD	YES
PANACAN	MLCSP	250	17,700.00	337.97	5,982,084.05	GOOD	YES
PANACAN	MLCSP	250	17,700.00	355.99	6,301,101.05	GOOD	YES
TIBUNGCO	MLCSP	400	23,600.00	50.15	1,183,566.85	GOOD	YES
PANACAN	MLCSP	250	17,700.00	98.20	1,738,061.72	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	106.19	2,506,076.94	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	308.85	7,288,872.85	GOOD	YES
BAGO APLAYA	MLCSP	250	17,700.00	22.45	397,359.35	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	133.67	5,360,135.41	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	309.24	12,400,362.21	GOOD	YES
BUCANA	MLCSP	250	17,700.00	35.28	624,405.85	GOOD	YES
20-B	PVC	150	11,200.00	60.44	676,967.78	GOOD	YES
PANACAN	MLCSP	400	23,600.00	394.81	9,317,623.27	GOOD	YES

Table LU-64. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 3-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
ILANG	MLCSP	400	23,600.00	1,130.94	26,690,260.14	GOOD	YES
TIBUNGCO	MLCSP	400	23,600.00	101.99	2,406,944.36	GOOD	YES
ILANG	MLCSP	400	23,600.00	710.32	16,763,617.49	GOOD	YES
TALOMO	MLCSP	750	48,500.00	45.20	2,192,066.57	GOOD	YES
TALOMO	MLCSP	350	20,800.00	5.75	119,647.21	GOOD	YES
TALOMO	MLCSP	350	20,800.00	347.65	7,231,077.46	GOOD	YES
TALOMO	MLCSP	250	17,700.00	161.17	2,852,696.87	GOOD	YES
TALOMO	MLCSP	250	17,700.00	0.61	10,821.60	GOOD	YES
V. HIZON	MLCSP	300	19,100.00	125.42	2,395,538.36	GOOD	YES
MATINA APLAYA	MLCSP	250	17,700.00	244.85	4,333,789.71	GOOD	YES
MATINA APLAYA	MLCSP	250	17,700.00	266.89	4,723,879.54	GOOD	YES
BUCANA	MLCSP	250	17,700.00	193.89	3,431,934.34	GOOD	YES
TIBUNGCO	MLCSP	400	23,600.00	10.06	237,366.34	GOOD	YES
TIBUNGCO	MLCSP	350	20,800.00	5.56	115,725.21	GOOD	YES
SAN ANTONIO	MLCSP	400	23,600.00	166.74	3,935,112.33	GOOD	YES

Table LU-64. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 4-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY NAME	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
10-A	PVC	150	11,200.00	33.65	376,891.14	GOOD	YES
10-A	PVC	150	11,200.00	162.51	1,820,057.21	GOOD	YES
12-B	PVC	150	11,200.00	316.29	3,542,453.77	GOOD	YES
11-B	PVC	150	11,200.00	157.90	1,768,458.51	GOOD	YES
12-B	PVC	150	11,200.00	34.69	388,494.76	GOOD	YES
BUCANA	PVC	150	11,200.00	67.51	756,094.38	GOOD	YES
BUCANA	PVC	150	11,200.00	42.92	480,702.13	GOOD	YES
11-B	MLCSP	300	19,100.00	65.48	1,250,680.34	GOOD	YES
11-B	MLCSP	300	19,100.00	50.70	968,452.91	GOOD	YES
BAGO APLAYA	MLCSP	300	19,100.00	92.16	1,760,270.32	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	61.88	693,038.72	GOOD	YES
TALOMO	MLCSP	700	44,200.00	101.51	4,486,839.94	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	109.92	1,231,106.90	GOOD	YES
TALOMO	MLCSP	600	40,100.00	312.37	12,526,132.18	GOOD	YES
BAGO APLAYA	MLCSP	500	33,200.00	134.63	4,469,844	GOOD	YES
BUCANA	PVC	150	11,200.00	69.95	783,459.03	GOOD	YES
BAGO GALLERA	MLCSP	250	17,700.00	232.38	4,113,113.43	GOOD	YES
BAGO APLAYA	MLCSP	250	17,700.00	243.45	4,308,980.47	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	88.95	2,099,327.03	GOOD	YES
TALOMO	MLCSP	700	44,200.00	84.93	3,753,971.15	GOOD	YES
BAGO APLAYA	MLCSP	500	33,200.00	121.64	4,038,506	GOOD	YES
7-A	MLCSP	600	40,100.00	59.90	2,401,860.30	GOOD	YES
2-A	MLCSP	350	20,800.00	214.03	4,451,861.01	GOOD	YES
MA-A	MLCSP	750	48,500.00	28.11	1,363,445.40	GOOD	YES
11-B	PVC	150	11,200.00	13.05	146,151.52	GOOD	YES
10-A	PVC	150	11,200.00	142.32	1,593,947.40	GOOD	YES
11-B	MLCSP	300	19,100.00	54.95	1,049,635.03	GOOD	YES
11-B	MLCSP	300	19,100.00	64.27	1,227,484.08	GOOD	YES
11-B	MLCSP	300	19,100.00	21.72	414,784.30	GOOD	YES
10-A	PVC	150	11,200.00	47.41	531,047.67	GOOD	YES
10-A	PVC	150	11,200.00	111.52	1,249,055.59	GOOD	YES
10-A	PVC	150	11,200.00	2.36	26,429.65	GOOD	YES
9-A	PVC	150	11,200.00	11.94	133,715.22	GOOD	YES

Table LU-64. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 4-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY NAME	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
7-A	MLCSP	600	40,100.00	150.53	6,036,264.83	GOOD	YES
7-A	MLCSP	500	33,200.00	140.13	4,652,214	GOOD	YES
7-A	MLCSP	600	40,100.00	7.69	308,555.84	GOOD	YES
6-A	MLCSP	600	40,100.00	80.98	3,247,315.17	GOOD	YES
7-A	MLCSP	500	33,200.00	3.49	115,906	GOOD	YES
4-A	MLCSP	500	33,200.00	182.25	6,050,797	GOOD	YES
2-A	MLCSP	350	20,800.00	52.74	1,097,054.66	GOOD	YES
TALOMO	MLCSP	900	56,500.00	78.13	4,414,178.58	GOOD	YES
TALOMO	MLCSP	800	52,800.00	130.78	6,905,027.14	GOOD	YES
TALOMO	MLCSP	750	48,500.00	16.57	803,475.52	GOOD	YES
WILFREDO AQUINO	MLCSP	300	19,100.00	57.35	1,095,383.59	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	14.63	163,861.08	GOOD	YES
2-A	MLCSP	350	20,800.00	38.36	797,955.20	GOOD	YES
11-B	PVC	150	11,200.00	12.97	145,317.47	GOOD	YES
10-A	PVC	150	11,200.00	142.86	1,600,015.98	GOOD	YES
BAGO APLAYA	MLCSP	300	19,100.00	219.77	4,197,535.24	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	196.64	7,885,096.25	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	345.04	13,836,280.65	GOOD	YES
7-A	MLCSP	600	40,100.00	78.89	3,163,605.59	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	424.60	17,026,499.85	GOOD	YES
TALOMO	MLCSP	250	17,700.00	85.41	1,511,758.40	GOOD	YES
TALOMO	MLCSP	300	19,100.00	152.94	2,921,110.39	GOOD	YES
BAGO APLAYA	MLCSP	500	33,200.00	65.78	2,183,919	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	17.98	424,242.22	GOOD	YES
6-A	MLCSP	600	40,100.00	101.25	4,060,142.85	GOOD	YES
TALOMO	MLCSP	900	56,500.00	20.76	1,173,136.17	GOOD	YES
BUCANA	PVC	150	11,200.00	65.89	737,915.10	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	17.73	198,522.33	GOOD	YES
TALOMO	MLCSP	450	24,300.00	8.64	209,921.93	GOOD	YES
BAGO APLAYA	MLCSP	450	24,300.00	30.74	746,956.97	GOOD	YES
TALOMO	MLCSP	600	40,100.00	4.63	185,578.22	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	41.60	1,668,185.38	GOOD	YES

Table LU-64. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 4-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY NAME	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
BUCANA	PVC	150	11,200.00	55.48	621,365.99	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	13.10	146,718.52	GOOD	YES
BUCANA	PVC	150	11,200.00	1.49	16,735.47	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	156.25	1,749,944.05	GOOD	YES
BAGO APLAYA	MLCSP	450	24,300.00	476.45	11,577,692.60	GOOD	YES
BAGO APLAYA	MLCSP	700	44,200.00	13.77	608,726.32	GOOD	YES
TALOMO	MLCSP	700	44,200.00	219.87	9,718,136.43	GOOD	YES
BAGO APLAYA	MLCSP	700	44,200.00	7.87	347,699.75	GOOD	YES
BUCANA	PVC	150	11,200.00	57.01	638,493.88	GOOD	YES
7-A	MLCSP	600	40,100.00	53.93	2,162,527.73	GOOD	YES
10-A	PVC	150	11,200.00	75.77	848,669.60	GOOD	YES
4-A	MLCSP	500	33,200.00	6.13	203,388	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	16.87	188,999.06	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	11.21	125,578.12	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	21.56	241,514.23	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	83.29	932,839.13	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	0.40	4,435.91	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	1.93	21,628.95	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	52.77	590,990.62	GOOD	YES
TALOMO	MLCSP	250	17,700.00	44.64	790,110.61	GOOD	YES
SASA	PVC	200	12,500.00	208.51	2,606,384.58	GOOD	YES
SASA	PVC	200	12,500.00	61.23	765,322.30	GOOD	YES
SASA	PVC	200	12,500.00	3.12	38,967.90	GOOD	YES
SASA	MLCSP	250	17,700.00	84.53	1,496,207.88	GOOD	YES
SASA	MLCSP	250	17,700.00	110.93	1,963,503.67	GOOD	YES
BAGO GALLERA	MLCSP	350	20,800.00	217.28	4,519,509.45	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	256.40	5,333,087.34	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	449.95	9,358,928.31	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	346.50	7,207,275.52	GOOD	YES
BAGO APLAYA	MLCSP	250	17,700.00	14.99	265,329.26	GOOD	YES
BAGO GALLERA	MLCSP	350	20,800.00	217.59	4,525,838.50	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	243.39	5,062,588.60	GOOD	YES

Table LU-64. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 4-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY NAME	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
11-B	MLCSP	300	19,100.00	60.43	1,154,117.70	GOOD	YES
A. ANGLIONGTO	MLCSP	250	17,700.00	69.97	1,238,542.64	GOOD	YES
WILFREDO AQUINO	MLCSP	400	23,600.00	12.06	284,638.52	GOOD	YES
19-B	MLCSP	300	19,100.00	92.88	1,774,055.40	GOOD	YES
MA-A	MLCSP	750	48,500.00	95.39	4,626,347.88	GOOD	YES
5-A	MLCSP	750	48,500.00	45.83	2,222,572.84	GOOD	YES
2-A	MLCSP	750	48,500.00	35.84	1,738,185.20	GOOD	YES
BAGO GALLERA	MLCSP	350	20,800.00	23.71	493,220.95	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	397.00	8,257,573.39	GOOD	YES
BAGO GALLERA	MLCSP	300	19,100.00	4.41	84,321.31	GOOD	YES
BAGO APLAYA	MLCSP	300	19,100.00	8.71	166,445.55	GOOD	YES
WILFREDO AQUINO	MLCSP	400	23,600.00	7.72	182,170.09	GOOD	YES
12-B	PVC	100	11,000.00	0.78	8,573.57	GOOD	YES
TALOMO	MLCSP	450	24,300.00	65.20	1,584,332.39	GOOD	YES
TALOMO	MLCSP	450	24,300.00	2.35	57,077.72	GOOD	YES
MATINA CROSSING	MLCSP	350	20,800.00	239.21	4,975,655.21	GOOD	YES
MATINA APLAYA	MLCSP	300	19,100.00	169.90	3,245,096.06	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	7.81	162,453.17	GOOD	YES
PANACAN	MLCSP	250	17,700.00	27.17	480,972.57	GOOD	YES
TIBUNGCO	MLCSP	400	23,600.00	99.02	2,336,887.77	GOOD	YES
PANACAN	MLCSP	250	17,700.00	482.76	8,544,828.58	GOOD	YES
6-A	MLCSP	600	40,100.00	14.10	565,234.39	GOOD	YES
6-A	MLCSP	600	40,100.00	9.89	396,689.78	GOOD	YES
BAGO APLAYA	MLCSP	450	24,300.00	150.52	3,657,643.32	GOOD	YES
BAGO APLAYA	MLCSP	450	24,300.00	49.90	1,212,587.32	GOOD	YES
11-B	MLCSP	300	19,100.00	11.72	223,799.69	GOOD	YES
19-B	MLCSP	300	19,100.00	7.90	150,897.48	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	105.04	2,478,843.08	GOOD	YES
BAGO APLAYA	MLCSP	400	23,600.00	149.64	3,531,577.11	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	89.84	3,602,683.08	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	154.19	6,182,886.56	GOOD	YES
BUCANA	MLCSP	250	17,700.00	149.35	2,643,530.85	GOOD	YES

Table LU-64. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 5-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
10-A	PVC	150	11,200.00	126.87	1,420,933.37	GOOD	YES
12-B	PVC	150	11,200.00	49.64	555,990.43	GOOD	YES
11-B	PVC	150	11,200.00	6.39	71,603.91	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	69.38	777,040.94	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	39.95	447,470.15	GOOD	YES
BUCANA	PVC	150	11,200.00	26.46	296,317.69	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	178.52	1,999,414.39	GOOD	YES
BUCANA	PVC	150	11,200.00	2.79	31,253.99	GOOD	YES
BUCANA	PVC	150	11,200.00	8.29	92,858.27	GOOD	YES
19-B	MLCSP	300	19,100.00	37.75	721,004.45	GOOD	YES
19-B	MLCSP	300	19,100.00	34.61	661,004.64	GOOD	YES
5-A	PVC	150	11,200.00	128.45	1,438,682.48	GOOD	YES
5-A	MLCSP	300	19,100.00	100.92	1,927,647.83	GOOD	YES
DUMOY	MLCSP	300	19,100.00	529.87	10,120,606.62	GOOD	YES
BAGO APLAYA	MLCSP	300	19,100.00	69.16	1,320,906.10	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	110.39	1,236,397.74	GOOD	YES
TALOMO	MLCSP	600	40,100.00	258.80	10,377,822.43	GOOD	YES
BAGO GALLERA	MLCSP	250	17,700.00	7.24	128,122.44	GOOD	YES
BAGO APLAYA	MLCSP	500	33,200.00	18.39	610,592	GOOD	YES
BUCANA	PVC	150	11,200.00	80.03	896,346.00	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	1.01	11,336.02	GOOD	YES
BUCANA	PVC	150	11,200.00	78.94	884,165.95	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	59.92	671,131.85	GOOD	YES
MA-A	MLCSP	750	48,500.00	143.95	6,981,709.23	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	75.75	848,395.16	GOOD	YES
7-A	MLCSP	600	40,100.00	40.84	1,637,645.77	GOOD	YES
9-A	PVC	150	11,200.00	145.74	1,632,254.53	GOOD	YES
10-A	PVC	150	11,200.00	1.89	21,205.56	GOOD	YES
6-A	MLCSP	350	20,800.00	1.70	35,275.05	GOOD	YES
5-A	MLCSP	350	20,800.00	11.53	239,791.51	GOOD	YES
2-A	MLCSP	350	20,800.00	47.49	987,758.15	GOOD	YES
TALOMO	MLCSP	800	52,800.00	150.02	7,920,953.26	GOOD	YES

Table LU-64. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 5-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
WILFREDO AQUINO	MLCSP	300	19,100.00	26.00	496,546.07	GOOD	YES
BAGO APLAYA	MLCSP	300	19,100.00	40.05	764,979.54	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	69.46	2,785,209.96	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	230.12	9,227,669.43	GOOD	YES
DUMOY	MLCSP	600	40,100.00	461.42	18,503,022.39	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	168.60	6,760,922.76	GOOD	YES
BAGO APLAYA	MLCSP	600	40,100.00	347.68	13,942,069.72	GOOD	YES
TALOMO	MLCSP	300	19,100.00	1.65	31,530.57	GOOD	YES
TALOMO	MLCSP	900	56,500.00	99.08	5,597,937.19	GOOD	YES
TALOMO	MLCSP	900	56,500.00	32.44	1,832,852.84	GOOD	YES
DUMOY	MLCSP	500	33,200.00	347.62	11,541,106	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	13.94	156,088.12	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	91.74	1,027,477.53	GOOD	YES
BAGO APLAYA	MLCSP	450	24,300.00	8.51	206,902.48	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	123.52	1,383,420.84	GOOD	YES
5-A	PVC	150	11,200.00	56.71	635,162.65	GOOD	YES
19-B	MLCSP	400	23,600.00	13.31	314,107.29	GOOD	YES
BAGO APLAYA	MLCSP	450	24,300.00	362.12	8,799,521.66	GOOD	YES
19-B	MLCSP	400	23,600.00	235.19	5,550,486.62	GOOD	YES
BUCANA	PVC	150	11,200.00	6.06	67,881.88	GOOD	YES
7-A	MLCSP	600	40,100.00	20.93	839,168.49	GOOD	YES
MATINA APLAYA	PVC	150	11,200.00	59.72	668,856.56	GOOD	YES
MATINA CROSSING	PVC	150	11,200.00	42.48	475,797.39	GOOD	YES
TALOMO	MLCSP	250	17,700.00	65.60	1,161,188.79	GOOD	YES
SASA	PVC	200	12,500.00	9.58	119,741.53	GOOD	YES
SASA	PVC	200	12,500.00	6.01	75,160.20	GOOD	YES
SASA	MLCSP	250	17,700.00	22.60	399,983.10	GOOD	YES
SASA	MLCSP	250	17,700.00	112.27	1,987,111.33	GOOD	YES
BAGO GALLERA	MLCSP	350	20,800.00	201.34	4,187,946.56	GOOD	YES
BAGO GALLERA	MLCSP	350	20,800.00	0.00	46.74	GOOD	YES
BAGO GALLERA	MLCSP	350	20,800.00	0.00	46.74	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	25.65	533,605.83	GOOD	YES

Table LU-64. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 5-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
BAGO GALLERA	MLCSP	350	20,800.00	120.55	2,507,359.11	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	105.58	2,196,136.01	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	97.58	2,029,691.39	GOOD	YES
BAGO GALLERA	MLCSP	350	20,800.00	187.42	3,898,351.49	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	38.70	804,993.42	GOOD	YES
WILFREDO AQUINO	MLCSP	400	23,600.00	72.27	1,705,490.01	GOOD	YES
WILFREDO AQUINO	MLCSP	400	23,600.00	58.37	1,377,457.17	GOOD	YES
BUHANGIN	MLCSP	400	23,600.00	1.98	46,617.29	GOOD	YES
BUHANGIN	MLCSP	400	23,600.00	13.48	318,113.87	GOOD	YES
19-B	MLCSP	300	19,100.00	55.61	1,062,153.96	GOOD	YES
5-A	MLCSP	750	48,500.00	150.79	7,313,154.20	GOOD	YES
BAGO APLAYA	MLCSP	350	20,800.00	148.52	3,089,204.28	GOOD	YES
MATINA CROSSING	MLCSP	350	20,800.00	162.66	3,383,333.34	GOOD	YES
MATINA APLAYA	MLCSP	350	20,800.00	98.18	2,042,215.47	GOOD	YES
MATINA APLAYA	MLCSP	300	19,100.00	56.03	1,070,171.30	GOOD	YES
DUMOY	MLCSP	250	17,700.00	15.00	265,469.06	GOOD	YES
BAGO APLAYA	MLCSP	250	17,700.00	5.64	99,844.86	GOOD	YES
BAGO GALLERA	MLCSP	250	17,700.00	6.99	123,788.54	GOOD	YES
PANACAN	MLCSP	250	17,700.00	27.61	488,756.79	GOOD	YES
TIBUNGCO	MLCSP	400	23,600.00	21.98	518,723.04	GOOD	YES
PANACAN	MLCSP	250	17,700.00	137.02	2,425,263.13	GOOD	YES
6-A	MLCSP	600	40,100.00	76.07	3,050,497.86	GOOD	YES
5-A	MLCSP	600	40,100.00	9.16	367,394.43	GOOD	YES
BAGO APLAYA	MLCSP	450	24,300.00	40.05	973,320.77	GOOD	YES
BAGO APLAYA	MLCSP	450	24,300.00	12.26	297,813.51	GOOD	YES
19-B	MLCSP	300	19,100.00	100.29	1,915,590.80	GOOD	YES
19-B	MLCSP	300	19,100.00	45.56	870,242.26	GOOD	YES
10-A	PVC	150	11,200.00	3.91	43,819.50	GOOD	YES
10-A	PVC	150	11,200.00	40.94	458,482.77	GOOD	YES
ILANG	MLCSP	400	23,600.00	175.96	4,152,543.01	GOOD	YES
ILANG	MLCSP	400	23,600.00	0.00	91.10	GOOD	YES
TIBUNGCO	MLCSP	400	23,600.00	109.09	2,574,634.71	GOOD	YES

Table LU-64. Lifeline Utilities, Level III Water System, Exposure Estimation Table For Storm Surge 5-meter wave, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
ILANG	MLCSP	400	23,600.00	4.44	104,728.75	GOOD	YES
TALOMO	MLCSP	750	48,500.00	17.28	838,135.19	GOOD	YES
TALOMO	MLCSP	700	44,200.00	275.23	12,165,276.16	GOOD	YES
TALOMO	MLCSP	350	20,800.00	217.93	4,532,931.53	GOOD	YES
TIBUNGCO	MLCSP	350	20,800.00	21.54	448,014.40	GOOD	YES

Exposure Estimation for DCWD Wells

All wells which are exposed to 2-meter, 3-meter wave, 4-meter wave and 5-meter wave have the replacement cost of ₱6,500,000.

Table LU-65. Lifeline Utilities, DCWD Production Wells, Exposure Estimation Table for Storm Surge, Davao City

EXPOSURE					SENSITIVITY	
LOCATION	STORM SURGE	PUMP TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
Km. 7, Talomo Sump Bangkal, Brgy. Talomo	5m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
UUHSA, Brgy. Talomo	4m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Km. 8 Ulas, Brgy. Talomo	5m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Puan Junction, Brgy. Talomo	4m	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES
Lower Rapnaga, Puan, Brgy. Bago Aplaya	4m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Lower Rapnaga, Puan, Brgy. Bago Aplaya	3m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Crossing Bago Aplaya, Brgy. Bago Aplaya	4m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Km. 10 Bago Aplaya fronting Ideal Subdivision, Brgy. Bago Aplaya	5m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	2m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Km. 11 Dumoy near the entrance to Dusnai, Brgy. Dumoy	5m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Bago Gallera Road near Gallera De Oro Subd., Brgy. Bago Gallera	5m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Km. 9, Puan along Davao Cotabato Road Brgy. Bago Aplaya	5m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Catotal Subdivision near Block 22, Brgy. Bago Aplaya	4m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES
Gallera de Oro Subdivision near Block 8, Brgy. Bago Aplaya	5m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES

Exposure Estimation for Cell Sites

All cell sites have the range of ₱12-15 million cost.

Table LU-69. Lifeline Utilities, Cell Sites, Exposure Estimation, Storm Surge with 2-meter wave, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
DIGITEL MOBILE PHILIPPINES, INC.	Lorenzo Manuel St., San Vicente Daliiao, Toril, Davao City,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	JMS Bldg., #88 Maya Street, Barangay 76A, Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-

Table LU-69. Lifeline Utilities, Cell Sites, Exposure Estimation, Storm Surge with 2-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
DIGITEL MOBILE PHILIPPINES, INC.	Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Magno Prop., No. 64 V. Mapa St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	No. 64 V. Mapa St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro corner Quimpo Blvd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	Bonifacio St., cor M.L.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES,	109 Piapi, Quezon Blvd,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Santiago's Lot, Brgy. Sasa Buhangin,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Erlinda Reyes Bldg., 19-Piapi Quezon Blvd.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	D. Ponce St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Chippens Bldg., 368 Padre Gomez St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Chippens Bldg., 368 Padre Gomez St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Gov. Sales St., Brgy. 27	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Jose Co Bldg., Gov. Sales St., Brgy. 27,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES,	NCC Mall Uyanguren	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	NCC Mall Unaguren	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	PBCOM Bldg., Monte-	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	PLDT Post fronting Chimes	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Lapu Lapu corner Bangoy Sts., Agdao,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Lapu-lapu St., cor. Bangoy Agdao,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-

Table LU-69. Lifeline Utilities, Cell Sites, Exposure Estimation, Storm Surge with 2-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Banco Filipino Bldg., Lapu-lapu St., cor. Dacudao Ave.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	Wescon Suites Cmpd., R. Castillo, Agdao	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Llanes Prop 1, Cabaguio Ave., Agdao,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Cabaguio Ave., Agdao	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	R. Castillo St., Otero Compound, Lapu-Lapu	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Leonor Property, Camia St., Ubalde Subd., Brgy. Ubalde	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Camia St., Ubalde Subd., Brgy. Ubalde	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Waterfront Hotel, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Doña Asuncion Road,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Km. 9, KMA, Brgy. Sasa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Sitio Nahul, Barangay Baliok,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Sitio Nahul, Brgy. Baliok	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	National Highway Panacan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-

Table LU-69. Lifeline Utilities, Cell Sites, Exposure Estimation, Storm Surge with 2-meter wave, Davao City

NAME OF CELL SITE	EXPOSURE			VALUE OF EXPOSED LIFELINE	SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST		CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
GLOBE TELECOM, INC.	Brgy. Daliao, Toril,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Brgy. Daliao, Toril	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Sandawa, McArthur Hi-Way, Matina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Sandawa, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	Magallanes St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	#88 Maya St., Brgy. 76A, Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro cor. Quimpo Blvd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Ponciano Reyes St. (crooked Rd.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Magno Bldg., Ponciano Reyes St. (crooked rd.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Baguio (Pob.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Km.12, National Highway, Barangay Catalunan Pequeno,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	PLDT Ponciano, PLDT Bldg., Ponciano St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Regency Inn, Villa Abrille St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Holy Cross College, Sta. Ana Ave. Cor Guerero	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	San Pedro Hospital Guzman St., Brgy. Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Brgy. Gov. Vicente Duterte,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-

Table LU-69. Lifeline Utilities, Cell Sites, Exposure Estimation, Storm Surge with 3-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
GLOBE TELECOM, INC.	Corner Palma Gil & Cervantes St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	University of Southern Philip-pines, Trade School Drive	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Opal St., Obrero,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Opal St., Obrero	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	SM Lanang, Km. 6 Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	SM Lanang, Km 6, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	SM Davao Ecoland	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	SM Davao Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-

Table LU-69. Lifeline Utilities, Cell Sites, Exposure Estimation, Storm Surge with 4-meter wave, Davao City

EXPOSURE (Storm Surge - 4m)				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Barangay Bago Aplaya, Talomo District, Davao City Golf Country Club	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Crossing Puan, McArthur Highway	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Bago Aplaya, Talomo	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Ortis Road, Brgy. Ulas	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Ortis Road, Brgy. Ulas,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	5/F Gaisano Ilustre St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Ilustre St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	J.S. Gaisano Mall, Ilustre St., cor. Gen. Luna St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	General Malvar St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Legaspi St. Cor. Bonifacio St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-

Table LU-69. Lifeline Utilities, Cell Sites, Exposure Estimation, Storm Surge with 4-meter wave, Davao City

EXPOSURE (Storm Surge - 4m)					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	J.P Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Infront of Luisa Avenue Square Bldg., B. Jacinto Ext. St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Landco Bldg., JP Laurel St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Billboard on Synchar Hotel, J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	J.P. Laurel Avenue, Bajada,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	SM Lanang Former Lanang Golf and Country Club, J.P. Laurel Ave., Lanang District, Brgy. San Antonio	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	J.P. Laurel Ave., Monark Compound, Brgy. Rafael Castillo	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Malagamot Road, Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway, Panacan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Mercado Property, Purok 3 (Near Market Site), Brgy. Bunawan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-

Table LU-69. Lifeline Utilities, Cell Sites, Exposure Estimation, Storm Surge with 4-meter wave, Davao City

EXPOSURE (Storm Surge - 4m)				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Purok 3, (near Market site), Brgy. Bunawan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Lasang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-

Table LU-69 Lifeline Utilities, Cell Sites, Exposure Estimation, Storm Surge with 5-meter wave, Davao City

EXPOSURE (Storm Surge - 5m)				SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Along National Highway, Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 millio	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGTEL MOBILE PHILIPPINES, INC.	Commandante Property, Along National Highway, Brgy. Bago Aplaya, Talomo District,	300 sq. m	₱12 -₱15 millio	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	Doña Luisa Subdivision, Phase 2, Brgy. Matina Aplaya	300 sq. m	₱12 -₱15 millio	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana	300 sq. m	₱12 -₱15 millio	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana,	300 sq. m	₱12 -₱15 millio	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 millio	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	University Ave., Juna Subd., Martina	300 sq. m	₱12 -₱15 millio	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGTEL MOBILE PHILIPPINES, INC.	Abarquez Prop., University Ave., Juna Subd., Martina,	300 sq. m	₱12 -₱15 millio	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St., Barangay 20-B (Pob.)	300 sq. m	₱12 -₱15 millio	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St. Acacia,	300 sq. m	₱12 -₱15 millio	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
GLOBE TELECOM, INC.	JP Laurel St., Barangay 20-B (Pob.),	300 sq. m	₱12 -₱15 millio	₱12 -₱15 million	Steel & Concrete	good	Yes	-	-

Table LU-69. Lifeline Utilities, Cell Sites, Exposure Estimation, Storm Surge with 5-meter wave, Davao City

EXPOSURE (Storm Surge - 5m)					SENSITIVITY/VULNERABILITY			ADAPTIVE CAPACITY	
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
SMART COMMUNICATIONS, INC.	Malagamot Road, Bayani Diaz Compound, Panacan	300 sq. m		₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway	300 sq. m		₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
DIGITEL MOBILE PHILIPPINES, INC.	Tefasco Lot, Panacan,	300 sq. m		₱12 -₱15 million	Steel & Concrete	good	Yes	-	-
SMART COMMUNICATIONS, INC.	Panacan,	300 sq. m		₱12 -₱15 million	Steel & Concrete	good	Yes	-	-

Exposure Estimation of Roads for Active Fault

A combination of three portions of McArthur Highway has the highest cost equivalent of ₱22, 308,007. Meanwhile, a portion of Fatima-Malabog-Road and Davao -Bukidnon Road also have high value at ₱1, 733,275, and ₱1,057,104, respectively.

Table LU-70. Lifeline Utilities Exposure Estimation of Roads for Active Fault, Davao City

EXPOSURE				SENSITIVITY		
ROAD NAME	TOTAL LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT
Calinan-Baguio-Cadalian Road	0.0106	35,000,000	372,526	concrete	good	Yes
Calinan-Baguio-Cadalian Road	0.0108	35,000,000	378,525	concrete	good	Yes
Davao-Bukidnon Road	0.0100	40,000,000	400,800	concrete	good	Yes
Davao-Bukidnon Road	0.0100	40,000,000	400,064	concrete	good	Yes
Davao-Bukidnon Road	0.0117	40,000,000	469,160	concrete	good	Yes
Davao-Bukidnon Road	0.0179	40,000,000	714,648	concrete	good	Yes
Davao-Bukidnon Road	0.0264	40,000,000	1,057,104	concrete	good	Yes
Fatima-Malabog Road	0.0108	54,000,000	583,146	concrete	good	Yes
Inawayan-Baracatan Road	0.0100	35,000,000	350,004	concrete	good	Yes
Mc. Arthur Highway	0.0611	56,000,000	3,422,031	concrete	good	Yes
Mc. Arthur Highway	0.1842	56,000,000	10,315,648	concrete	good	Yes
Mc. Arthur Highway	0.0101	56,000,000	563,153	concrete	good	Yes
Mc. Arthur Highway	0.1541	56,000,000	8,630,328	concrete	good	Yes

Exposure Estimation of Bridges for Active Fault

Lipadas Bridge 1 and 2 are exposed to Dacudao Fault with the values of ₱45,360,000 and ₱48,000,000, respectively.

Table LU-71. Lifeline Utilities, Bridges, Exposure Estimation Table for Faultline, Davao City

EXPOSURE				SENSITIVITY			ADAPTIVE CAPACITY	
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES
Lipadas Br. I	37.80	1,200,000.00	45,360,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes
Lipadas Br. II	40.00	1,200,000.00	48,000,000	Concrete	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes

Exposure Estimation for Level II Water System for Faultline

The 3 HP well in barangay Manambulan, costs, ₱60, 500.

Table LU-72 Lifeline Utilities, Level II Water System, Exposure Estimation Table for Faultline, Davao City

EXPOSURE					SENSITIVITY		ADAPTIVE CAPACITY	
BARANGAY	SUSCEPTIBILITY	TYPE	REPLACE- MENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RE- SISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
MANAMBULAN	Tamugan Fault	3 HP	60,500	60,500	FAIR	Yes: casing of the well	None, but there is 1 month warranty if the waterpump is installed by the supplier	Yes. Subject to proposal

Exposure Estimation for Level III Water System for Faultline

One mainline in Mudiang with a total length of 650.63 meters has the highest value of exposed lifeline at ₱12,426, 970.17, this is followed by a separate mainline in Tugbok which cost is ₱303,228.60, and Dumoy mainline costing up to ₱232,702.37.

Table LU-73. Lifeline Utilities Level III Water System Exposure Estimation Table for Faultline, Davao City

EXPOSURE						SENSITIVITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN
BAGO OSHIRO	MLCSP	250	17,700.00	0.05	962.78	GOOD	YES
BAGO GALLERA	MLCSP	250	17,700.00	0.05	962.78	GOOD	YES
BAGO OSHIRO	MLCSP	250	17,700.00	0.03	448.70	GOOD	YES
BAGO GALLERA	MLCSP	250	17,700.00	0.03	448.70	GOOD	YES
WANGAN	PVC	200	12,500.00	0.12	1,504.72	GOOD	YES
CALINAN	PVC	200	12,500.00	0.09	1,162.16	GOOD	YES
TUGBOK	MLCSP	500	33,200.00	10.04	333,228.60	GOOD	YES
MINTAL	MLCSP	350	20,800.00	11.19	232,702.37	GOOD	YES
CATALUNAN GRANDE	MLCSP	350	20,800.00	10.37	215,645.36	GOOD	YES
TALOMO	MLCSP	350	20,800.00	10.02	208,492.21	GOOD	YES

Degree of Impact for Roads

Agdao Flyover, portions of Carlos P. Garcia Highway, portions of Davao Bukidnon Road, Don Julian Rodriguez Avenue, Eden-Tagurano Road, Inawayan-Baracatan Road, J.P Cabaguio Road, Leon Garcia St., Libby Road, Ma-a Radio St, Manggahan St, McArthur Highway, Pichon, Quimpo Boulevard, Quirino Avenue, and Rafael Castillo St. have high degree of impact. Direct impacts in terms of number of fatalities, injuries and value of the property damage will be disastrous given the extent of exposure and the current sensitivity of the system. The degree of impact was assessed using the data on the value of the exposed lifeline and also the volume of vehicles that will traverse on the said road network.

Table LU-73. Lifeline Utilities, Roads, Degree of Impact Table for Flood, Davao City

ROAD NAME	EXPOSURE		SENSITIVITY			IMPACT			
	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	DEGREE OF IMPACT			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
2nd Avenue	0.0055	327,355	concrete	good	Yes	1	1	1	1.0
Agdao Flyover	0.4734	26,508,216	concrete	good	Yes	3	3	3	3.0
Calinan-Baguio-Cadalian Road	2.4488	85,708,700	concrete	good	Yes	1	1	1	1.0
Calinan-Baguio-Cadalian Road	0.4303	15,059,240	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	0.1052	6,310,020	concrete	good	Yes	3	3	3	3.0
Carlos P. Garcia Highway	0.0399	2,394,378	concrete	good	Yes	3	3	3	3.0
Carlos P. Garcia Highway	0.0817	4,899,636	concrete	good	Yes	3	3	3	3.0
Carlos P. Garcia Highway	0.3295	19,772,940	concrete	good	Yes	3	3	3	3.0
Carlos P. Garcia Highway	0.0314	1,886,508	concrete	good	Yes	3	3	3	3.0
Carlos P. Garcia Highway	0.3522	21,129,360	concrete	good	Yes	3	3	3	3.0
Carlos P. Garcia Highway	0.1119	6,711,120	concrete	good	Yes	3	3	3	3.0
Carlos P. Garcia Highway	0.0129	775,470	concrete	good	Yes	3	3	3	3.0
Carlos P. Garcia Highway	0.0063	375,574	concrete	good	Yes	3	3	3	3.0
Carlos P. Garcia Highway	0.3292	19,751,820	concrete	good	Yes	3	3	3	3.0
Carlos P. Garcia Highway	0.2961	17,768,520	concrete	good	Yes	3	3	3	3.0
Dacudao Avenue	1.1168	62,540,800	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	2.2435	89,739,600	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	0.5888	23,551,720	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	0.9692	38,769,520	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	0.3905	15,621,320	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	1.6118	64,471,600	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	0.6323	25,293,080	concrete	good	Yes	3	3	3	3.0

Table LU-73. Lifeline Utilities, Roads, Degree of Impact Table for Flood, Davao City

ROAD NAME	EXPOSURE		SENSITIVITY			IMPACT			
	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	DEGREE OF IMPACT			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Davao-Bukidnon Road	0.9835	39,340,080	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	0.8472	33,889,920	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	0.2592	10,369,640	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	1.9633	78,531,600	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	1.1280	45,121,200	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	0.5791	23,165,360	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	0.6943	27,773,760	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	0.0412	1,647,920	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	0.5601	22,405,360	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	0.3309	13,237,880	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	2.0777	83,107,600	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	1.6613	66,450,400	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	0.2861	11,445,040	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	2.4449	97,797,600	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.0825	4,621,092	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.0331	1,851,041	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.0126	704,346	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.2037	11,408,544	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.1551	8,688,064	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.6234	34,908,384	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.0860	4,813,519	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.0480	2,690,055	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.0329	1,843,610	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.0842	4,716,370	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.1324	7,415,800	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.0685	3,835,726	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.1062	5,948,488	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.0245	1,374,548	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.0880	4,928,465	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.0993	5,559,999	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.0226	1,262,839	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.0444	2,484,166	concrete	good	Yes	3	3	3	3.0

Table LU-73. Lifeline Utilities, Roads, Degree of Impact Table for Flood, Davao City

ROAD NAME	EXPOSURE		SENSITIVITY			IMPACT			
	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	DEGREE OF IMPACT			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Davao - Agusan Highway	0.0796	4,456,368	concrete	good	Yes	3	3	3	3.0
Davao - Agusan Highway	0.0262	1,469,451	concrete	good	Yes	3	3	3	3.0
Don Julian Rodriguez Ave. (Maa Road)	0.5272	14,760,536	concrete	good	Yes	3	3	3	3.0
Don Julian Rodriguez Ave. (Maa Road)	0.3069	8,593,004	concrete	good	Yes	3	3	3	3.0
Don Julian Rodriguez Ave. (Maa Road)	0.3612	10,113,488	concrete	good	Yes	3	3	3	3.0
Eden-Tagurano Road	0.1210	4,235,595	concrete	good	Yes	3	3	3	3.0
Inawayan-Baracatan Road	0.0328	1,146,572	concrete	good	Yes	3	3	3	3.0
J.P. Cabaguio Avenue	1.4047	78,662,080	concrete	good	Yes	3	3	3	3.0
Leon Garcia St.	0.2600	12,740,588	concrete	good	Yes	3	3	3	3.0
Libby Road	0.0494	1,235,630	concrete	good	Yes	3	3	3	3.0
Libby Road	0.0075	186,545	concrete	good	Yes	3	3	3	3.0
Libby Road	1.7755	44,387,750	concrete	good	Yes	3	3	3	3.0
Maa Radio Station St.	0.1871	5,238,352	concrete	good	Yes	3	3	3	3.0
Maa Radio Station St.	0.1576	4,411,904	concrete	good	Yes	3	3	3	3.0
Mabuhay-Pañalum-Paquibato Road	0.2632	11,582,604	concrete	good	Yes	2	2	2	2.0
Mabuhay-Pañalum-Paquibato Road	0.1382	6,081,108	concrete	good	Yes	2	2	2	2.0
Manggahan St.	0.5772	14,431,225	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	0.0730	4,087,412	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	0.1741	9,750,720	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	0.7103	39,776,016	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	0.1954	10,942,848	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	0.2950	16,518,208	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	0.7051	39,485,432	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	0.1347	7,544,768	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	0.2224	12,452,832	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	0.1283	7,186,872	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	0.2059	11,531,912	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	0.4105	22,990,352	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	0.4010	22,458,464	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	0.1792	10,035,200	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	0.2129	11,922,904	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	0.4510	25,258,128	concrete	good	Yes	3	3	3	3.0

Table LU-73. Lifeline Utilities, Roads, Degree of Impact Table for Flood, Davao City

ROAD NAME	EXPOSURE		SENSITIVITY			IMPACT			
	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	DEGREE OF IMPACT			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Mc. Arthur Highway	0.2950	16,520,392	concrete	good	Yes	3	3	3	3.0
Mc. Arthur Highway	1.1842	66,314,080	concrete	good	Yes	3	3	3	3.0
Pakiputan Wharf Road	0.4554	25,500,328	concrete	good	Yes	2	2	2	2.0
Pichon St.	0.1014	5,677,560	concrete	good	Yes	3	3	3	3.0
Quimpo Boulevard	0.5484	27,422,300	concrete	good	Yes	3	3	3	3.0
Quimpo Boulevard	0.0351	1,756,095	concrete	good	Yes	3	3	3	3.0
Quimpo Boulevard	0.3839	19,194,450	concrete	good	Yes	3	3	3	3.0
Quimpo Boulevard	0.4730	23,650,750	concrete	good	Yes	3	3	3	3.0
Quirino Avenue	0.2199	8,794,920	concrete	good	Yes	3	3	3	3.0
Rafael Castillo St.	0.4003	34,426,144	concrete	good	Yes	3	3	3	3.0
Rafael Castillo St.	0.8161	70,183,224	concrete	good	Yes	3	3	3	3.0
Toril-Bayabas-Eden Road	0.2472	7,414,650	concrete	good	Yes	2	2	2	2.0
Toril-Bayabas-Eden Road	0.2321	6,962,490	concrete	good	Yes	2	2	2	2.0
Toril-Bayabas-Eden Road	0.0626	1,877,580	concrete	good	Yes	2	2	2	2.0
Toril-Bayabas-Eden Road	0.2519	7,555,530	concrete	good	Yes	2	2	2	2.0
Carlos P. Garcia Highway	0.0003	17,217	concrete	good	Yes	3	3	3	3.0
Carlos P. Garcia Highway	0.0003	17,217	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	0.0002	8,169	concrete	good	Yes	3	3	3	3.0
Davao-Bukidnon Road	0.0002	8,169	concrete	good	Yes	3	3	3	3.0
J.P. Cabaguio Avenue	0.0001	6,043	concrete	good	Yes	3	3	3	3.0
Pichon St.	0.0005	28,962	concrete	good	Yes	2	2	2	2.0
Quimpo Boulevard	0.0001	5,460	concrete	good	Yes	3	3	3	3.0
Quimpo Boulevard	0.0001	4,624	concrete	good	Yes	3	3	3	3.0
Quimpo Boulevard	0.0001	4,624	concrete	good	Yes	3	3	3	3.0
Quimpo Boulevard	0.0008	38,908	concrete	good	Yes	3	3	3	3.0
Quimpo Boulevard	0.0008	38,908	concrete	good	Yes	3	3	3	3.0
Quirino Avenue	0.0001	3,889	concrete	good	Yes	3	3	3	3.0
Rafael Castillo St.	0.0003	25,057	concrete	good	Yes	3	3	3	3.0
Rafael Castillo St.	0.0003	26,521	concrete	good	Yes	3	3	3	3.0

Degree of Impact for Bridges

For the degree of impact, high rating pertains to that the estimated direct impacts in terms of number of fatalities, injuries and value of the property damage which will be disastrous given the extent of exposure and the current sensitivity of the system. Angalan Bridge 1, Angalan Bridge V, Angalan Bridge VI, Bago Bridge, Bato Bridge, Bolton Bridge 1, Bolton Bridge 2, Bunawan Bridge 1, Bunawan Bridge 2, Davao River Bridge, Generoso Bridge 1 and 2, Matina Bridge, Pagan Grande, Pagan Pequeno, Panacan Bridge, Pangi Bridge, Pangi Bridge, Sasa Bridge, Suawan Bridge, Tagurano Bridge, Talomo Bridge 1, Talomo Bridge 2, and Tamugan Bridge have high degree of impact during flood occurrence. This is important to be monitored because these bridges connect rivers of the city which are susceptible to flooding

Table LU-74. Lifeline Utilities, Bridges, Degree of Impact Table for Flood, Davao City

ROAD NAME	EXPOSURE			SENSITIVITY			IMPACT			
	EXPOSED LENGTH (LINNEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT			
							GROUP 1	GROUP 2	GROUP 3	AVERAGE
Agdao Flyover	382.98	1,200,000	459,576,000	Concrete	Good	Yes	2	2	3	2.33
Angalan Br. I	12.10	1,200,000	14,520,000	Concrete	Good	Yes	2	2	2	2.00
Angalan Br. II	11.92	1,200,000	14,304,000	Concrete	Good	Yes	3	3	3	3.00
Angalan Br. III	48.88	1,200,000	58,656,000	Concrete	Good	Yes	2	2	2	2.00
Angalan Br. IV	15.90	1,200,000	19,080,000	Concrete	Good	Yes	2	2	2	2.00
Angalan Br. V	18.00	1,200,000	21,600,000	Concrete	Good	Yes	3	3	3	3.00
Angalan Br. VI	45.00	1,200,000	54,000,000	Concrete	Good	Yes	3	3	3	3.00
Bago Br.	31.21	1,200,000	37,452,000		Good	Yes	3	3	3	3.00
Bato Br.	20.70	1,200,000	24,840,000	Concrete	Good	Yes	3	3	3	3.00
Bolton Br. 1	185.30	1,200,000	222,360,000		Good	Yes	3	3	3	3.00
Bolton Br. 2	196.88	1,200,000	236,256,000		Good	Yes	3	3	3	3.00
Buhangin Flyover	488.07	1,200,000	585,684,000		Good	Yes	3	3	3	3.00
Bunawan Br. 1	49.76	1,200,000	59,712,000		Good	Yes	3	3	3	3.00
Bunawan Br. 2	47.79	1,200,000	57,348,000		Good	Yes	3	3	3	3.00
Davao River Br.	141.11	1,200,000	169,332,000		Good	Yes	3	3	3	3.00
Generoso Br. 1	89.94	1,200,000	107,928,000		Good	Yes	3	3	3	3.00
Generoso Br. 2	87.60	1,200,000	105,120,000		Good	Yes	3	3	3	3.00
Libby Br.	24.69	1,200,000	29,628,000		Good	Yes	2	2	2	2.00
Lipadas Br. I	37.80	1,200,000	45,360,000	Concrete	Good	Yes	2	2	2	2.00
Lipadas Br. II	40.00	1,200,000	48,000,000	Concrete	Good	Yes	2	2	2	2.00
Matina Br.	38.66	1,200,000	46,392,000		Good	Yes	3	3	3	3.00
Nalum Br.	23.54	1,200,000	28,248,000		Good	Yes	3	3	3	3.00

Table LU-74. Lifeline Utilities, Bridges, Degree of Impact Table for Flood, Davao City

ROAD NAME	EXPOSURE			SENSITIVITY			IMPACT			
	EXPOSED LENGTH (LINNEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT			
							GROUP 1	GROUP 2	GROUP 3	AVERAGE
Pagan Grande	45.48	1,200,000	54,576,000	Concrete	Good	Yes	3	3	3	3.00
Pagan Pequeño	89.93	1,200,000	107,916,000	Steel	Good	Yes	3	3	3	3.00
Panacan Br.	23.53	1,200,000	28,236,000		Good	Yes	3	3	3	3.00
Pangi Br.	121.69	1,200,000	146,028,000		Good	Yes	3	3	3	3.00
Piedad Br.	47.82	1,200,000	57,384,000	Steel	Good	Yes	2	2	2	2.00
Sasa Br.	18.43	1,200,000	22,116,000		Good	Yes	3	3	3	3.00
Suawan Br.	45.00	1,200,000	54,000,000	Concrete	Good	Yes	3	3	3	3.00

Degree of Impact for Power Substations

A total of three power substations namely Calinan, Tugbok, and Matina Substation have moderate degree of impact. Moderate degree of impact means medium to low cost needed to return to pre-impact levels.

Table LU-75. Lifeline Utilities, Power Substations, Degree of Impact Rating for Flood, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	GROUP 1	GROUP 2	AVERAGE
Calinan Substation	1,000.00	140 Million	140 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; with Roofdeck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	3	2
Tugbok Substation	1,809.00	130 Million	130 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside b) Control Building: Prepainted Metal Sheet Cladding Wall and Concrete Floor ; Prepainted Roofing Sheet. c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	1	3	2
Matina Substation	1,000.00	120 Million	120 Million	a) Perimeter Fence : Concrete Fence (3.0m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	3	2
Pampanga Substation	1,031.00	118 Million	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	1	2	1.5

Lifeline Utilities Level I Degree of Impact

As presented, four (4) barangays namely, Tibungco, Panacan, Lizada and Binugao have high degree of impact. A total of three (3) spring sources in Tibungco, two (2) spring sources in Panacan, four (4) spring sources in Lizada and two (2) spring sources in Binugao have high degree of impact. All spring sources have the same cost.

Table LU-76. Lifeline Utilities, Level I, Degree of Impact Table for Flood, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DE-SIGN	DEGREE OF IMPACT
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
TIBUNGCO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
TIBUNGCO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
TIBUNGCO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
PANACAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3
PANACAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3
TALOMO RIVER	DEEPWELL	5,500,000	5,500,000	GOOD	NONE	2
ULA	DEEPWELL	5,500,000	5,500,000	GOOD	NONE	2
RIVERSIDE	DEEPWELL	5,500,000	5,500,000	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	3
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	3
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	3
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	3
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2

Table LU-76. Lifeline Utilities, Level I, Degree of Impact Table for Flood, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EX- POSED LIFELINE	EXISTING CON- DITION	HAZARD RESISTANT DE- SIGN	DEGREE OF IMPACT
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
BINUGAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
BINUGAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3

Degree of Impact on Level II Water System

Based on the assessment, Level 2 sources obtain only moderate degree of impact as the highest rating. Moderate direct impact in terms of value of property damage are expected on these water sources upon flood occurrence. Short to medium term indirect impacts will also be experienced which may affect development processes.

One spring source in Binugao, one spring source and two wells in Sirawan, three spring sources in Mt. Apo National Park, two spring sources in Tungkalan, one spring source in Daliaon Plantation, two wells in Subasta, two wells in Waan, One well each in Tigatto, Subasta and Baguio, and one spring source each in Cawayan, Malagos, Salaysay.

Table LU-77. Lifeline Utilities, Level II Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT SCORE
BINUGAO	SPRING	41,586.32	41,586.32	FAIR	Yes because of the design of the casing of the well	2
SIRAWAN	SPRING	41,586.32	41,586.32	FAIR	Yes because of the design of the G.I pipe casing of the well	2
BINUGAO	SPRING	41,586.32	41,586.32	FAIR	Yes because of the design of the casing of the well	1
SIRAWAN	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	2
SIRAWAN	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	2
MARAPANGI	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	2
SIBULAN	SPRING	41,586.32	41,586.32	FAIR	Yes because of the design of the casing of the well	2
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	FAIR	Yes because of the design of the casing of the well	2
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	FAIR	Yes because of the design of the casing of the well	2
TUNGKALAN	SPRING	41,586.32	41,586.32	FAIR	Yes because of the design of the casing of the well	2
TUNGKALAN	SPRING	41,586.32	41,586.32	FAIR	Yes because of the design of the casing of the well	2
DALIAON PLANTATION	SPRING	41,586.32	41,586.32	FAIR	Yes because of the design of the casing of the well	2
MANUEL GUIANGA	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
SIRIB	5HP	82,500.00	82,500.00	FAIR	Yes because of the design of the casing of the well	1
ANGALAN	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	FAIR	Yes because of the design of the casing of the well	2
TAGAKPAN	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
BALENGAENG	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
ANGALAN	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1

Table LU-77. Lifeline Utilities, Level II Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT SCORE
SIRIB	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
SIRIB	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
SIRIB	3HP	60,500.00	60,500.00	FAIR	Yes because of the design of the casing of the well	1
TAGAKPAN	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
SUBASTA	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	2
WAAN	18GS20	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	2
WAAN	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	2
TAGAKPAN	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
TIGATTO	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	2
BALENGAENG	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
MATINA BIAO	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
LOS AMIGOS	3HP	60,500.00	60,500.00	FAIR	Yes because of the design of the casing of the well	1
SUBASTA	3HP	60,500.00	60,500.00	FAIR	Yes because of the design of the casing of the well	2
CAWAYAN	3HP	60,500.00	60,500.00	FAIR	Yes because of the design of the casing of the well	1
SUBASTA	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
BIAO ESCUELA	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
LOS AMIGOS	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
LOS AMIGOS	1HP	31,000.00	31,000.00	FAIR	Yes because of the design of the casing of the well	1
CAWAYAN	SPRING	41,586.32	41,586.32	FAIR	Yes because of the design of the casing of the well	2
MATINA BIAO	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
BIAO GUIANGA	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
BIAO GUIANGA	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
BIAO ESCUELA	3HP	60,500.00	60,500.00	FAIR	Yes because of the design of the casing of the well	1
SUBASTA	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
CAWAYAN	3HP	60,500.00	60,500.00	FAIR	Yes because of the design of the casing of the well	1
BIAO ESCUELA	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
BIAO GUIANGA	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
BIAO ESCUELA	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
BIAO GUIANGA	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
BAGUIO	3HP	60,500.00	60,500.00	FAIR	Yes because of the design of the casing of the well	2
BIAO JOAQUIN	1.5HP	38,500.00	38,500.00	FAIR	Yes because of the design of the casing of the well	1
TALOMO RIVER	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1

Table LU-77. Lifeline Utilities, Level II Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EX-POSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT SCORE
TALOMO RIVER	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
BIAO JOAQUIN	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
TALANDANG	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
BIAO JOAQUIN	1.5HP	38,500.00	38,500.00	FAIR	Yes because of the design of the casing of the well	1
TALOMO RIVER	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
TALOMO RIVER	1.5HP	38,500.00	38,500.00	FAIR	Yes because of the design of the casing of the well	1
TALOMO RIVER	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
TALOMO RIVER	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
TALOMO RIVER	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
TALOMO RIVER	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
BIAO JOAQUIN	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
MALAGOS	SPRING	41,586.32	41,586.32	FAIR	Yes because of the design of the casing of the well	2
TALOMO RIVER	2HP	46,200.00	46,200.00	FAIR	Yes because of the design of the casing of the well	1
GUMALANG	3HP	60,500.00	60,500.00	FAIR	Yes because of the design of the casing of the well	1
SALAYSAY	SPRING	41,586.32	41,586.32	FAIR	Yes because of the design of the casing of the well	2

Degree of Impact on Level III Water System

Same as the Level I Degree of Impact the highest rating to flooding in Level II Water System is moderate. Mainline pipes in Bago Aplaya, Matina Aplaya, Ilang and Tibungco are identified to have moderate degree of impact this is in lieu of the presence of these lines within the bridges.

Table LU-78. Lifeline Utilities, Level III Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
AGDAO PROPER	MLCSP	400	₱23,600.00	175.51	₱4,142,036.00	GOOD	YES	1
AGDAO PROPER	MLCSP	150	₱11,200.00	28.8	₱322,560.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	22.26	₱425,166.00	GOOD	YES	1
AGDAO PROPER	MLCSP	400	₱23,600.00	17.76	₱419,136.00	GOOD	YES	1
AGDAO PROPER	MLCSP	400	₱23,600.00	63.34	₱1,494,824.00	GOOD	YES	1
BAGO GALLERA	MLCSP	250	₱17,700.00	158.17	₱2,799,609.00	GOOD	YES	1
BAGO GALLERA	MLCSP	250	₱17,700.00	604.49	₱10,699,473.00	GOOD	YES	1
DUMOY	MLCSP	400	₱23,600.00	51.53	₱1,216,108.00	GOOD	YES	1
BAGO APLAYA	MLCSP	300	₱19,100.00	106.54	₱2,034,914.00	GOOD	YES	1
BAGO APLAYA	MLCSP	300	₱19,100.00	90.25	₱1,723,775.00	GOOD	YES	1
BAGO GALLERA	MLCSP	250	₱17,700.00	229.3	₱4,058,610.00	GOOD	YES	1
BAGO APLAYA	MLCSP	250	₱17,700.00	3.93	₱69,561.00	GOOD	YES	1
TALOMO	MLCSP	800	₱52,800.00	44.64	₱2,356,992.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	61.88	₱693,056.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	18.19	₱882,215.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	126.37	₱6,128,945.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	146.85	₱7,122,225.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	96.58	₱1,081,696.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	38.24	₱428,288.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	154.2	₱1,727,040.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	149.77	₱1,677,424.00	GOOD	YES	1
TALOMO	MLCSP	700	₱44,200.00	49.78	₱2,200,276.00	GOOD	YES	1
TALOMO	MLCSP	750	₱48,500.00	109.99	₱5,334,515.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	74.05	₱829,360.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	7.28	₱81,536.00	GOOD	YES	1

Table LU-78. Lifeline Utilities, Level III Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDI-TION	HAZARD RE-SISTANT DESIGN	DEGREE OF IMPACT
MATINA CROSSING	MLCSP	150	₱11,200.00	220.22	₱2,466,464.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	174.49	₱1,954,288.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	106.03	₱1,187,536.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	2.66	₱29,792.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	112.32	₱5,447,520.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	153.34	₱7,436,990.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	326.59	₱3,657,808.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	8.67	₱420,495.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	1	₱48,500.00	GOOD	YES	1
TALOMO	MLCSP	600	₱40,100.00	571.17	₱22,903,917.00	GOOD	YES	1
TALOMO	MLCSP	900	₱56,500.00	46.82	₱2,645,330.00	GOOD	YES	1
AGDAO PROPER	MLCSP	400	₱23,600.00	90.43	₱2,134,148.00	GOOD	YES	1
BAGO GALLERA	MLCSP	250	₱17,700.00	74.23	₱1,313,871.00	GOOD	YES	1
BAGO APLAYA	MLCSP	400	₱23,600.00	223.09	₱5,264,924.00	GOOD	YES	2
BAGO APLAYA	MLCSP	400	₱23,600.00	99.67	₱2,352,212.00	GOOD	YES	1
TALOMO	MLCSP	700	₱44,200.00	231.11	₱10,215,062.00	GOOD	YES	1
TALOMO	MLCSP	700	₱44,200.00	4.72	₱208,624.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	301.54	₱14,624,690.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	413.54	₱4,631,648.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	117.78	₱1,319,136.00	GOOD	YES	1
TALOMO	MLCSP	700	₱44,200.00	21.82	₱964,444.00	GOOD	YES	1
TALOMO	MLCSP	750	₱48,500.00	18.45	₱894,825.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	95.18	₱1,066,016.00	GOOD	YES	1
AGDAO PROPER	MLCSP	400	₱23,600.00	9.02	₱212,872.00	GOOD	YES	1
15-B	MLCSP	400	₱23,600.00	28.77	₱678,972.00	GOOD	YES	1
MA-A	MLCSP	750	₱48,500.00	68.62	₱3,328,070.00	GOOD	YES	1
MA-A	MLCSP	350	₱20,800.00	13.06	₱271,648.00	GOOD	YES	1
MA-A	MLCSP	300	₱19,100.00	194.93	₱3,723,163.00	GOOD	YES	1
MA-A	MLCSP	300	₱19,100.00	188.62	₱3,602,642.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	32.52	₱364,224.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	72.6	₱3,521,100.00	GOOD	YES	1
TALOMO	MLCSP	750	₱48,500.00	4.59	₱222,615.00	GOOD	YES	1

Table LU-78. Lifeline Utilities, Level III Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
MATINA CROSSING	MLCSP	750	₱48,500.00	201.95	₱9,794,575.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	19.29	₱935,565.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	18.95	₱212,240.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	0.87	₱9,744.00	GOOD	YES	1
TALOMO	MLCSP	900	₱56,500.00	78.13	₱4,414,345.00	GOOD	YES	1
TALOMO	MLCSP	800	₱52,800.00	248.74	₱13,133,472.00	GOOD	YES	1
TALOMO	MLCSP	800	₱52,800.00	45.84	₱2,420,352.00	GOOD	YES	1
TALOMO	MLCSP	750	₱48,500.00	79.51	₱3,856,235.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	47.99	₱537,488.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	14.63	₱163,856.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	38.75	₱434,000.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	87.81	₱983,472.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	28.56	₱319,872.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	34.89	₱390,768.00	GOOD	YES	1
BAGO GALLERA	MLCSP	250	₱17,700.00	341.35	₱6,041,895.00	GOOD	YES	1
TALOMO	MLCSP	300	₱19,100.00	62.21	₱1,188,211.00	GOOD	YES	1
BAGO APLAYA	MLCSP	300	₱19,100.00	331.11	₱6,324,201.00	GOOD	YES	1
BAGO APLAYA	MLCSP	600	₱40,100.00	130.39	₱5,228,639.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	153.26	₱1,716,512.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	169.1	₱1,893,920.00	GOOD	YES	1
AGDAO PROPER	MLCSP	150	₱11,200.00	6.83	₱76,496.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	46.1	₱516,320.00	GOOD	YES	1
2-A	MLCSP	300	₱19,100.00	71.13	₱1,358,583.00	GOOD	YES	1
39-D	MLCSP	300	₱19,100.00	5.37	₱102,567.00	GOOD	YES	1
BAGO APLAYA	MLCSP	600	₱40,100.00	169.94	₱6,814,594.00	GOOD	YES	1
TALOMO	MLCSP	250	₱17,700.00	85.41	₱1,511,757.00	GOOD	YES	1
TALOMO	MLCSP	300	₱19,100.00	154.59	₱2,952,669.00	GOOD	YES	1
BAGO APLAYA	MLCSP	400	₱23,600.00	48.77	₱1,150,972.00	GOOD	YES	1
DUMOY	MLCSP	250	₱17,700.00	269.22	₱4,765,194.00	GOOD	YES	1
TALOMO	MLCSP	900	₱56,500.00	119.84	₱6,770,960.00	GOOD	YES	1
TALOMO	MLCSP	900	₱56,500.00	10.74	₱606,810.00	GOOD	YES	1

Table LU-78. Lifeline Utilities, Level III Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RE-SISTANT DESIGN	DEGREE OF IMPACT
MATINA APLAYA	MLCSP	150	₱11,200.00	143.01	₱1,601,712.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	42.88	₱480,256.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	123.86	₱1,387,232.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	100.87	₱1,129,744.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	69.27	₱775,824.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	40.6	₱454,720.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	44.36	₱496,832.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	73.05	₱818,160.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	38.45	₱430,640.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	42.39	₱474,768.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	43.58	₱488,096.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	52.77	₱591,024.00	GOOD	YES	1
AGDAO PROPER	MLCSP	150	₱11,200.00	72.06	₱807,072.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	95.78	₱1,197,250.00	GOOD	YES	1
PAMPANGA	MLCSP	300	₱19,100.00	5	₱95,500.00	GOOD	YES	1
PAMPANGA	MLCSP	300	₱19,100.00	14.98	₱286,118.00	GOOD	YES	1
PAMPANGA	MLCSP	300	₱19,100.00	45.71	₱873,061.00	GOOD	YES	1
V. HIZON	MLCSP	250	₱17,700.00	2.85	₱50,445.00	GOOD	YES	1
PAMPANGA	MLCSP	250	₱17,700.00	12.43	₱220,011.00	GOOD	YES	1
SASA	MLCSP	250	₱17,700.00	75.16	₱1,330,332.00	GOOD	YES	1
PAMPANGA	MLCSP	250	₱17,700.00	13.9	₱246,030.00	GOOD	YES	1
PAMPANGA	MLCSP	250	₱17,700.00	209.85	₱3,714,345.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	61.06	₱763,250.00	GOOD	YES	1
V. HIZON	MLCSP	250	₱17,700.00	386.94	₱6,848,838.00	GOOD	YES	1
PAMPANGA	MLCSP	250	₱17,700.00	23.61	₱417,897.00	GOOD	YES	1
PAMPANGA	MLCSP	250	₱17,700.00	23.06	₱408,162.00	GOOD	YES	1
PAMPANGA	MLCSP	300	₱19,100.00	336.36	₱6,424,476.00	GOOD	YES	1
SASA	MLCSP	250	₱17,700.00	87.14	₱1,542,378.00	GOOD	YES	1
MA-A	MLCSP	350	₱20,800.00	348.23	₱7,243,184.00	GOOD	YES	1
MA-A	MLCSP	350	₱20,800.00	137.11	₱2,851,888.00	GOOD	YES	1
MA-A	MLCSP	800	₱52,800.00	194.54	₱10,271,712.00	GOOD	YES	1

Table LU-78. Lifeline Utilities, Level III Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE						SENSITIVITY		IMPACT	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RE-SISTANT DESIGN	DEGREE OF	IMPACT
MA-A	MLCSP	800	₱52,800.00	10.29	₱543,312.00	GOOD	YES	1	
MA-A	MLCSP	800	₱52,800.00	12.31	₱649,968.00	GOOD	YES	1	
V. HIZON	MLCSP	250	₱17,700.00	5	₱88,500.00	GOOD	YES	1	
CABANTIAN	MLCSP	400	₱23,600.00	5.59	₱131,924.00	GOOD	YES	1	
CABANTIAN	MLCSP	350	₱20,800.00	5.2	₱108,160.00	GOOD	YES	1	
BUHANGIN	MLCSP	600	₱40,100.00	9.88	₱396,188.00	GOOD	YES	1	
BAGO GALLERA	MLCSP	350	₱20,800.00	489.24	₱10,176,192.00	GOOD	YES	1	
BAGO GALLERA	MLCSP	350	₱20,800.00	663.83	₱13,807,664.00	GOOD	YES	1	
BAGO APLAYA	MLCSP	350	₱20,800.00	104.91	₱2,182,128.00	GOOD	YES	1	
BAGO GALLERA	MLCSP	350	₱20,800.00	505.33	₱10,510,864.00	GOOD	YES	1	
BAGO APLAYA	MLCSP	350	₱20,800.00	280.59	₱5,836,272.00	GOOD	YES	1	
BAGO GALLERA	MLCSP	350	₱20,800.00	186.97	₱3,888,976.00	GOOD	YES	1	
BAGO APLAYA	MLCSP	350	₱20,800.00	104.92	₱2,182,336.00	GOOD	YES	1	
19-B	MLCSP	600	₱40,100.00	181.38	₱7,273,338.00	GOOD	YES	1	
19-B	MLCSP	600	₱40,100.00	229.36	₱9,197,336.00	GOOD	YES	1	
19-B	MLCSP	600	₱40,100.00	191.74	₱7,688,774.00	GOOD	YES	1	
WILFREDO AQUINO	MLCSP	300	₱19,100.00	190.87	₱3,645,617.00	GOOD	YES	1	
PACIANO BANGOY	MLCSP	150	₱11,200.00	25.58	₱286,496.00	GOOD	YES	1	
PACIANO BANGOY	MLCSP	150	₱11,200.00	38.83	₱434,896.00	GOOD	YES	1	
PACIANO BANGOY	MLCSP	150	₱11,200.00	171.17	₱1,917,104.00	GOOD	YES	1	
WILFREDO AQUINO	MLCSP	300	₱19,100.00	3.66	₱69,906.00	GOOD	YES	1	
AGDAO PROPER	MLCSP	300	₱19,100.00	111.52	₱2,130,032.00	GOOD	YES	1	
MATINA CROSSING	MLCSP	150	₱11,200.00	37.85	₱423,920.00	GOOD	YES	1	
AGDAO PROPER	MLCSP	200	₱12,500.00	20.1	₱251,250.00	GOOD	YES	1	
40-D	MLCSP	250	₱17,700.00	283.77	₱5,022,729.00	GOOD	YES	1	
2-A	MLCSP	250	₱17,700.00	7.32	₱129,564.00	GOOD	YES	1	
39-D	MLCSP	250	₱17,700.00	196.26	₱3,473,802.00	GOOD	YES	1	
WILFREDO AQUINO	MLCSP	150	₱11,200.00	15.86	₱177,632.00	GOOD	YES	1	
PACIANO BANGOY	MLCSP	150	₱11,200.00	5.45	₱61,040.00	GOOD	YES	1	
AGDAO PROPER	MLCSP	400	₱23,600.00	421.48	₱9,946,928.00	GOOD	YES	1	
MA-A	MLCSP	750	₱48,500.00	37.27	₱1,807,595.00	GOOD	YES	1	
MA-A	MLCSP	750	₱48,500.00	126.08	₱6,114,880.00	GOOD	YES	1	

Table LU-78. Lifeline Utilities, Level III Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE						SENSITIVITY		IMPACT	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RE-SISTANT DESIGN	DEGREE OF	IMPACT
MA-A	MLCSP	800	₱52,800.00	10.29	₱543,312.00	GOOD	YES	1	
MA-A	MLCSP	800	₱52,800.00	12.31	₱649,968.00	GOOD	YES	1	
V. HIZON	MLCSP	250	₱17,700.00	5	₱88,500.00	GOOD	YES	1	
CABANTIAN	MLCSP	400	₱23,600.00	5.59	₱131,924.00	GOOD	YES	1	
CABANTIAN	MLCSP	350	₱20,800.00	5.2	₱108,160.00	GOOD	YES	1	
BUHANGIN	MLCSP	600	₱40,100.00	9.88	₱396,188.00	GOOD	YES	1	
BAGO GALLERA	MLCSP	350	₱20,800.00	489.24	₱10,176,192.00	GOOD	YES	1	
BAGO GALLERA	MLCSP	350	₱20,800.00	663.83	₱13,807,664.00	GOOD	YES	1	
BAGO APLAYA	MLCSP	350	₱20,800.00	104.91	₱2,182,128.00	GOOD	YES	1	
BAGO GALLERA	MLCSP	350	₱20,800.00	505.33	₱10,510,864.00	GOOD	YES	1	
BAGO APLAYA	MLCSP	350	₱20,800.00	280.59	₱5,836,272.00	GOOD	YES	1	
BAGO GALLERA	MLCSP	350	₱20,800.00	186.97	₱3,888,976.00	GOOD	YES	1	
BAGO APLAYA	MLCSP	350	₱20,800.00	104.92	₱2,182,336.00	GOOD	YES	1	
19-B	MLCSP	600	₱40,100.00	181.38	₱7,273,338.00	GOOD	YES	1	
19-B	MLCSP	600	₱40,100.00	229.36	₱9,197,336.00	GOOD	YES	1	
19-B	MLCSP	600	₱40,100.00	191.74	₱7,688,774.00	GOOD	YES	1	
WILFREDO AQUINO	MLCSP	300	₱19,100.00	190.87	₱3,645,617.00	GOOD	YES	1	
PACIANO BANGOY	MLCSP	150	₱11,200.00	25.58	₱286,496.00	GOOD	YES	1	
PACIANO BANGOY	MLCSP	150	₱11,200.00	38.83	₱434,896.00	GOOD	YES	1	
PACIANO BANGOY	MLCSP	150	₱11,200.00	171.17	₱1,917,104.00	GOOD	YES	1	
WILFREDO AQUINO	MLCSP	300	₱19,100.00	3.66	₱69,906.00	GOOD	YES	1	
AGDAO PROPER	MLCSP	300	₱19,100.00	111.52	₱2,130,032.00	GOOD	YES	1	
MATINA CROSSING	MLCSP	150	₱11,200.00	37.85	₱423,920.00	GOOD	YES	1	
AGDAO PROPER	MLCSP	200	₱12,500.00	20.1	₱251,250.00	GOOD	YES	1	
40-D	MLCSP	250	₱17,700.00	283.77	₱5,022,729.00	GOOD	YES	1	
2-A	MLCSP	250	₱17,700.00	7.32	₱129,564.00	GOOD	YES	1	
39-D	MLCSP	250	₱17,700.00	196.26	₱3,473,802.00	GOOD	YES	1	
WILFREDO AQUINO	MLCSP	150	₱11,200.00	15.86	₱177,632.00	GOOD	YES	1	
PACIANO BANGOY	MLCSP	150	₱11,200.00	5.45	₱61,040.00	GOOD	YES	1	
AGDAO PROPER	MLCSP	400	₱23,600.00	421.48	₱9,946,928.00	GOOD	YES	1	
MA-A	MLCSP	750	₱48,500.00	37.27	₱1,807,595.00	GOOD	YES	1	
MA-A	MLCSP	750	₱48,500.00	126.08	₱6,114,880.00	GOOD	YES	1	

Table LU-78. Lifeline Utilities, Level III Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE						SENSITIVITY		IMPACT	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT	IM-
MA-A	MLCSP	750	₱48,500.00	16.15	₱783,275.00	GOOD	YES	1	
2-A	MLCSP	750	₱48,500.00	100.64	₱4,881,040.00	GOOD	YES	1	
BUCANA	MLCSP	750	₱48,500.00	145.29	₱7,046,565.00	GOOD	YES	1	
BUCANA	MLCSP	750	₱48,500.00	162.06	₱7,859,910.00	GOOD	YES	1	
MATINA CROSSING	MLCSP	150	₱11,200.00	208.98	₱2,340,576.00	GOOD	YES	1	
BAGO GALLERA	MLCSP	350	₱20,800.00	23.71	₱493,168.00	GOOD	YES	1	
BAGO APLAYA	MLCSP	350	₱20,800.00	206.38	₱4,292,704.00	GOOD	YES	1	
BAGO APLAYA	MLCSP	350	₱20,800.00	339.14	₱7,054,112.00	GOOD	YES	1	
BAGO GALLERA	MLCSP	300	₱19,100.00	4.41	₱84,231.00	GOOD	YES	1	
BAGO APLAYA	MLCSP	300	₱19,100.00	8.71	₱166,361.00	GOOD	YES	1	
MATINA CROSSING	MLCSP	150	₱11,200.00	48.42	₱542,304.00	GOOD	YES	1	
MATINA CROSSING	MLCSP	150	₱11,200.00	244.32	₱2,736,384.00	GOOD	YES	1	
CABANTIAN	MLCSP	350	₱20,800.00	6.12	₱127,296.00	GOOD	YES	1	
BUHANGIN	MLCSP	350	₱20,800.00	15.38	₱319,904.00	GOOD	YES	1	
A. ANGLIONGTO	MLCSP	350	₱20,800.00	13.91	₱289,328.00	GOOD	YES	1	
A. ANGLIONGTO	MLCSP	350	₱20,800.00	7.64	₱158,912.00	GOOD	YES	1	
MA-A	MLCSP	350	₱20,800.00	46.31	₱963,248.00	GOOD	YES	1	
MA-A	MLCSP	400	₱23,600.00	40.19	₱948,484.00	GOOD	YES	1	
MA-A	MLCSP	450	₱24,300.00	35.26	₱856,818.00	GOOD	YES	1	
MA-A	MLCSP	500	₱33,200.00	22.76	₱755,632.00	GOOD	YES	1	
MA-A	MLCSP	600	₱40,100.00	105.56	₱4,232,956.00	GOOD	YES	1	
SASA	MLCSP	250	₱17,700.00	212.79	₱3,766,383.00	GOOD	YES	1	
SASA	MLCSP	250	₱17,700.00	61.19	₱1,083,063.00	GOOD	YES	1	
BUHANGIN	MLCSP	600	₱40,100.00	21.48	₱861,348.00	GOOD	YES	1	
BUHANGIN	MLCSP	600	₱40,100.00	34.67	₱1,390,267.00	GOOD	YES	1	
MA-A	MLCSP	800	₱52,800.00	124.31	₱6,563,568.00	GOOD	YES	1	
MATINA PANGI	MLCSP	800	₱52,800.00	163.78	₱8,647,584.00	GOOD	YES	1	
MATINA PANGI	MLCSP	800	₱52,800.00	644.38	₱34,023,264.00	GOOD	YES	1	
MATINA PANGI	MLCSP	800	₱52,800.00	65.99	₱3,484,272.00	GOOD	YES	1	
MATINA PANGI	MLCSP	800	₱52,800.00	158.75	₱8,382,000.00	GOOD	YES	1	
MATINA PANGI	MLCSP	800	₱52,800.00	9.89	₱522,192.00	GOOD	YES	1	
MATINA PANGI	MLCSP	800	₱52,800.00	186.78	₱9,861,984.00	GOOD	YES	1	

Table LU-78. Lifeline Utilities, Level III Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE						SENSITIVITY		IMPACT	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RE-SISTANT DESIGN	DEGREE OF	IMPACT
MATINA PANGI	MLCSP	800	₱52,800.00	72.4	₱3,822,720.00	GOOD	YES	1	
SASA	MLCSP	300	₱19,100.00	107.31	₱2,049,621.00	GOOD	YES	1	
TALOMO	MLCSP	450	₱24,300.00	5.47	₱132,921.00	GOOD	YES	1	
TALOMO	MLCSP	450	₱24,300.00	88.89	₱2,160,027.00	GOOD	YES	1	
TALOMO	MLCSP	450	₱24,300.00	2.35	₱57,105.00	GOOD	YES	1	
MATINA CROSSING	MLCSP	350	₱20,800.00	524.62	₱10,912,096.00	GOOD	YES	1	
MATINA CROSSING	MLCSP	350	₱20,800.00	99.6	₱2,071,680.00	GOOD	YES	1	
MATINA APLAYA	MLCSP	350	₱20,800.00	98.18	₱2,042,144.00	GOOD	YES	1	
MATINA APLAYA	MLCSP	300	₱19,100.00	665.27	₱12,706,657.00	GOOD	YES	2	
TIGATTO	MLCSP	400	₱23,600.00	64	₱1,510,400.00	GOOD	YES	1	
TIGATTO	MLCSP	400	₱23,600.00	458.47	₱10,819,892.00	GOOD	YES	1	
BUHANGIN	MLCSP	400	₱23,600.00	0.36	₱8,496.00	GOOD	YES	1	
BAGO APLAYA	MLCSP	250	₱17,700.00	28.02	₱495,954.00	GOOD	YES	1	
BAGO GALLERA	MLCSP	250	₱17,700.00	11.23	₱198,771.00	GOOD	YES	1	
PAMPANGA	MLCSP	300	₱19,100.00	3.45	₱65,895.00	GOOD	YES	1	
LUBOGAN	MLCSP	250	₱17,700.00	168.9	₱2,989,530.00	GOOD	YES	1	
LUBOGAN	MLCSP	250	₱17,700.00	47.96	₱848,892.00	GOOD	YES	1	
TUGBOK	MLCSP	500	₱33,200.00	156.72	₱5,203,104.00	GOOD	YES	1	
TUGBOK	MLCSP	500	₱33,200.00	505.59	₱16,785,588.00	GOOD	YES	1	
TUGBOK	MLCSP	500	₱33,200.00	308.15	₱10,230,580.00	GOOD	YES	1	
TUGBOK	MLCSP	500	₱33,200.00	52.67	₱1,748,644.00	GOOD	YES	1	
MINTAL	MLCSP	500	₱33,200.00	545.75	₱18,118,900.00	GOOD	YES	1	
MINTAL	MLCSP	500	₱33,200.00	10.49	₱348,268.00	GOOD	YES	1	
STO. NIÑO	MLCSP	350	₱20,800.00	163.39	₱3,398,512.00	GOOD	YES	1	
STO. NIÑO	MLCSP	350	₱20,800.00	279.44	₱5,812,352.00	GOOD	YES	1	
MINTAL	MLCSP	350	₱20,800.00	91.03	₱1,893,424.00	GOOD	YES	1	
MINTAL	MLCSP	350	₱20,800.00	540.72	₱11,246,976.00	GOOD	YES	1	
MINTAL	MLCSP	500	₱33,200.00	11.85	₱393,420.00	GOOD	YES	1	
TUGBOK	MLCSP	500	₱33,200.00	156.72	₱5,203,104.00	GOOD	YES	1	
TUGBOK	MLCSP	500	₱33,200.00	505.59	₱16,785,588.00	GOOD	YES	1	
TUGBOK	MLCSP	500	₱33,200.00	308.15	₱10,230,580.00	GOOD	YES	1	

Table LU-78. Lifeline Utilities, Level III Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
TUGBOK	MLCSP	500	₱33,200.00	52.67	₱1,748,644.00	GOOD	YES	1
MINTAL	MLCSP	500	₱33,200.00	545.75	₱18,118,900.00	GOOD	YES	1
MINTAL	MLCSP	500	₱33,200.00	10.49	₱348,268.00	GOOD	YES	1
STO. NI ÆO	MLCSP	350	₱20,800.00	163.39	₱3,398,512.00	GOOD	YES	1
STO. NI ÆO	MLCSP	350	₱20,800.00	279.44	₱5,812,352.00	GOOD	YES	1
MINTAL	MLCSP	350	₱20,800.00	91.03	₱1,893,424.00	GOOD	YES	1
MINTAL	MLCSP	350	₱20,800.00	540.72	₱11,246,976.00	GOOD	YES	1
MINTAL	MLCSP	500	₱33,200.00	11.85	₱393,420.00	GOOD	YES	1
TUGBOK	MLCSP	500	₱33,200.00	256.82	₱8,526,424.00	GOOD	YES	1
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	20.49	₱426,192.00	GOOD	YES	1
TUGBOK	MLCSP	250	₱17,700.00	79.26	₱1,402,902.00	GOOD	YES	1
TUGBOK	MLCSP	250	₱17,700.00	20.77	₱367,629.00	GOOD	YES	1
TUGBOK	MLCSP	500	₱33,200.00	304.69	₱10,115,708.00	GOOD	YES	1
TUGBOK	MLCSP	500	₱33,200.00	77.19	₱2,562,708.00	GOOD	YES	1
TUGBOK	MLCSP	500	₱33,200.00	214.48	₱7,120,736.00	GOOD	YES	1
TUGBOK	MLCSP	150	₱11,200.00	36.45	₱408,240.00	GOOD	YES	1
MINTAL	MLCSP	200	₱12,500.00	101.31	₱1,266,375.00	GOOD	YES	1
MINTAL	MLCSP	200	₱12,500.00	310.22	₱3,877,750.00	GOOD	YES	1
MINTAL	MLCSP	200	₱12,500.00	192.23	₱2,402,875.00	GOOD	YES	1
MINTAL	MLCSP	200	₱12,500.00	332.13	₱4,151,625.00	GOOD	YES	1
TUGBOK	MLCSP	150	₱11,200.00	5.07	₱56,784.00	GOOD	YES	1
TUGBOK	MLCSP	250	₱17,700.00	5.62	₱99,474.00	GOOD	YES	1
TIGATTO	MLCSP	400	₱23,600.00	733.65	₱17,314,140.00	GOOD	YES	1
BUHANGIN	MLCSP	1000	₱62,400.00	33.44	₱2,086,656.00	GOOD	YES	1
BUHANGIN	MLCSP	800	₱52,800.00	0.06	₱3,168.00	GOOD	YES	1
PANACAN	MLCSP	250	₱17,700.00	44.03	₱779,331.00	GOOD	YES	1
SASA	MLCSP	300	₱19,100.00	79.92	₱1,526,472.00	GOOD	YES	1
PAMPANGA	MLCSP	300	₱19,100.00	18.37	₱350,867.00	GOOD	YES	1

Table LU-78. Lifeline Utilities, Level III Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RE-SISTANT DESIGN	DEGREE OF IMPACT
SASA	MLCSP	300	₱19,100.00	73.23	₱1,398,693.00	GOOD	YES	1
SASA	MLCSP	300	₱19,100.00	96.55	₱1,844,105.00	GOOD	YES	1
PAMPANGA	MLCSP	300	₱19,100.00	65.98	₱1,260,218.00	GOOD	YES	1
PAMPANGA	MLCSP	300	₱19,100.00	210.86	₱4,027,426.00	GOOD	YES	1
TALOMO	MLCSP	450	₱24,300.00	159.31	₱3,871,233.00	GOOD	YES	1
BAGO GALLERA	MLCSP	450	₱24,300.00	226.66	₱5,507,838.00	GOOD	YES	1
BAGO APLAYA	MLCSP	450	₱24,300.00	186.83	₱4,539,969.00	GOOD	YES	1
BAGO APLAYA	MLCSP	450	₱24,300.00	62.16	₱1,510,488.00	GOOD	YES	1
LOS AMIGOS	MLCSP	350	₱20,800.00	51.37	₱1,068,496.00	GOOD	YES	1
LOS AMIGOS	MLCSP	350	₱20,800.00	1,244.28	₱25,881,024.00	GOOD	YES	1
RIVERSIDE	MLCSP	350	₱20,800.00	839.64	₱17,464,512.00	GOOD	YES	1
RIVERSIDE	MLCSP	350	₱20,800.00	836.24	₱17,393,792.00	GOOD	YES	1
ULA	MLCSP	250	₱17,700.00	214.1	₱3,789,570.00	GOOD	YES	1
TACUNAN	MLCSP	250	₱17,700.00	148.72	₱2,632,344.00	GOOD	YES	1
TACUNAN	MLCSP	250	₱17,700.00	324.24	₱5,739,048.00	GOOD	YES	1
BIAO ESCUELA	MLCSP	300	₱19,100.00	3.29	₱62,839.00	GOOD	YES	1
BIAO GUIANGA	MLCSP	300	₱19,100.00	785.43	₱15,001,713.00	GOOD	YES	1
BIAO ESCUELA	MLCSP	300	₱19,100.00	139.87	₱2,671,517.00	GOOD	YES	1
BIAO ESCUELA	MLCSP	300	₱19,100.00	956.66	₱18,272,206.00	GOOD	YES	1
BIAO ESCUELA	MLCSP	300	₱19,100.00	18.93	₱361,563.00	GOOD	YES	1
BIAO ESCUELA	MLCSP	350	₱20,800.00	3.96	₱82,368.00	GOOD	YES	1
BIAO ESCUELA	MLCSP	350	₱20,800.00	19.93	₱414,544.00	GOOD	YES	1
BIAO ESCUELA	MLCSP	350	₱20,800.00	251.49	₱5,230,992.00	GOOD	YES	1
MATINA PANGI	MLCSP	250	₱17,700.00	223.69	₱3,959,313.00	GOOD	YES	1
MATINA PANGI	MLCSP	250	₱17,700.00	231.79	₱4,102,683.00	GOOD	YES	1
CATALUNAN GRANDE	MLCSP	250	₱17,700.00	315.15	₱5,578,155.00	GOOD	YES	1
MINTAL	MLCSP	500	₱33,200.00	34.6	₱1,148,720.00	GOOD	YES	1
MINTAL	MLCSP	500	₱33,200.00	11.83	₱392,756.00	GOOD	YES	1
PANACAN	MLCSP	300	₱19,100.00	67.51	₱1,289,441.00	GOOD	YES	1
PANACAN	MLCSP	300	₱19,100.00	279.2	₱5,332,720.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	18.07	₱202,384.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	24.03	₱269,136.00	GOOD	YES	1

Table LU-78. Lifeline Utilities, Level III Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE						SENSITIVITY		IMPACT	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RE-SISTANT DESIGN	DEGREE OF	IMPACT
TIGATTO	MLCSP	400	₱23,600.00	280.8	₱6,626,880.00	GOOD	YES	1	
TIGATTO	MLCSP	400	₱23,600.00	25.15	₱593,540.00	GOOD	YES	1	
TIGATTO	MLCSP	400	₱23,600.00	52.58	₱1,240,888.00	GOOD	YES	1	
MANDUG	MLCSP	400	₱23,600.00	90.74	₱2,141,464.00	GOOD	YES	1	
MANDUG	MLCSP	400	₱23,600.00	309.63	₱7,307,268.00	GOOD	YES	1	
MANDUG	MLCSP	400	₱23,600.00	92.98	₱2,194,328.00	GOOD	YES	1	
BAGO APLAYA	MLCSP	400	₱23,600.00	45.16	₱1,065,776.00	GOOD	YES	2	
BAGO APLAYA	MLCSP	400	₱23,600.00	76.34	₱1,801,624.00	GOOD	YES	1	
BAGO APLAYA	MLCSP	400	₱23,600.00	163.75	₱3,864,500.00	GOOD	YES	2	
BAGO APLAYA	MLCSP	400	₱23,600.00	79.14	₱1,867,704.00	GOOD	YES	1	
BAGO APLAYA	MLCSP	250	₱17,700.00	39.3	₱695,610.00	GOOD	YES	1	
BAGO APLAYA	MLCSP	600	₱40,100.00	64.71	₱2,594,871.00	GOOD	YES	2	
BAGO APLAYA	MLCSP	600	₱40,100.00	75.18	₱3,014,718.00	GOOD	YES	1	
BAGO APLAYA	MLCSP	600	₱40,100.00	158.54	₱6,357,454.00	GOOD	YES	2	
BAGO APLAYA	MLCSP	600	₱40,100.00	76.23	₱3,056,823.00	GOOD	YES	1	
MATINA APLAYA	MLCSP	250	₱17,700.00	576.96	₱10,212,192.00	GOOD	YES	1	
MATINA APLAYA	MLCSP	250	₱17,700.00	875	₱15,487,500.00	GOOD	YES	1	
MATINA APLAYA	MLCSP	250	₱17,700.00	45.78	₱810,306.00	GOOD	YES	1	
COMMUNAL	MLCSP	350	₱20,800.00	4.28	₱89,024.00	GOOD	YES	1	
COMMUNAL	MLCSP	350	₱20,800.00	13.89	₱288,912.00	GOOD	YES	1	
TUGBOK	MLCSP	500	₱33,200.00	786.72	₱26,119,104.00	GOOD	YES	1	
MINTAL	MLCSP	500	₱33,200.00	103.31	₱3,429,892.00	GOOD	YES	1	
TUGBOK	MLCSP	500	₱33,200.00	68.54	₱2,275,528.00	GOOD	YES	1	
ILANG	MLCSP	400	₱23,600.00	32.4	₱764,640.00	GOOD	YES	2	
ILANG	MLCSP	400	₱23,600.00	19.49	₱459,964.00	GOOD	YES	2	
TIBUNGCO	MLCSP	400	₱23,600.00	25.62	₱604,632.00	GOOD	YES	2	
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	6.88	₱143,104.00	GOOD	YES	1	
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	46.53	₱967,824.00	GOOD	YES	1	
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	47.91	₱996,528.00	GOOD	YES	1	
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	103.67	₱2,156,336.00	GOOD	YES	1	
MATINA CROSSING	MLCSP	250	₱17,700.00	14.61	₱258,597.00	GOOD	YES	1	
TUGBOK	MLCSP	250	₱17,700.00	177.45	₱3,140,865.00	GOOD	YES	1	

Table LU-78. Lifeline Utilities, Level III Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE						SENSITIVITY	IMPACT	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RE-SISTANT DESIGN	DEGREE OF IMPACT
TUGBOK	MLCSP	250	₱17,700.00	630.04	₱11,151,708.00	GOOD	YES	1
TUGBOK	MLCSP	250	₱17,700.00	91.68	₱1,622,736.00	GOOD	YES	1
CALINAN	MLCSP	200	₱12,500.00	47.96	₱599,500.00	GOOD	YES	1
CALINAN	MLCSP	200	₱12,500.00	16.51	₱206,375.00	GOOD	YES	1
CALINAN	MLCSP	200	₱12,500.00	79.38	₱992,250.00	GOOD	YES	1
CALINAN	MLCSP	200	₱12,500.00	169.11	₱2,113,875.00	GOOD	YES	1
BANKAS HEIGHTS	MLCSP	250	₱17,700.00	701.77	₱12,421,329.00	GOOD	YES	1
BANKAS HEIGHTS	MLCSP	250	₱17,700.00	4.69	₱83,013.00	GOOD	YES	1
TIGATTO	MLCSP	400	₱23,600.00	368.62	₱8,699,432.00	GOOD	YES	1
TIGATTO	MLCSP	400	₱23,600.00	478.61	₱11,295,196.00	GOOD	YES	1
MINTAL	MLCSP	250	₱17,700.00	414.87	₱7,343,199.00	GOOD	YES	1
MINTAL	MLCSP	250	₱17,700.00	440.61	₱7,798,797.0	GOOD	YES	1
MINTAL	MLCSP	250	₱17,700.00	100.79	₱1,783,983.00	GOOD	YES	1
BIAO GUIANGA	MLCSP	350	₱20,800.00	367.36	₱7,641,088.00	GOOD	YES	1
TALOMO	MLCSP	450	₱24,300.00	6.06	₱147,258.00	GOOD	YES	1
TALOMO	MLCSP	750	₱48,500.00	277.64	₱13,465,540.00	GOOD	YES	1
TALOMO	MLCSP	750	₱48,500.00	111.56	₱5,410,660.00	GOOD	YES	1
TALOMO	MLCSP	750	₱48,500.00	3.04	₱147,440.00	GOOD	YES	1
TALOMO	MLCSP	350	₱20,800.00	39.38	₱819,104.00	GOOD	YES	1
TALOMO	MLCSP	350	₱20,800.00	569.71	₱11,849,968.00	GOOD	YES	1
TALOMO	MLCSP	250	₱17,700.00	16.21	₱286,917.00	GOOD	YES	1
TALOMO	MLCSP	350	₱20,800.00	5.75	₱119,600.00	GOOD	YES	1
TALOMO	MLCSP	350	₱20,800.00	437.34	₱9,096,672.00	GOOD	YES	1
TALOMO	MLCSP	250	₱17,700.00	328	₱5,805,600.00	GOOD	YES	1
TALOMO	MLCSP	250	₱17,700.00	0.61	₱10,797.00	GOOD	YES	1
BIAO GUIANGA	MLCSP	350	₱20,800.00	417.93	₱8,692,944.00	GOOD	YES	1
BIAO ESCUELA	MLCSP	350	₱20,800.00	139.93	₱2,910,544.00	GOOD	YES	1
BIAO ESCUELA	MLCSP	350	₱20,800.00	625.51	₱13,010,608.00	GOOD	YES	1
BIAO ESCUELA	MLCSP	350	₱20,800.00	80.82	₱1,681,056.00	GOOD	YES	1
PANACAN	MLCSP	300	₱19,100.00	24.42	₱466,422.00	GOOD	YES	1
MA-A	MLCSP	800	₱52,800.00	120.09	₱6,340,752.00	GOOD	YES	1
TIGATTO	MLCSP	800	₱52,800.00	83.03	₱4,383,984.00	GOOD	YES	1

Table LU-78. Lifeline Utilities, Level III Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE						SENSITIVITY		IMPACT	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RE-SISTANT DESIGN	DEGREE OF	IMPACT
TIGATTO	MLCSP	800	₱52,800.00	97.57	₱5,151,696.00	GOOD	YES	1	
BUHANGIN	MLCSP	800	₱52,800.00	34.49	₱1,821,072.00	GOOD	YES	1	
MA-A	MLCSP	800	₱52,800.00	87.21	₱4,604,688.00	GOOD	YES	1	
TALOMO	MLCSP	700	₱44,200.00	353.39	₱15,619,838.00	GOOD	YES	1	
TALOMO	MLCSP	700	₱44,200.00	224.7	₱9,931,740.00	GOOD	YES	1	
TALOMO	MLCSP	350	₱20,800.00	280.51	₱5,834,608.00	GOOD	YES	1	
PACIANO BANGOY	MLCSP	150	₱11,200.00	71.18	₱797,216.00	GOOD	YES	1	
PACIANO BANGOY	MLCSP	150	₱11,200.00	2.02	₱22,624.00	GOOD	YES	1	
AGDAO PROPER	MLCSP	400	₱23,600.00	24.87	₱586,932.00	GOOD	YES	1	
AGDAO PROPER	MLCSP	400	₱23,600.00	5.86	₱138,296.00	GOOD	YES	1	
BUHANGIN	MLCSP	1000	₱62,400.00	30.9	₱1,928,160.00	GOOD	YES	1	
MATINA APLAYA	MLCSP	250	₱17,700.00	341.23	₱6,039,771.00	GOOD	YES	1	
MATINA APLAYA	MLCSP	250	₱17,700.00	44.03	₱779,331.00	GOOD	YES	1	
LOS AMIGOS	MLCSP	250	₱17,700.00	8.8	₱155,760.00	GOOD	YES	1	
LOS AMIGOS	MLCSP	250	₱17,700.00	2.67	₱47,259.00	GOOD	YES	1	
LOS AMIGOS	MLCSP	250	₱17,700.00	2.22	₱39,294.00	GOOD	YES	1	
LOS AMIGOS	MLCSP	250	₱17,700.00	260.44	₱4,609,788.00	GOOD	YES	1	
LOS AMIGOS	MLCSP	250	₱17,700.00	2.08	₱36,816.00	GOOD	YES	1	
LOS AMIGOS	MLCSP	250	₱17,700.00	553.2	₱9,791,640.00	GOOD	YES	1	
LOS AMIGOS	MLCSP	250	₱17,700.00	359.81	₱6,368,637.00	GOOD	YES	1	
LOS AMIGOS	MLCSP	250	₱17,700.00	16.73	₱296,121.00	GOOD	YES	1	
39-D	MLCSP	300	₱19,100.00	0.51	₱9,741.00	GOOD	YES	1	
WILFREDO AQUINO	MLCSP	300	₱19,100.00	0.37	₱7,067.00	GOOD	YES	1	
MATINA CROSSING	MLCSP	150	₱11,200.00	0.41	₱4,592.00	GOOD	YES	1	
MATINA CROSSING	MLCSP	150	₱11,200.00	0.41	₱4,592.00	GOOD	YES	1	
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	0.31	₱7,316.00	GOOD	YES	1	
LAPU - LAPU	MLCSP	400	₱23,600.00	0.29	₱6,844.00	GOOD	YES	1	
2-A	MLCSP	750	₱48,500.00	0.06	₱2,910.00	GOOD	YES	1	
TACUNAN	MLCSP	250	₱17,700.00	1.87	₱33,099.00	GOOD	YES	1	
TACUNAN	MLCSP	250	₱17,700.00	1.87	₱33,099.00	GOOD	YES	1	
PANACAN	MLCSP	300	₱19,100.00	1.22	₱23,302.00	GOOD	YES	1	
MANDUG	MLCSP	400	₱23,600.00	2.89	₱68,204.00	GOOD	YES	1	

Table LU-78. Lifeline Utilities, Level III Water System, Degree of Impact Table for Flood, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDI-TION	HAZARD RE-SISTANT DESIGN	DEGREE OF IMPACT
MANDUG	MLCSP	400	₱23,600.00	2.89	₱68,204.00	GOOD	YES	1
COMMUNAL	MLCSP	350	₱20,800.00	26.77	₱556,816.00	GOOD	YES	1
COMMUNAL	MLCSP	350	₱20,800.00	26.77	₱556,816.00	GOOD	YES	1
COMMUNAL	MLCSP	350	₱20,800.00	33.32	₱693,056.00	GOOD	YES	1
COMMUNAL	MLCSP	350	₱20,800.00	33.32	₱693,056.00	GOOD	YES	1

Degree of Impact on DCWD Production Wells

Submersible wells have moderate degree of impact rating while vertical wells have high degree of impact. This is because submersible wells are less exposed to flood waters. Identified to have high degree of impact are 14 production wells found in Kilometer, Talomo Sump Bangkal, Brgy. Talomo, UUHSA, Brgy. Talomo, Km. 8 Ulas, Brgy. Talomo, Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya, Gallera de Oro Subdivision near Block 8, Brgy. Bago Aplaya, Purok 6, Sta Cruz Bago Gallera Road fronting Spring Valley, Brgy. Bago Gallera, Reldo Village, Acacia St., Brgy. Bago Gallera, Along Apo Golf Road, Brgy. Bago Aplaya, Along Libby Road in front of San Lorenzo Village, Brgy. Bago Gallera, Farland Extension near Block 2, Brgy. Dumoy, Mangahan Bridge Alambre, Toril, Tugbok Quarry, Along Davao Bukidnon Road, Brgy. Tugbok, Los Amigos.

Table LU-79. Lifeline Utilities, DCWD Production Wells, Degree of Impact Table for Flood, Davao City

EXPOSURE			SENSITIVITY			DEGREE OF IMPACT
LOCATION	PUMP TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	
Km. 7, Talomo Sump Bangkal, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	3
UUHSA, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	3
Km. 8 Ulas, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	3
Puan Junction, Brgy. Talomo	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES	2
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	3
Catotal Subdivision near Block 22, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	3
Gallera de Oro Subdivision near Block 8, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	3
Purok 6, Sta Cruz Bago Gallera Road fronting Spring Valley, Brgy. Bago Gallera	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	3
Reldo Village, Acacia St., Brgy. Bago Gallera	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	3
Along Apo Golf Road, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	3
Along Libby Road in front of San Lorenzo Village, Brgy. Bago Gallera	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	3
Farland Extension near Block 2, Brgy. Dumoy	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	3
Purok 6, Brgy. Baliok	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES	2
Mangahan Bridge Alambre, Toril	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	3
Bangcas Heights Lubogan, Toril	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES	2
Sitio Mahayahay, Brgy. Tugbok	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES	2
Sitio Mahayahay, Brgy. Tugbok	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES	2
Tugbok Quarry, Along Davao Bukidnon Road, Brgy. Tugbok	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	3
Davao - Bukidnon Road, Upper Riverside	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES	2
Los Amigos	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	3

Degree of Impact on Cell Sites

Cell sites found in Peralta Property, Seminary Road Catalunan Grande, and Catalunan Grande, Talomo District, #88 Maya St. Barangay 76-A, Ecoland Barangay Bucana and National Highway, Times Beach, Matina Aplaya have high degree of impact. High degree of impact means that there is an estimated value of damage which will be disastrous, given the extent of exposure and the current sensitivity. Medium to long term impacts shall also be experienced, which may affect development processes. Significant cost is needed to return to pre-impact levels.

Table LU-80. Lifeline Utilities, Cell Sites, Degree of Impact Table for Flood, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
GLOBE TELECOM, INC.	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Centerpoint Mall, Brgy. Matina Crossing,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Peralta Property, Seminary Rd., Brgy Catalunan Grande Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
SMART COMMUNICATIONS, INC.	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Mc Arthur Hiway, Brgy. 74-A, Matina Crossing	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Magno Prop., No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2

Table LU-80. Lifeline Utilities, Cell Sites, Degree of Impact Table for Flood, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	#88 Maya St., Brgy. 76A, Ecoland, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
SMART COMMUNICATIONS, INC.	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
SMART COMMUNICATIONS, INC.	Crossing Puan, McArthur Highway, Brgy. Bago Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
DIGITEL MOBILE PHILIPPINES, INC.	Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
SMART COMMUNICATIONS, INC.	PLDT Village, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
SMART COMMUNICATIONS, INC.	PLDT Village, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
SMART COMMUNICATIONS, INC.	Ortis Road, Ulas, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
DIGITEL MOBILE PHILIPPINES, INC.	Ortis Road, Ulas, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
DIGITEL MOBILE PHILIPPINES, INC.	Upper Rapnaga, Bago Gallera Talumo Dist.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
SMART COMMUNICATIONS, INC.	Purok 16, Sitio Durian, Brgy. Bago Gallera	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
SMART COMMUNICATIONS, INC.	Upper Rapnaga, Bago Gallera Talumo Dist.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
DIGITEL MOBILE PHILIPPINES, INC.	Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	3	2
DIGITEL MOBILE PHILIPPINES, INC.	Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	3	2
DIGITEL MOBILE PHILIPPINES, INC.	Sandawa, McArthur Hi-Way, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	3	2
SMART COMMUNICATIONS, INC.	Sandawa, McArthur Hi-Way, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	3	2
GLOBE TELECOM, INC.	Km 12.5, Talomo Dist , Brgy. Catalunan Pequeño, Davao City, Davao del Sur	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5

Degree of Impact for Landslide

Degree of Impact for Roads

A total of 0.8466 kilometers of Calinan-Baguio Cadalian Road, Carlos P. Garcia Highway, Davao-Bukidnon Road, portion of Eden-Tagurano Road, Fatima-Malabog Road, Inawayan-Baracatan Road, Mabuhay-Pañalum-Paquibato Road and a portion of Toril-Bayabas-Eden-Road are assessed to have high degree of impact upon landslide occurrence.

Table LU-81. Lifeline Utilities, Roads, Degree of Impact Table for Landslide, Davao City

EXPOSURE			SENSITIVITY			IMPACT			
Road Name	Exposed Length (Linear	Value of Exposed Lifeline	Surface Type	Existing Condition	Hazard Resistant	Degree of Impact			
						Group 1	Group 2	Group 3	Average
Calinan-Baguio-Cadalian Road	0.8466	29,632,050	concrete	good	Yes	3.0	3.0	3.0	3.0
Carlos P. Garcia Highway	4.9353	296,118,000	concrete	good	Yes	3.0	3.0	3.0	3.0
Carlos P. Garcia Highway	0.6098	36,587,100	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.1525	6,100,120	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.0305	1,219,384	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.1078	4,310,200	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.1419	5,676,080	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.0376	1,505,592	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.1442	5,769,840	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.0636	2,544,348	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	15.1655	606,620,000	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	17.5150	700,600,000	concrete	good	Yes	3.0	3.0	3.0	3.0
Eden-Tagurano Road	0.1042	3,646,895	concrete	good	Yes	2.0	2.0	2.0	2.0
Eden-Tagurano Road	0.3792	13,273,470	concrete	good	Yes	2.0	2.0	2.0	2.0
Fatima-Malabog Road	8.8631	478,604,700	concrete	good	Yes	3.0	3.0	3.0	3.0
Fatima-Malabog Road	8.7231	471,045,780	concrete	good	Yes	3.0	3.0	3.0	3.0
Inawayan-Baracatan Road	1.8346	64,212,050	concrete	good	Yes	3.0	3.0	3.0	3.0
Inawayan-Baracatan Road	5.2520	183,818,600	concrete	good	Yes	2.0	2.0	2.0	2.0
Mabuhay-Pañalum-Paquibato Road	0.4214	18,542,700	concrete	good	Yes	2.0	2.0	2.0	2.0
Mabuhay-Pañalum-Paquibato Road	1.4726	64,793,080	concrete	good	Yes	3.0	3.0	3.0	3.0
Toril-Bayabas-Eden Road	0.8748	26,245,020	concrete	good	Yes	2.0	2.0	2.0	2.0
Toril-Bayabas-Eden Road	4.3880	131,640,600	concrete	good	Yes	3.0	3.0	3.0	3.0

Degree of Impact for Landslide

Tagurano Bridge, is a bailey bridge with the highest degree of impact and has a value of Php 14, 952,000.

Table LU-82. Lifeline Utilities, Bridges, Degree of Impact Table for Landslide, Davao City

EXPOSURE				SENSITIVITY			IMPACT			
Road Name	Exposed Length (Linear Meters)	Replacement Cost per Linear meter	Value of Exposed Lifeline	Surface Type	Existing Condition	Hazard Resistant Design	Degree of Impact			Average
							Group 1	Group 2	Group 3	
Baracatan Br.	22.20	1,200,000	26,640,000	Bailey	Good	Yes	2	2	2	2.00
Crossing Malabog Br.	41.02	1,200,000	49,224,000		Good	Yes	2	2	2	2.00
Tagurano Br.	12.46	1,200,000	14,952,000	Bailey	Good	Yes	3	3	3	3.00

Degree of Impact for Power Substations

The Tibungco Substation is the only substation identified to be susceptible to landslide and it has low degree of impact.

Table LU-83. Lifeline Utilities, Power Substations, Degree of Impact Table for Landslide, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
Name of Power Plant	Area Occupied (sq.m)	Replacement Cost	Value of exposed Lifeline	Construction Materials Used	Existing Condition	Hazard Resistant Design	Group 1	Group 2	Average
Tibungco Substation	2,626.00	118 Million	118 Million	a) Perimeter Fence :CHB Fence with top Guard Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: P.U. Panel walls and roof. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	1	2	1.5

Degree of Impact for Level I Water System

Seven (7) spring sources found in Bunawan, Cabantian, Daliao and Ilang have high degree of impact to an occurrence of landslide. This is primarily because these spring sources are located in mountain slopes and may technically be washed out or be destroyed upon an occurrence of landslide.

Table LU-84. Lifeline Utilities, Level I Water Supply, Degree of Impact Table for Landslide, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITON	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
BUNAWAN	SPRING	41,586.32	41,586.32	Fair	None	3
CABANTIAN	SPRING	41,586.32	41,586.32	Fair	None	3
DALIAO	SPRING	41,586.32	41,586.32	Fair	None	3
DALIAO	SPRING	41,586.32	41,586.32	Fair	None	3
DALIAO	SPRING	41,586.32	41,586.32	Fair	None	3
DALIAO	SPRING	41,586.32	41,586.32	Fair	None	3
ILANG	SPRING	41,586.32	41,586.32	Fair	None	3

Degree of Impact for Level II Water System

A total of 101 spring and well sources are assessed to have high degree of impact upon an occurrence of landslide. These are located in Binugao, Acacia, Bantol, Callawa, Camansi, Carmen, Dalag Lumot, Daliaon Plantation, Gatungan, Gumalang, Gumitan, Lampianao, Lumiad, Magsaysay, Magtuod, Malabog, Malamba,

Table LU-85. Lifeline Utilities, Level II Water System, Degree of Impact Table for Landslide, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
BINUGAO	2HP	46,600	46,600	FAIR	NO	2
SIRAWAN	SPRING	41,586.32	41,586.32	FAIR	NO	3
SIBULAN	SPRING	41,586.32	41,586.32	FAIR	NO	3
SIBULAN	SPRING	41,586.32	41,586.32	FAIR	NO	3
SIBULAN	SPRING	41,586.32	41,586.32	FAIR	NO	3
SIBULAN	SPRING	41,586.32	41,586.32	FAIR	NO	3

Table LU-85. Lifeline Utilities, Level II Water System, Degree of Impact Table for Landslide, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
BAYABAS	SPRING	41,586.32	41,586.32	FAIR	NO	3
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	FAIR	NO	3
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	FAIR	NO	3
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	FAIR	NO	3
TUNGKALAN	SPRING	41,586.32	41,586.32	FAIR	NO	3
TUNGKALAN	SPRING	41,586.32	41,586.32	FAIR	NO	3
DALIAON PLANTATION	SPRING	41,586.32	41,586.32	FAIR	NO	3
TUNGKALAN	SPRING	41,586.32	41,586.32	FAIR	NO	3
TUNGKALAN	SPRING	41,586.32	41,586.32	FAIR	NO	3
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	FAIR	NO	3
CAMANSI	SPRING	41,586.32	41,586.32	FAIR	NO	3
CAMANSI	3HP	60,500.00	60,500.00	FAIR	NO	3
DALIAON PLANTATION	SPRING	41,586.32	41,586.32	FAIR	NO	3
MAGTUOD	2HP	46200	46200	FAIR	NO	3
MAGTUOD	3HP	60,500.00	60,500.00	FAIR	NO	3
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	FAIR	NO	3
MAGTUOD	3HP	60,500.00	60,500.00	FAIR	NO	3
CARMEN	SPRING	41,586.32	41,586.32	FAIR	NO	3
MAGTUOD	2HP	46200	46200	FAIR	NO	3
MAGTUOD	2HP	46200	46200	FAIR	NO	3
NEW CARMEN	2HP	46200	46200	FAIR	NO	3
NEW CARMEN	3HP	60500	60500	FAIR	NO	3
NEW CARMEN	3HP	60500	60500	FAIR	NO	3
MUDIANG	2HP	46200	46200	FAIR	NO	3
MUDIANG	2HP	46200	46200	FAIR	NO	3
MUDIANG	2HP	46200	46200	FAIR	NO	3
ACACIA	25GS18	46200	46200	FAIR	NO	3
MUDIANG	2HP	46200	46200	FAIR	NO	3
ACACIA	33GS20	60500	60500	FAIR	NO	3
SUAWAN	SPRING	41586.32	41586.32	FAIR	NO	3
ACACIA	18GS20	46200	46200	FAIR	NO	3
ACACIA	3HP	60500	60500	FAIR	NO	3

Table LU-85. Lifeline Utilities, Level II Water System, Degree of Impact Table for Landslide, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
ACACIA	3HP	60500	60500	FAIR	NO	3
TIBUNGCO	2HP	46200	46200	FAIR	NO	3
TALANDANG	SPRING	41586.32	41586.32	FAIR	NO	3
ACACIA	25GS20	46200	46200	FAIR	NO	3
TIBUNGCO	2HP	46200	46200	FAIR	NO	3
GATUNGAN	25GS20	60500	60500	FAIR	NO	3
TAMBOBONG	SPRING	41586.32	41586.32	FAIR	NO	3
GATUNGAN	3HP	60500	60500	FAIR	NO	3
CALLAWA	18GS15	46200	46200	FAIR	NO	3
DALAG LUMOT	SPRING	41586.32	41586.32	FAIR	NO	3
LAMPIANAO	2HP	46200	46200	FAIR	NO	3
SUAWAN	SPRING	41586.32	41586.32	FAIR	NO	3
SALAYSAY	SPRING	41586.32	41586.32	FAIR	NO	3
SUAWAN	SPRING	41586.32	41586.32	FAIR	NO	3
GUMALANG	SPRING	41586.32	41586.32	FAIR	NO	3
SALAYSAY	SPRING	41586.32	41586.32	FAIR	NO	3
SUAWAN	SPRING	41586.32	41586.32	FAIR	NO	3
MARILOG	SPRING	41586.32	41586.32	FAIR	NO	3
MALAMBA	SPRING	41586.32	41586.32	FAIR	NO	3
MALAMBA	SPRING	41586.32	41586.32	FAIR	NO	3
MARILOG	SPRING	41586.32	41586.32	FAIR	NO	3
MALAMBA	SPRING	41586.32	41586.32	FAIR	NO	3
MEGKAWAYAN	SPRING	41586.32	41586.32	FAIR	NO	3
BANTOL	SPRING	41586.32	41586.32	FAIR	NO	3
MARILOG	SPRING	41586.32	41586.32	FAIR	NO	3
MALABOG	SPRING	41586.32	41586.32	FAIR	NO	3
BANTOL	SPRING	41586.32	41586.32	FAIR	NO	3
MARILOG	SPRING	41586.32	41586.32	FAIR	NO	3
MALABOG	SPRING	41586.32	41586.32	FAIR	NO	3
SALOY	SPRING	41586.32	41586.32	FAIR	NO	3
MAGSAYSAY	SPRING	41586.32	41586.32	FAIR	NO	3
PAÑALUM	SPRING	41586.32	41586.32	FAIR	NO	3

Table LU-85. Lifeline Utilities, Level II Water System, Degree of Impact Table for Landslide, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
MALABOG	SPRING	41586.32	41586.32	FAIR	NO	3
MALABOG	SPRING	41586.32	41586.32	FAIR	NO	3
MARILOG	SPRING	41586.32	41586.32	FAIR	NO	3
PAÑALUM	SPRING	41586.32	41586.32	FAIR	NO	3
PAQUIBATO	SPRING	41586.32	41586.32	FAIR	NO	3
MALABOG	SPRING	41586.32	41586.32	FAIR	NO	3
MALABOG	SPRING	41586.32	41586.32	FAIR	NO	3
PAÑALUM	SPRING	41586.32	41586.32	FAIR	NO	3
PAQUIBATO	SPRING	41586.32	41586.32	FAIR	NO	3
MAGSAYSAY	SPRING	41586.32	41586.32	FAIR	NO	3
MALABOG	SPRING	41586.32	41586.32	FAIR	NO	3
MALABOG	SPRING	41586.32	41586.32	FAIR	NO	3
PAQUIBATO	SPRING	41586.32	41586.32	FAIR	NO	3
PARADISE EMBAC	3HP	60500	60500	FAIR	NO	3
LUMIAD	SPRING	41586.32	41586.32	FAIR	NO	3
GUMITAN	SPRING	41586.32	41586.32	FAIR	NO	3
LUMIAD	SPRING	41586.32	41586.32	FAIR	NO	3
LUMIAD	SPRING	41586.32	41586.32	FAIR	NO	3
LUMIAD	SPRING	41586.32	41586.32	FAIR	NO	3
LUMIAD	SPRING	41586.32	41586.32	FAIR	NO	3
LUMIAD	SPRING	41586.32	41586.32	FAIR	NO	3
LUMIAD	SPRING	41586.32	41586.32	FAIR	NO	3
LUMIAD	SPRING	41586.32	41586.32	FAIR	NO	3
PANDAITAN	SPRING	41586.32	41586.32	FAIR	NO	3
PANDAITAN	2HP	46200	46200	FAIR	NO	3
PANDAITAN	SPRING	41586.32	41586.32	FAIR	NO	3
MAPULA	SPRING	41586.32	41586.32	FAIR	NO	3
MARILOG	SPRING	41586.32	41586.32	FAIR	NO	3
GUMITAN	SPRING	41586.32	41586.32	FAIR	NO	3
MARILOG	SPRING	41586.32	41586.32	FAIR	NO	3
SALAPAWAN	SPRING	41586.32	41586.32	FAIR	NO	3
MARILOG	SPRING	41586.32	41586.32	FAIR	NO	3
TAPAK	SPRING	41586.32	41586.32	FAIR	NO	3

Degree of Impact for Level III Water System

A total of 34 mainline pipes with a total length of 9,156.21 meters have moderate degree of impact. These total length include pipes in Catalunan Grande, Langub, Ma-a, Magtuod, Matina Crossing, Matina Pangi, Panacan, Talomo, Tibungco, and Tigatto.

Table LU-86. Lifeline Utilities. Level III Water System, Degree of Impact Table for Landslide, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
19-B	MLCSP	600	₱40,100.00	23.31	₱934,731.00	GOOD	YES	1
MA-A	MLCSP	800	₱52,800.00	0.72	₱38,016.00	GOOD	YES	2
BUHANGIN	MLCSP	600	₱40,100.00	338.29	₱13,565,429.00	GOOD	YES	1
19-B	MLCSP	600	₱40,100.00	15.04	₱603,104.00	GOOD	YES	1
MA-A	MLCSP	150	₱11,200.00	158.36	₱1,773,632.00	GOOD	YES	2
MATINA PANGI	MLCSP	150	₱11,200.00	546.53	₱6,121,136.00	GOOD	YES	2
MATINA PANGI	MLCSP	150	₱11,200.00	378.56	₱4,239,872.00	GOOD	YES	2
BUHANGIN	MLCSP	600	₱40,100.00	41.27	₱1,654,927.00	GOOD	YES	1
BUHANGIN	MLCSP	600	₱40,100.00	60.97	₱2,444,897.00	GOOD	YES	1
MA-A	MLCSP	800	₱52,800.00	1,153.29	₱60,893,712.00	GOOD	YES	2
MA-A	MLCSP	800	₱52,800.00	294.93	₱15,572,304.00	GOOD	YES	2
MATINA PANGI	MLCSP	800	₱52,800.00	62.67	₱3,308,976.00	GOOD	YES	2
MATINA PANGI	MLCSP	800	₱52,800.00	804.92	₱42,499,776.00	GOOD	YES	2
LANGUB	MLCSP	800	₱52,800.00	551.65	₱29,127,120.00	GOOD	YES	2
MATINA PANGI	MLCSP	800	₱52,800.00	144.78	₱7,644,384.00	GOOD	YES	2
MA-A	MLCSP	800	₱52,800.00	33.58	₱1,773,024.00	GOOD	YES	2
MAGTUOD	MLCSP	800	₱52,800.00	97.35	₱5,140,080.00	GOOD	YES	2
MAGTUOD	MLCSP	800	₱52,800.00	22.24	₱1,174,272.00	GOOD	YES	2
TALOMO	MLCSP	800	₱52,800.00	20.23	₱1,068,144.00	GOOD	YES	2
PANACAN	MLCSP	350	₱20,800.00	67.56	₱1,405,248.00	GOOD	YES	2
TIBUNGCO	MLCSP	350	₱20,800.00	268.19	₱5,578,352.00	GOOD	YES	2
CABANTIAN	MLCSP	450	₱24,300.00	354.52	₱8,614,836.00	GOOD	YES	1
CABANTIAN	MLCSP	450	₱24,300.00	10.65	₱258,795.00	GOOD	YES	1
CABANTIAN	MLCSP	450	₱24,300.00	10.88	₱264,384.00	GOOD	YES	1
CABANTIAN	MLCSP	450	₱24,300.00	150.43	₱3,655,449.00	GOOD	YES	1

Table LU-86. Lifeline Utilities. Level III Water System, Degree of Impact Table for Landslide, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
CABANTIAN	MLCSP	450	₱24,300.00	90.51	₱2,199,393.00	GOOD	YES	1
CABANTIAN	MLCSP	450	₱24,300.00	53.14	₱1,291,302.00	GOOD	YES	1
CABANTIAN	MLCSP	450	₱24,300.00	42.79	₱1,039,797.00	GOOD	YES	1
BUHANGIN	MLCSP	1000	₱62,400.00	113.1	₱7,057,440.00	GOOD	YES	1
BUHANGIN	MLCSP	1000	₱62,400.00	19.25	₱1,201,200.00	GOOD	YES	1
CATALUNAN GRANDE	MLCSP	250	₱17,700.00	474.8	₱8,403,960.00	GOOD	YES	2
CATALUNAN GRANDE	MLCSP	250	₱17,700.00	479.85	₱8,493,345.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	1.97	₱22,064.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	282.18	₱3,160,416.00	GOOD	YES	2
CABANTIAN	MLCSP	450	₱24,300.00	0.89	₱21,627.00	GOOD	YES	1
TALOMO	MLCSP	250	₱17,700.00	649.36	₱11,493,672.00	GOOD	YES	2
MATINA PANGI	MLCSP	250	₱17,700.00	94.92	₱1,680,084.00	GOOD	YES	2
CATALUNAN GRANDE	MLCSP	250	₱17,700.00	29.34	₱519,318.00	GOOD	YES	2
MATINA PANGI	MLCSP	150	₱11,200.00	174.12	₱1,950,144.00	GOOD	YES	2
MATINA PANGI	MLCSP	150	₱11,200.00	402.42	₱4,507,104.00	GOOD	YES	2
MATINA PANGI	MLCSP	150	₱11,200.00	8.16	₱91,392.00	GOOD	YES	2
MA-A	MLCSP	150	₱11,200.00	644.74	₱7,221,088.00	GOOD	YES	2
MA-A	MLCSP	150	₱11,200.00	333.65	₱3,736,880.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	346.67	₱3,882,704.00	GOOD	YES	2
TIGATTO	MLCSP	400	₱23,600.00	18.87	₱445,332.00	GOOD	YES	2
PANACAN	MLCSP	300	₱19,100.00	125.15	₱2,390,365.00	GOOD	YES	2
PANACAN	MLCSP	300	₱19,100.00	398.24	₱7,606,384.00	GOOD	YES	2
MA-A	MLCSP	800	₱52,800.00	36.2	₱1,911,360.00	GOOD	YES	2
MA-A	MLCSP	800	₱52,800.00	50.01	₱2,640,528.00	GOOD	YES	2
BUHANGIN	MLCSP	800	₱52,800.00	148.86	₱7,859,808.00	GOOD	YES	1
CABANTIAN	MLCSP	350	₱20,800.00	207.79	₱4,322,032.00	GOOD	YES	1
BUHANGIN	MLCSP	1000	₱62,400.00	300.11	₱18,726,864.00	GOOD	YES	1

Degree of Impact for DCWD wells

Only four (4) have high degree of impact. All of them are submersible wells, located at Davao Molave Homes, Barangay Indangan, Purok 27, Malagamot Barangay Panacan, Purok 24, Malagamot Barangay Panacan, and Tibungco Relocation, Barangay Tibungco. Each has a value of 6, 500,000.00.

Table LU-87. Lifeline Utilities, DCWD Production Wells, Degree of Impact Table for Landslide, Davao City

EXPOSURE			SENSITIVITY			
LOCATION	PUMP TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
Davao Mojave Homes, Brgy. Indangan	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES	3
Purok 27, Malagamot, Brgy. Panacan	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES	3
Purok 24, Malagamot, Brgy. Panacan	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES	3
Tibungco Relocation, Brgy. Tibungco	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES	3

Degree of Impact for the Cell Sites

A total of ten (10) cell sites have high degree of impact with 2.5 score. These are found in Shrine Hills Matina, Barangay Panorama, Water Tank, Palos Verdes Golf Course & Subdivision, Mandug, Eden Nature Park, Brgy. Eden, Toril District, Brgy. Sirib, Calinan District, Brgy. Mandug, Carnoustie St., Palos Verdes Compound

Table LU-88. Lifeline Utilities, Cell Sites, Degree of Impact Table for Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (ha)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	Ave.
GLOBE TELECOM, INC.	Lloueras Bldg., McArthur Highway, Talomo (Pob.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Telstar St., GSIS Subdivision, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Diversion Road, Bangkal,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
GLOBE TELECOM, INC.	Matina Shrine, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5

Table LU– 88. Lifeline Utilities, Cell Sites, Degree of Impact Table for Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (ha)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	Ave.
SMART COMMUNICATIONS, INC.	Shrine Hill, Matina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Matina RS,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
GLOBE TELECOM, INC.	lot 19 blk 17 Bacaca road El Rio Vista Buhangin (Pob.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	796 Tigatto, Buhangin	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Brgy. Panorama,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
SMART COMMUNICATIONS, INC.	Diversion Road, Brgy. Catitipan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Communal Road, Buhangin District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Water Tank, Palos Verdes Golf Course & Subd., Mandug,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
SMART COMMUNICATIONS, INC.	Brgy. Malabog, Paquibato District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	3	3
SMART COMMUNICATIONS, INC.	Eden Nature Park, Brgy. Eden, Toril District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
SMART COMMUNICATIONS, INC.	Shrine Hill Matina RS	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
SMART COMMUNICATIONS, INC.	Maa Rd., Sitio Bugac, Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	3	2
SMART COMMUNICATIONS, INC.	Maa Rd., Sitio Bugac, Brgy. Maa,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	3	2
SMART COMMUNICATIONS, INC.	Maa Rd., Sitio Bugac, Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	3	2
SMART COMMUNICATIONS, INC.	Brgy. Sirib, Calinan District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5

Table LU– 88. Lifeline Utilities, Cell Sites, Degree of Impact Table for Landslide, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (ha)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	Ave.
DIGITEL MOBILE PHILIPPINES, INC.	Brgy. Mandug,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
SMART COMMUNICATIONS, INC.	Carnoustie St., Palos Verdes Compound Golf Club, Mandug	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
GLOBE TELECOM, INC.	Buhisan St., Brgy. Tibungco,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
SMART COMMUNICATIONS, INC.	Sitio Lumondao,, Brgy. Marilog Proper, Marilog District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5

Degree of Impact for Roads

A total for 20 road networks have high degree of impact. These are Agdao Flyover, Bonifacio Rotonda, C.P. Garcia Highway, Claro M. Recto, Dacudao Avenue, Davao-Agusan Highway, Davao Bukidnon Road, Don Julian Rodriguez, Florentino Torrest St., J.P Cabaguio Avenue, Jose P. Laurel Avenue, Leon Garcia Avenue, McArthur Highway, Pichon, Quezon Boulevard, Quimpo Boulevard, Quirino, Rafael Castillo, Ramon Magsaysay, Sta. Ana Avenue. The area with the highest exposed length is the Davao Agusan Highway with 14.4817 kilometers exposed with the corresponding value of ₱115,853,350. This is followed by McArthur

Table LU-89. Lifeline Utilities, Roads, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE			SENSITIVITY			IMPACT			
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	DEGREE OF IMPACT			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
2nd Avenue	0.2056	12,337,800	concrete	good	Yes	1.0	1.0	1.0	1.0
5th Ave.	0.2043	12,260,640	concrete	good	Yes	1.0	1.0	1.0	1.0
Agdao Flyover	0.4734	26,508,216	concrete	good	Yes	3.0	3.0	3.0	3.0
Bonifacio Rotonda	0.0839	4,697,403	concrete	good	Yes	3.0	3.0	3.0	3.0
Carlos P. Garcia Highway	0.9844	59,065,380	concrete	good	Yes	3.0	3.0	3.0	3.0
Carlos P. Garcia Highway	0.3141	18,847,080	concrete	good	Yes	3.0	3.0	3.0	3.0
Carlos P. Garcia Highway	0.6716	40,295,160	concrete	good	Yes	3.0	3.0	3.0	3.0
Claro M. Recto St.	1.2152	68,050,080	concrete	good	Yes	3.0	3.0	3.0	3.0
Dacudao Avenue	0.7526	42,144,480	concrete	good	Yes	3.0	3.0	3.0	3.0
Dacudao Avenue	0.7785	43,597,064	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.0092	366,574	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.0202	1,131,284	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	11.3802	637,291,200	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.7390	41,383,216	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	1.0639	59,577,840	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	1.2081	67,654,720	concrete	good	Yes	3.0	3.0	3.0	3.0
Don Julian Rodriguez Ave. (Maa Road)	1.0931	30,607,080	concrete	good	Yes	3.0	3.0	3.0	3.0
Don Julian Rodriguez Ave. (Maa Road)	0.7840	21,950,908	concrete	good	Yes	3.0	3.0	3.0	3.0
Don Julian Rodriguez Ave. (Maa Road)	0.3266	9,144,156	concrete	good	Yes	3.0	3.0	3.0	3.0
Florentino Torres St	1.3493	87,707,100	concrete	good	Yes	3.0	3.0	3.0	3.0

Table LU-89. Lifeline Utilities, Roads, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE			SENSITIVITY			IMPACT			
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	DEGREE OF IMPACT			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
J.P. Cabaguio Avenue	0.6968	39,023,432	concrete	good	Yes	3.0	3.0	3.0	3.0
J.P. Cabaguio Avenue	0.3525	19,741,960	concrete	good	Yes	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	2.4896	139,418,160	concrete	good	Yes	3.0	3.0	3.0	3.0
Jose P. Laurel Avenue	1.0490	58,741,760	concrete	good	Yes	3.0	3.0	3.0	3.0
Leon Garcia St.	0.6511	31,904,733	concrete	good	Yes	3.0	3.0	3.0	3.0
Libby Road	0.3655	9,136,700	concrete	good	Yes	2.0	2.0	2.0	2.0
Maa Radio Station St.	0.3727	10,436,636	concrete	good	Yes	2.0	2.0	2.0	2.0
Mc. Arthur Highway	5.1120	286,273,680	concrete	good	Yes	3.0	3.0	3.0	3.0
Mc. Arthur Highway	8.1776	457,946,160	concrete	good	Yes	3.0	3.0	3.0	3.0
Old Airport Road	0.1267	7,602,180	concrete	good	Yes	2.0	2.0	2.0	2.0
Old Airport Road	0.1236	7,416,540	concrete	good	Yes	2.0	2.0	2.0	2.0
Pakiputan Wharf Road	0.5062	28,345,632	concrete	good	Yes	2.0	2.0	2.0	2.0
Pichon St.	0.9460	52,974,208	concrete	good	Yes	3.0	3.0	3.0	3.0
Quezon Boulevard	4.2215	363,048,140	concrete	good	Yes	3.0	3.0	3.0	3.0
Quimpo Boulevard	3.9110	195,551,000	concrete	good	Yes	3.0	3.0	3.0	3.0
Quimpo Boulevard	0.3944	19,720,750	concrete	good	Yes	3.0	3.0	3.0	3.0
Quirino Avenue	2.0325	81,299,200	concrete	good	Yes	3.0	3.0	3.0	3.0
Rafael Castillo St.	3.1795	273,439,580	concrete	good	Yes	3.0	3.0	3.0	3.0
Ramon Magsaysay Ave.	1.3741	82,446,600	concrete	good	Yes	3.0	3.0	3.0	3.0
Sta. Ana Ave.	1.2910	77,460,600	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.0351	1,967,594	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.0351	1,967,594	concrete	good	Yes	3.0	3.0	3.0	3.0

Degree of Impact for Bridge

For bridges, Agdao Flyover, Bunawan Br., Bunawan Bridge 2, Matina Bridge, Bago Bridge, Panacan Bridge and Sasa Bridge have high degree of impact. Among the seven, Agdao Flyover has the highest exposed length with 382.98 and the highest value of ₱459,576,000.

Table LU-90. Lifeline Utilities, Bridges, Degree of Impact Table for Liquefaction, Davao City

ROAD NAME	EXPOSURE			SENSITIVITY			IMPACT			
	EXPOSED LENGTH (LINEAR)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	DEGREE OF IMPACT			AVERAGE
							GROUP 1	GROUP 2	GROUP 3	
Agdao Flyover	382.98	1,200,000	459,576,000	Concrete	Good	Yes	3	3	3	3.00
Bago Br.	31.21	1,200,000	37,452,000	-	Good	Yes	3	3	3	3.00
Bunawan Br. 1	49.76	1,200,000	59,712,000	-	Good	Yes	3	3	3	3.00
Bunawan Br. 2	47.79	1,200,000	57,348,000	-	Good	Yes	3	3	3	3.00
Ilang Br.	25.70	1,200,000	30,840,000	-	Good	Yes	2	2	2	2.00
Lipadas Br. I	37.80	1,200,000	45,360,000	Concrete	Good	Yes	2	2	2	2.00
Lipadas Br. II	40.00	1,200,000	48,000,000	Concrete	Good	Yes	2	2	2	2.00
Matina Br.	38.66	1,200,000	46,392,000	-	Good	Yes	3	3	3	3.00
Panacan Br.	23.53	1,200,000	28,236,000	-	Good	Yes	3	3	3	3.00
Pangi Br.	121.69	1,200,000	146,028,000	-	Good	Yes	2	2	2	2.00
Sasa Br.	18.43	1,200,000	22,116,000	-	Good	Yes	3	3	3	3.00

Degree of Impact of Power Substations

A total of 13 substations have moderate degree of impact. These are Dumoy Substation, Puan Substation, P.Reyes, Gaisano Substatiion, Sta. Ana Substation, R. Castillo Substation, Pampanga Substation, Panacan Substation, Matina Substation, Ecoland Substation, Victoria Substation, Don Ramon Substation, and

Table LU-91. Lifeline Utilities, Power Substations, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DLPC	CPDO	AVE.
Dumoy Substation	1,322	118 Million	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	1	3	2
Puan Substation	803	85 Million	85 Million	a) Perimeter Fence : Concrete Fence b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	3	2
Matina Substation	1,000.00	120 Million	120 Million	a) Perimeter Fence : Concrete Fence (3.0m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	2	1.5
Ecoland Substation	1,547.00	120 Million	120 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	1	2	1.5
P.Reyes Substation	825.86	85 Million	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : Concrete Pole and Steel Beams	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	3	2

Table LU-91. Lifeline Utilities, Power Substations, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DLPC	CPDO	AVE.
Gaisano Substation	454.00	85 Million	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	1	3	2
Sta Ana Substation	607.00	135 Million	135 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) & Bended Metal Sheets b) Control Building: Concrete Wall and Floor ; with Roof deck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	3	2
Victoria Substation	595.00	120 Million	120 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	1	2	1.5
R.Castillo Substation	852.00	125 Million	125 Million	a) Perimeter Fence : Concrete High Wall Fence (3.5m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	3	2
Pampanga Substation	1,031.00	118 Million	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	1	3	2

Table LU-91. Lifeline Utilities, Power Substations, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DLPC	CPDO	AVE.
Panacan Substation	858.00	85 Million	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: Concrete wall and Floor, PU Panel Roof. c) Equipment Support :Concrete Pole	a) Operational b) Last upgraded 10 yrs ago.	Recommended for relocation or Reconstruction	1	3	2
Don Ramon Substation	15,540.00	570 Million	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel Structures	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	2	1.5
Bunawan Substation	1,085.00	110 Million	110 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside b) Control Building: Concrete wall and floor, ; Prepainted Roofing Sheet. c) Equipment Support : All Steel Struc-	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	1	2	1.5

Degree of Impact for Level I Water Supply

All deep wells exposed to high liquefaction susceptibility have the high degree of impact rating. These wells are found in Talomo River, Wangan, Talandang, Ula and Riverside.

Table LU-92. Lifeline Utilities, Level I, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
MAHAYAG	SPRING	41,586.32	41,586.32	GOOD	NONE	2
MAHAYAG	SPRING	41,586.32	41,586.32	GOOD	NONE	2
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
MANDUG	SPRING	41,586.32	41,586.32	GOOD	NONE	2
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2

Table LU-92. Lifeline Utilities, Level I, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	2
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	2
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	2
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	2
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	2
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	2
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	2
BINUGAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2
BINUGAO	SPRING	41,586.32	41,586.32	GOOD	NONE	2

Degree of Impact for Level II Water Supply

For level 2, sources which have moderate degree of impact are found in Binugao , Sirawan and Waan.

Table LU-93. Lifeline Utilities, Level II Water System, Degree of Impact Table For Liquefaction, Davao City

EXPOSURE				SENSITIVITY		DEGREE OF IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	
BINUGAO	2HP	46,200	46,200	FAIR	Yes because of the design of the casing of the well.	2
SIRAWAN	2HP	46200	46200	FAIR	Yes because of the design of the casing of the well	2
SIRAWAN	2HP	46200	46200	FAIR	Yes because of the design of the casing of the well	2
SIRAWAN	2HP	46200	46200	FAIR	Yes because of the design of the casing of the well	2
WAAN	18GS20	46200	46200	FAIR	Yes because of the design of the casing of the well	2
WAAN	2HP	46200	46200	FAIR	Yes because of the design of the casing of the well	2

Degree of Impact for Level III Water Supply

A total of 433 lines with a total length of 54,289.28 meters have a moderate degree of impact. Matina Crossing has the longest exposed mainline with a total length of 7,607.89 meters with the value of ₱150,979,88. This is followed by Bago Aplaya with 28 lines totalling up to 5288.49 with a total value of

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
5-A	MLCSP	300	₱19,100.00	42.36	₱809,076.00	GOOD	YES	2
10-A	MLCSP	150	₱11,200.00	160.52	₱1,797,824.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	162.51	₱1,820,112.00	GOOD	YES	1
12-B	MLCSP	150	₱11,200.00	365.93	₱4,098,416.00	GOOD	YES	1
11-B	MLCSP	150	₱11,200.00	164.29	₱1,840,048.00	GOOD	YES	1
39-D	MLCSP	300	₱19,100.00	156.23	₱2,983,993.00	GOOD	YES	2

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

BARANGAY	TYPE	SIZE	EXPOSURE			SENSITIVITY		IMPACT DEGREE OF IMPACT
			REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	
37-D	MLCSP	300	₱19,100.00	76.08	₱1,453,128.00	GOOD	YES	2
32-D	MLCSP	300	₱19,100.00	236.99	₱4,526,509.00	GOOD	YES	2
24-C	MLCSP	300	₱19,100.00	2.96	₱56,536.00	GOOD	YES	2
24-C	MLCSP	150	₱11,200.00	187.67	₱2,101,904.00	GOOD	YES	2
32-D	MLCSP	300	₱19,100.00	222.24	₱4,244,784.00	GOOD	YES	2
30-C	MLCSP	300	₱19,100.00	10.29	₱196,539.00	GOOD	YES	2
11-B	MLCSP	300	₱19,100.00	117.3	₱2,240,430.00	GOOD	YES	2
28-C	MLCSP	150	₱11,200.00	165.94	₱1,858,528.00	GOOD	YES	2
28-C	MLCSP	150	₱11,200.00	164.76	₱1,845,312.00	GOOD	YES	2
30-C	MLCSP	150	₱11,200.00	117.93	₱1,320,816.00	GOOD	YES	2
28-C	MLCSP	150	₱11,200.00	6.71	₱75,152.00	GOOD	YES	2
32-D	MLCSP	300	₱19,100.00	67.83	₱1,295,553.00	GOOD	YES	2
32-D	MLCSP	400	₱20,600.00	31.07	₱640,042.00	GOOD	YES	2
30-C	MLCSP	400	₱20,600.00	500.92	₱10,318,952.00	GOOD	YES	2
12-B	MLCSP	400	₱20,600.00	40.79	₱840,274.00	GOOD	YES	2
30-C	MLCSP	150	₱11,200.00	34.82	₱389,984.00	GOOD	YES	2
11-B	MLCSP	300	₱19,100.00	91.64	₱1,750,324.00	GOOD	YES	2
15-B	MLCSP	400	₱20,600.00	8.27	₱170,362.00	GOOD	YES	2
14-B	MLCSP	400	₱20,600.00	63.08	₱1,299,448.00	GOOD	YES	2
18-B	MLCSP	300	₱19,100.00	194.44	₱3,713,804.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	2.43	₱46,413.00	GOOD	YES	1
18-B	MLCSP	300	₱19,100.00	3.62	₱69,142.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	115.53	₱2,206,623.00	GOOD	YES	1
12-B	MLCSP	150	₱11,200.00	58.01	₱649,712.00	GOOD	YES	1
19-B	MLCSP	150	₱11,200.00	37.77	₱423,024.00	GOOD	YES	1
18-B	MLCSP	300	₱19,100.00	13.35	₱254,985.00	GOOD	YES	1
13-B	MLCSP	300	₱19,100.00	42.75	₱816,525.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	18.93	₱212,016.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	34.32	₱384,384.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	10.91	₱122,192.00	GOOD	YES	1
32-D	MLCSP	300	₱19,100.00	26.31	₱502,521.00	GOOD	YES	2
30-C	MLCSP	300	₱19,100.00	12.67	₱241,997.00	GOOD	YES	2

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
28-C	MLCSP	150	₱11,200.00	8.52	₱95,424.00	GOOD	YES	2
28-C	MLCSP	150	₱11,200.00	110.26	₱1,234,912.00	GOOD	YES	2
28-C	MLCSP	150	₱11,200.00	59.34	₱664,608.00	GOOD	YES	2
28-C	MLCSP	150	₱11,200.00	15.83	₱177,296.00	GOOD	YES	2
28-C	MLCSP	150	₱11,200.00	54.8	₱613,760.00	GOOD	YES	2
26-C	MLCSP	150	₱11,200.00	6.5	₱72,800.00	GOOD	YES	2
28-C	MLCSP	150	₱11,200.00	59.36	₱664,832.00	GOOD	YES	2
30-C	MLCSP	150	₱11,200.00	114.89	₱1,286,768.00	GOOD	YES	2
14-B	MLCSP	150	₱11,200.00	0.45	₱5,040.00	GOOD	YES	2
14-B	MLCSP	150	₱11,200.00	100.83	₱1,129,296.00	GOOD	YES	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	2.87	₱32,144.00	GOOD	YES	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	123.65	₱1,384,880.00	GOOD	YES	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	119.84	₱1,342,208.00	GOOD	YES	2
15-B	MLCSP	400	₱20,600.00	160.75	₱3,311,450.00	GOOD	YES	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	11.5	₱128,800.00	GOOD	YES	2
AGDAO PROPER	MLCSP	400	₱20,600.00	175.51	₱3,615,506.00	GOOD	YES	2
AGDAO PROPER	MLCSP	150	₱11,200.00	57.96	₱649,152.00	GOOD	YES	2
AGDAO PROPER	MLCSP	150	₱11,200.00	131.04	₱1,467,648.00	GOOD	YES	2
AGDAO PROPER	MLCSP	150	₱11,200.00	25	₱280,000.00	GOOD	YES	2
15-B	MLCSP	150	₱11,200.00	39.81	₱445,872.00	GOOD	YES	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	49.8	₱951,180.00	GOOD	YES	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	51.94	₱992,054.00	GOOD	YES	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	111.4	₱2,127,740.00	GOOD	YES	2
PACIANO BANGOY	MLCSP	150	₱11,200.00	2.57	₱28,784.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	213.68	₱2,393,216.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	58.49	₱1,117,159.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	255.23	₱2,858,576.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	54.75	₱613,200.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	69.38	₱777,056.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	67.38	₱754,656.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	72.51	₱812,112.00	GOOD	YES	2
MATINA CROSSING	MLCSP	750	₱48,500.00	8.42	₱408,370.00	GOOD	YES	2

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
BUCANA	MLCSP	150	₱11,200.00	67.51	₱756,112.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	69.38	₱777,056.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	246.01	₱2,755,312.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	2.79	₱31,248.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	73.68	₱825,216.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	8.29	₱92,848.00	GOOD	YES	2
MATINA CROSSING	MLCSP	300	₱19,100.00	7.81	₱149,171.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	69	₱772,800.00	GOOD	YES	2
11-B	MLCSP	300	₱19,100.00	65.48	₱1,250,668.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	8.09	₱154,519.00	GOOD	YES	2
19-B	MLCSP	300	₱19,100.00	38.01	₱725,991.00	GOOD	YES	1
10-A	MLCSP	300	₱19,100.00	13.62	₱260,142.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	39.23	₱749,293.00	GOOD	YES	1
11-B	MLCSP	300	₱19,100.00	50.7	₱968,370.00	GOOD	YES	1
2-A	MLCSP	300	₱19,100.00	113.84	₱2,174,344.00	GOOD	YES	2
32-D	MLCSP	300	₱19,100.00	201.85	₱3,855,335.00	GOOD	YES	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	64.28	₱1,227,748.00	GOOD	YES	2
2-A	MLCSP	300	₱19,100.00	113.84	₱2,174,344.00	GOOD	YES	2
32-D	MLCSP	300	₱19,100.00	201.85	₱3,855,335.00	GOOD	YES	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	64.28	₱1,227,748.00	GOOD	YES	2
5-A	MLCSP	150	₱11,200.00	171.57	₱1,921,584.00	GOOD	YES	2
19-B	MLCSP	300	₱19,100.00	96.96	₱1,851,936.00	GOOD	YES	1
AGDAO PROPER	MLCSP	400	₱20,600.00	17.76	₱365,856.00	GOOD	YES	2
AGDAO PROPER	MLCSP	400	₱20,600.00	63.34	₱1,304,804.00	GOOD	YES	2
5-A	MLCSP	300	₱19,100.00	107.3	₱2,049,430.00	GOOD	YES	2
BAGO APLAYA	MLCSP	300	₱19,100.00	55.49	₱1,059,859.00	GOOD	YES	2
BAGO APLAYA	MLCSP	300	₱19,100.00	141.31	₱2,699,021.00	GOOD	YES	1
DUMOY	MLCSP	300	₱19,100.00	529.87	₱10,120,517.00	GOOD	YES	2
BAGO APLAYA	MLCSP	300	₱19,100.00	69.16	₱1,320,956.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	87.34	₱978,208.00	GOOD	YES	1
TALOMO	MLCSP	900	₱56,500.00	36.87	₱2,083,155.00	GOOD	YES	1
TALOMO	MLCSP	900	₱56,500.00	96.56	₱5,455,640.00	GOOD	YES	1

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
MATINA CROSSING	MLCSP	150	₱11,200.00	61.88	₱693,056.00	GOOD	YES	2
MATINA CROSSING	MLCSP	750	₱48,500.00	66.72	₱3,235,920.00	GOOD	YES	2
MATINA CROSSING	MLCSP	750	₱48,500.00	212.13	₱10,288,305.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	146.85	₱7,122,225.00	GOOD	YES	2
MATINA CROSSING	MLCSP	750	₱48,500.00	108.73	₱5,273,405.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	154.2	₱1,727,040.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	149.77	₱1,677,424.00	GOOD	YES	2
TALOMO	MLCSP	750	₱48,500.00	177.49	₱8,608,265.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	227.31	₱2,545,872.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	74.65	₱836,080.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	174.49	₱1,954,288.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	109.92	₱1,231,104.00	GOOD	YES	2
MATINA CROSSING	MLCSP	750	₱48,500.00	265.8	₱12,891,300.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	326.59	₱3,657,808.00	GOOD	YES	2
MATINA CROSSING	MLCSP	750	₱48,500.00	9.95	₱482,575.00	GOOD	YES	2
MATINA CROSSING	MLCSP	250	₱17,000.00	89.61	₱1,523,370.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	132.25	₱6,414,125.00	GOOD	YES	1
MATINA CROSSING	MLCSP	250	₱17,000.00	62.3	₱1,059,100.00	GOOD	YES	1
MATINA CROSSING	MLCSP	250	₱17,000.00	61.15	₱1,039,550.00	GOOD	YES	1
TALOMO	MLCSP	600	₱40,100.00	560.6	₱22,480,060.00	GOOD	YES	1
BAGO APLAYA	MLCSP	500	₱33,200.00	134.63	₱4,469,716.00	GOOD	YES	2
TALOMO	MLCSP	900	₱56,500.00	44.85	₱2,534,025.00	GOOD	YES	1
TALOMO	MLCSP	900	₱56,500.00	128.39	₱7,254,035.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	125.17	₱1,401,904.00	GOOD	YES	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	124.31	₱1,392,272.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	69.95	₱783,440.00	GOOD	YES	2
AGDAO PROPER	MLCSP	400	₱20,600.00	90.43	₱1,862,858.00	GOOD	YES	2
BAGO GALLERA	MLCSP	250	₱17,000.00	86.86	₱1,476,620.00	GOOD	YES	1
BAGO APLAYA	MLCSP	250	₱17,000.00	11.53	₱196,010.00	GOOD	YES	2
BAGO APLAYA	MLCSP	250	₱17,000.00	231.91	₱3,942,470.00	GOOD	YES	1
BAGO APLAYA	MLCSP	400	₱20,600.00	407.29	₱8,390,174.00	GOOD	YES	2
MATINA CROSSING	MLCSP	750	₱48,500.00	301.54	₱14,624,690.00	GOOD	YES	2

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
BAGO APLAYA	MLCSP	500	₱33,200.00	140.03	₱4,648,996.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	474.04	₱5,309,248.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	60.62	₱678,944.00	GOOD	YES	1
39-D	MLCSP	300	₱19,100.00	23.9	₱456,490.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	95.18	₱1,066,016.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	111.11	₱1,244,432.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	163.4	₱1,830,080.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	79	₱884,800.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	12.02	₱134,624.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	14.21	₱159,152.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	95.76	₱1,072,512.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	37.24	₱417,088.00	GOOD	YES	2
7-A	MLCSP	600	₱40,100.00	59.9	₱2,401,990.00	GOOD	YES	2
2-A	MLCSP	350	₱20,800.00	214.03	₱4,451,824.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	80.03	₱896,336.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	1.01	₱11,312.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	78.94	₱884,128.00	GOOD	YES	2
18-B	MLCSP	150	₱11,200.00	175.92	₱1,970,304.00	GOOD	YES	1
AGDAO PROPER	MLCSP	400	₱20,600.00	9.02	₱185,812.00	GOOD	YES	2
15-B	MLCSP	400	₱20,600.00	339.5	₱6,993,700.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	62.93	₱704,816.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	71.1	₱796,320.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	67.73	₱758,576.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	456.04	₱5,107,648.00	GOOD	YES	2
MATINA CROSSING	MLCSP	750	₱48,500.00	346.36	₱16,798,460.00	GOOD	YES	2
MATINA CROSSING	MLCSP	750	₱48,500.00	78.22	₱3,793,670.00	GOOD	YES	1
MA-A	MLCSP	700	₱44,200.00	97.5	₱4,309,500.00	GOOD	YES	2
MATINA CROSSING	MLCSP	700	₱44,200.00	7.4	₱327,080.00	GOOD	YES	2
MA-A	MLCSP	750	₱48,500.00	249.82	₱12,116,270.00	GOOD	YES	2
MATINA CROSSING	MLCSP	750	₱48,500.00	424.59	₱20,592,615.00	GOOD	YES	2
MA-A	MLCSP	150	₱11,200.00	229.1	₱2,565,920.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	8.13	₱91,056.00	GOOD	YES	2

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
MA-A	MLCSP	150	₱11,200.00	137.9	₱1,544,480.00	GOOD	YES	2
17-B	MLCSP	300	₱19,100.00	13.23	₱252,693.00	GOOD	YES	1
16-B	MLCSP	300	₱19,100.00	3.58	₱68,378.00	GOOD	YES	2
16-B	MLCSP	300	₱19,100.00	34.1	₱651,310.00	GOOD	YES	1
13-B	MLCSP	300	₱19,100.00	2.1	₱40,110.00	GOOD	YES	1
13-B	MLCSP	300	₱19,100.00	49.44	₱944,304.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	101.35	₱1,135,120.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	71.97	₱806,064.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	70.12	₱785,344.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	123.94	₱1,388,128.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	70.95	₱794,640.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	75.38	₱844,256.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	74.97	₱839,664.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	62.8	₱703,360.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	74.07	₱829,584.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	65.52	₱733,824.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	76.59	₱857,808.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	96.92	₱1,085,504.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	200.67	₱2,247,504.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	62.98	₱705,376.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	169.54	₱1,898,848.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	56.27	₱630,224.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	64.45	₱721,840.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	69.02	₱773,024.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	116.06	₱1,299,872.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	25.53	₱1,238,205.00	GOOD	YES	2
MATINA CROSSING	MLCSP	750	₱48,500.00	47.07	₱2,282,895.00	GOOD	YES	1
TALOMO	MLCSP	750	₱48,500.00	4.59	₱222,615.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	221.24	₱10,730,140.00	GOOD	YES	1
11-B	MLCSP	150	₱11,200.00	13.05	₱146,160.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	142.32	₱1,593,984.00	GOOD	YES	1
11-B	MLCSP	300	₱19,100.00	54.95	₱1,049,545.00	GOOD	YES	1

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
11-B	MLCSP	300	₱19,100.00	64.27	₱1,227,557.00	GOOD	YES	1
11-B	MLCSP	300	₱19,100.00	12.45	₱237,795.00	GOOD	YES	2
11-B	MLCSP	300	₱19,100.00	39.02	₱745,282.00	GOOD	YES	1
7-A	MLCSP	600	₱40,100.00	57.59	₱2,309,359.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	20.09	₱225,008.00	GOOD	YES	2
9-A	MLCSP	600	₱40,100.00	11.89	₱476,789.00	GOOD	YES	1
7-A	MLCSP	600	₱40,100.00	47.21	₱1,893,121.00	GOOD	YES	1
7-A	MLCSP	600	₱40,100.00	40.64	₱1,629,664.00	GOOD	YES	2
7-A	MLCSP	600	₱40,100.00	17.51	₱702,151.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	47.41	₱530,992.00	GOOD	YES	2
10-A	MLCSP	150	₱11,200.00	13.28	₱148,736.00	GOOD	YES	2
10-A	MLCSP	150	₱11,200.00	98.24	₱1,100,288.00	GOOD	YES	1
9-A	MLCSP	150	₱11,200.00	78.36	₱877,632.00	GOOD	YES	1
9-A	MLCSP	150	₱11,200.00	46.61	₱522,032.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	2.36	₱26,432.00	GOOD	YES	1
9-A	MLCSP	150	₱11,200.00	190.27	₱2,131,024.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	9.56	₱107,072.00	GOOD	YES	1
9-A	MLCSP	150	₱11,200.00	183.82	₱2,058,784.00	GOOD	YES	1
7-A	MLCSP	600	₱40,100.00	150.53	₱6,036,253.00	GOOD	YES	2
7-A	MLCSP	500	₱33,200.00	140.13	₱4,652,316.00	GOOD	YES	2
7-A	MLCSP	600	₱40,100.00	7.69	₱308,369.00	GOOD	YES	2
6-A	MLCSP	600	₱40,100.00	80.98	₱3,247,298.00	GOOD	YES	2
7-A	MLCSP	500	₱33,200.00	3.52	₱116,864.00	GOOD	YES	2
4-A	MLCSP	500	₱33,200.00	182.25	₱6,050,700.00	GOOD	YES	2
6-A	MLCSP	350	₱20,800.00	1.74	₱36,192.00	GOOD	YES	2
5-A	MLCSP	350	₱20,800.00	11.53	₱239,824.00	GOOD	YES	2
2-A	MLCSP	350	₱20,800.00	100.23	₱2,084,784.00	GOOD	YES	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	169.74	₱3,242,034.00	GOOD	YES	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	64.29	₱1,227,939.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	47.99	₱537,488.00	GOOD	YES	2

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
MATINA APLAYA	MLCSP	150	₱11,200.00	14.63	₱163,856.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	38.75	₱434,000.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	87.81	₱983,472.00	GOOD	YES	2
2-A	MLCSP	300	₱19,100.00	39.19	₱748,529.00	GOOD	YES	2
2-A	MLCSP	350	₱20,800.00	173.02	₱3,598,816.00	GOOD	YES	2
TALOMO	MLCSP	900	₱56,500.00	73.84	₱4,171,960.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	28.56	₱319,872.00	GOOD	YES	2
28-C	MLCSP	150	₱11,200.00	0.83	₱9,296.00	GOOD	YES	2
24-C	MLCSP	150	₱11,200.00	84.43	₱945,616.00	GOOD	YES	2
30-C	MLCSP	400	₱20,600.00	65.86	₱1,356,716.00	GOOD	YES	2
32-D	MLCSP	300	₱19,100.00	47.65	₱910,115.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	34.89	₱390,768.00	GOOD	YES	2
11-B	MLCSP	150	₱11,200.00	12.97	₱145,264.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	142.86	₱1,600,032.00	GOOD	YES	1
BAGO APLAYA	MLCSP	300	₱19,100.00	307.29	₱5,869,239.00	GOOD	YES	1
26-C	MLCSP	150	₱11,200.00	3.71	₱41,552.00	GOOD	YES	2
27-C	MLCSP	150	₱11,200.00	155.64	₱1,743,168.00	GOOD	YES	2
27-C	MLCSP	150	₱11,200.00	150.89	₱1,689,968.00	GOOD	YES	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	10.44	₱116,928.00	GOOD	YES	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	56.38	₱631,456.00	GOOD	YES	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	51.4	₱575,680.00	GOOD	YES	2
LEON GARCIA SR.	MLCSP	150	₱11,200.00	9.75	₱109,200.00	GOOD	YES	2
32-D	MLCSP	300	₱19,100.00	118.33	₱2,260,103.00	GOOD	YES	2
32-D	MLCSP	300	₱19,100.00	86.96	₱1,660,936.00	GOOD	YES	2
BAGO APLAYA	MLCSP	600	₱40,100.00	148.22	₱5,943,622.00	GOOD	YES	2
BAGO APLAYA	MLCSP	600	₱40,100.00	198.94	₱7,977,494.00	GOOD	YES	2
BAGO APLAYA	MLCSP	600	₱40,100.00	411.37	₱16,495,937.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	177.11	₱1,983,632.00	GOOD	YES	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	169.1	₱1,893,920.00	GOOD	YES	2
AGDAO PROPER	MLCSP	150	₱11,200.00	6.83	₱76,496.00	GOOD	YES	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	46.1	₱516,320.00	GOOD	YES	2
20-B	MLCSP	150	₱11,200.00	52.02	₱582,624.00	GOOD	YES	1

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
PACIANO BANGOY	MLCSP	150	₱11,200.00	12.1	₱135,520.00	GOOD	YES	1
20-B	MLCSP	150	₱11,200.00	41.11	₱460,432.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	1.2	₱13,440.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	48.43	₱542,416.00	GOOD	YES	1
20-B	MLCSP	150	₱11,200.00	1.49	₱16,688.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	5.98	₱66,976.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	170.17	₱1,905,904.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	278.99	₱3,124,688.00	GOOD	YES	1
19-B	MLCSP	150	₱11,200.00	2.77	₱31,024.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	37.07	₱708,037.00	GOOD	YES	2
2-A	MLCSP	300	₱19,100.00	127.25	₱2,430,475.00	GOOD	YES	2
39-D	MLCSP	300	₱19,100.00	5.37	₱102,567.00	GOOD	YES	2
DUMOY	MLCSP	600	₱40,100.00	461.42	₱18,502,942.00	GOOD	YES	2
BAGO APLAYA	MLCSP	600	₱40,100.00	513.65	₱20,597,365.00	GOOD	YES	2
31-D	MLCSP	300	₱19,100.00	9.14	₱174,574.00	GOOD	YES	2
9-A	MLCSP	150	₱11,200.00	26.58	₱297,696.00	GOOD	YES	1
7-A	MLCSP	150	₱11,200.00	6.79	₱76,048.00	GOOD	YES	1
9-A	MLCSP	150	₱11,200.00	156.68	₱1,754,816.00	GOOD	YES	1
9-A	MLCSP	600	₱40,100.00	59.42	₱2,382,742.00	GOOD	YES	1
7-A	MLCSP	600	₱40,100.00	32.72	₱1,312,072.00	GOOD	YES	1
7-A	MLCSP	600	₱40,100.00	131.91	₱5,289,591.00	GOOD	YES	1
7-A	MLCSP	600	₱40,100.00	78.89	₱3,163,489.00	GOOD	YES	2
BAGO APLAYA	MLCSP	600	₱40,100.00	570.45	₱22,875,045.00	GOOD	YES	2
BAGO APLAYA	MLCSP	600	₱40,100.00	436.83	₱17,516,883.00	GOOD	YES	1
TALOMO	MLCSP	250	₱17,000.00	59.24	₱1,007,080.00	GOOD	YES	1
BAGO APLAYA	MLCSP	500	₱33,200.00	65.78	₱2,183,896.00	GOOD	YES	2
BAGO APLAYA	MLCSP	400	₱20,600.00	96.4	₱1,985,840.00	GOOD	YES	2
BAGO APLAYA	MLCSP	400	₱20,600.00	47.27	₱973,762.00	GOOD	YES	2
6-A	MLCSP	600	₱40,100.00	101.25	₱4,060,125.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	124.24	₱1,391,488.00	GOOD	YES	2

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

BARANGAY	TYPE	SIZE	EXPOSURE			SENSITIVITY		IMPACT
			REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
DUMOY	MLCSP	500	₱33,200.00	404.49	₱13,429,068.00	GOOD	YES	1
DUMOY	MLCSP	500	₱33,200.00	421.94	₱14,008,408.00	GOOD	YES	2
DUMOY	MLCSP	500	₱33,200.00	94.17	₱3,126,444.00	GOOD	YES	1
DUMOY	MLCSP	250	₱17,000.00	27.3	₱464,100.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	39.52	₱754,832.00	GOOD	YES	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	42.46	₱810,986.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	31.66	₱354,592.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	91.74	₱1,027,488.00	GOOD	YES	2
TALOMO	MLCSP	450	₱24,300.00	8.64	₱209,952.00	GOOD	YES	1
BAGO APLAYA	MLCSP	450	₱24,300.00	39.25	₱953,775.00	GOOD	YES	1
TALOMO	MLCSP	600	₱40,100.00	4.63	₱185,663.00	GOOD	YES	1
BAGO APLAYA	MLCSP	600	₱40,100.00	41.6	₱1,668,160.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	360.06	₱4,032,672.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	61.17	₱685,104.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	13.1	₱146,720.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	1.49	₱16,688.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	358.81	₱4,018,672.00	GOOD	YES	2
5-A	MLCSP	150	₱11,200.00	49.36	₱552,832.00	GOOD	YES	2
BAGO APLAYA	MLCSP	450	₱24,300.00	645.07	₱15,675,201.00	GOOD	YES	2
BAGO APLAYA	MLCSP	450	₱24,300.00	388.51	₱9,440,793.00	GOOD	YES	1
BAGO APLAYA	MLCSP	700	₱44,200.00	13.77	₱608,634.00	GOOD	YES	1
TALOMO	MLCSP	700	₱44,200.00	219.87	₱9,718,254.00	GOOD	YES	1
BAGO APLAYA	MLCSP	700	₱44,200.00	7.87	₱347,854.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	63.07	₱706,384.00	GOOD	YES	2
7-A	MLCSP	600	₱40,100.00	74.86	₱3,001,886.00	GOOD	YES	2
31-D	MLCSP	300	₱19,100.00	33.02	₱630,682.00	GOOD	YES	2
37-D	MLCSP	300	₱19,100.00	104.48	₱1,995,568.00	GOOD	YES	2
31-D	MLCSP	300	₱19,100.00	12.87	₱245,817.00	GOOD	YES	2
37-D	MLCSP	300	₱19,100.00	97.71	₱1,866,261.00	GOOD	YES	2
38-D	MLCSP	300	₱19,100.00	13.57	₱259,187.00	GOOD	YES	2
37-D	MLCSP	300	₱19,100.00	227.02	₱4,336,082.00	GOOD	YES	2

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

BARANGAY	TYPE	SIZE	EXPOSURE			SENSITIVITY		IMPACT
			REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
AGDAO PROPER	MLCSP	300	₱19,100.00	239.57	₱4,575,787.00	GOOD	YES	2
AGDAO PROPER	MLCSP	400	₱20,600.00	53.67	₱1,105,602.00	GOOD	YES	2
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	206.29	₱4,249,574.00	GOOD	YES	2
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	116.45	₱2,398,870.00	GOOD	YES	2
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	20.82	₱428,892.00	GOOD	YES	2
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	66.75	₱1,375,050.00	GOOD	YES	2
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	124.74	₱2,569,644.00	GOOD	YES	2
UBALDE	MLCSP	400	₱20,600.00	173.79	₱3,580,074.00	GOOD	YES	2
UBALDE	MLCSP	400	₱20,600.00	21.83	₱449,698.00	GOOD	YES	2
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	368.65	₱7,594,190.00	GOOD	YES	2
SAN ANTONIO	MLCSP	400	₱20,600.00	196.92	₱4,056,552.00	GOOD	YES	2
UBALDE	MLCSP	400	₱20,600.00	9.54	₱196,524.00	GOOD	YES	2
LAPU - LAPU	MLCSP	400	₱20,600.00	180.35	₱3,715,210.00	GOOD	YES	2
LAPU - LAPU	MLCSP	400	₱20,600.00	490.41	₱10,102,446.00	GOOD	YES	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	37.02	₱707,082.00	GOOD	YES	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	39.11	₱747,001.00	GOOD	YES	2
32-D	MLCSP	500	₱33,200.00	19.37	₱643,084.00	GOOD	YES	2
10-A	MLCSP	500	₱33,200.00	173.65	₱5,765,180.00	GOOD	YES	2
4-A	MLCSP	500	₱33,200.00	147.97	₱4,912,604.00	GOOD	YES	2
10-A	MLCSP	150	₱11,200.00	169.02	₱1,893,024.00	GOOD	YES	2
4-A	MLCSP	150	₱11,200.00	2.89	₱32,368.00	GOOD	YES	2
4-A	MLCSP	500	₱33,200.00	263.63	₱8,752,516.00	GOOD	YES	2
4-A	MLCSP	500	₱33,200.00	36.32	₱1,205,824.00	GOOD	YES	2
UBALDE	MLCSP	400	₱20,600.00	56.8	₱1,170,080.00	GOOD	YES	2
LAPU - LAPU	MLCSP	400	₱20,600.00	162.28	₱3,342,968.00	GOOD	YES	2
CENTRO	MLCSP	400	₱20,600.00	93.79	₱1,932,074.00	GOOD	YES	2
MA-A	MLCSP	100	₱11,000.00	11.77	₱129,470.00	GOOD	YES	2
MA-A	MLCSP	750	₱48,500.00	117.14	₱5,681,290.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	228.64	₱11,089,040.00	GOOD	YES	1
MATINA CROSSING	MLCSP	750	₱48,500.00	134.23	₱6,510,155.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	16.87	₱188,944.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	32.12	₱359,744.00	GOOD	YES	2

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
MATINA CROSSING	MLCSP	150	₱11,200.00	11.21	₱125,552.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	21.56	₱241,472.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	143.01	₱1,601,712.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	42.88	₱480,256.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	224.73	₱2,516,976.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	69.27	₱775,824.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	40.6	₱454,720.00	GOOD	YES	2
MATINA CROSSING	MLCSP	300	₱19,100.00	72.23	₱1,379,593.00	GOOD	YES	1
MATINA CROSSING	MLCSP	300	₱19,100.00	76.88	₱1,468,408.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	67.98	₱761,376.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	98.64	₱1,104,768.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	66.4	₱743,680.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	73.05	₱818,160.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	38.45	₱430,640.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	42.39	₱474,768.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	43.58	₱488,096.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	52.77	₱591,024.00	GOOD	YES	2
AGDAO PROPER	MLCSP	150	₱11,200.00	72.06	₱807,072.00	GOOD	YES	2
SASA	MLCSP	200	₱12,500.00	172.47	₱2,155,875.00	GOOD	YES	2
SASA	MLCSP	200	₱12,500.00	287.63	₱3,595,375.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	158.22	₱1,977,750.00	GOOD	YES	2
SASA	MLCSP	200	₱12,500.00	116.91	₱1,461,375.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	706.36	₱8,829,500.00	GOOD	YES	2
V. HIZON	MLCSP	250	₱17,000.00	130.5	₱2,218,500.00	GOOD	YES	2
A. ANGLIONGTO	MLCSP	250	₱17,000.00	45.55	₱774,350.00	GOOD	YES	2
V. HIZON	MLCSP	300	₱19,100.00	15.35	₱293,185.00	GOOD	YES	2
PAMPANGA	MLCSP	300	₱19,100.00	118.53	₱2,263,923.00	GOOD	YES	2
PAMPANGA	MLCSP	300	₱19,100.00	45.71	₱873,061.00	GOOD	YES	2
V. HIZON	MLCSP	250	₱17,000.00	2.88	₱48,960.00	GOOD	YES	2
PAMPANGA	MLCSP	250	₱17,000.00	12.43	₱211,310.00	GOOD	YES	2
SASA	MLCSP	250	₱17,000.00	75.16	₱1,277,720.00	GOOD	YES	2
PAMPANGA	MLCSP	250	₱17,000.00	223.75	₱3,803,750.00	GOOD	YES	2

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
SASA	MLCSP	200	₱12,500.00	96.35	₱1,204,375.00	GOOD	YES	2
SASA	MLCSP	200	₱12,500.00	14.44	₱180,500.00	GOOD	YES	1
SASA	MLCSP	250	₱17,000.00	261.04	₱4,437,680.00	GOOD	YES	2
SASA	MLCSP	250	₱17,000.00	167.7	₱2,850,900.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	15.76	₱197,000.00	GOOD	YES	2
SASA	MLCSP	200	₱12,500.00	178.68	₱2,233,500.00	GOOD	YES	2
SASA	MLCSP	200	₱12,500.00	55.47	₱693,375.00	GOOD	YES	2
SASA	MLCSP	200	₱12,500.00	15.42	₱192,750.00	GOOD	YES	2
V. HIZON	MLCSP	250	₱17,000.00	386.97	₱6,578,490.00	GOOD	YES	2
PAMPANGA	MLCSP	250	₱17,000.00	23.61	₱401,370.00	GOOD	YES	2
PAMPANGA	MLCSP	250	₱17,000.00	23.06	₱392,020.00	GOOD	YES	2
PAMPANGA	MLCSP	300	₱19,100.00	336.36	₱6,424,476.00	GOOD	YES	2
MA-A	MLCSP	300	₱19,100.00	22.52	₱430,132.00	GOOD	YES	1
SASA	MLCSP	250	₱17,000.00	178.44	₱3,033,480.00	GOOD	YES	2
SASA	MLCSP	250	₱17,000.00	328.88	₱5,590,960.00	GOOD	YES	1
V. HIZON	MLCSP	250	₱17,000.00	664.01	₱11,288,170.00	GOOD	YES	2
V. HIZON	MLCSP	250	₱17,000.00	107.3	₱1,824,100.00	GOOD	YES	2
SASA	MLCSP	200	₱12,500.00	149.99	₱1,874,875.00	GOOD	YES	2
SASA	MLCSP	200	₱12,500.00	155.39	₱1,942,375.00	GOOD	YES	2
BAGO GALLERA	MLCSP	350	₱20,800.00	447.09	₱9,299,472.00	GOOD	YES	1
BAGO APLAYA	MLCSP	350	₱20,800.00	101.39	₱2,108,912.00	GOOD	YES	2
BAGO APLAYA	MLCSP	350	₱20,800.00	180.67	₱3,757,936.00	GOOD	YES	1
BAGO GALLERA	MLCSP	350	₱20,800.00	161.78	₱3,365,024.00	GOOD	YES	1
BAGO APLAYA	MLCSP	350	₱20,800.00	86.72	₱1,803,776.00	GOOD	YES	2
BAGO APLAYA	MLCSP	350	₱20,800.00	468.81	₱9,751,248.00	GOOD	YES	1
BAGO APLAYA	MLCSP	350	₱20,800.00	444.08	₱9,236,864.00	GOOD	YES	2
BAGO APLAYA	MLCSP	250	₱17,000.00	14.99	₱254,830.00	GOOD	YES	2
BAGO GALLERA	MLCSP	350	₱20,800.00	434.15	₱9,030,320.00	GOOD	YES	1
BAGO APLAYA	MLCSP	350	₱20,800.00	88.28	₱1,836,224.00	GOOD	YES	2
BAGO APLAYA	MLCSP	350	₱20,800.00	193.82	₱4,031,456.00	GOOD	YES	1
11-B	MLCSP	300	₱19,100.00	60.43	₱1,154,213.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	190.87	₱3,645,617.00	GOOD	YES	2

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
V. HIZON	MLCSP	300	₱19,100.00	576.33	₱11,007,903.00	GOOD	YES	2
PAMPANGA	MLCSP	300	₱19,100.00	73.97	₱1,412,827.00	GOOD	YES	2
V. HIZON	MLCSP	300	₱19,100.00	10.52	₱200,932.00	GOOD	YES	2
16-B	MLCSP	300	₱19,100.00	13.62	₱260,142.00	GOOD	YES	2
15-B	MLCSP	300	₱19,100.00	481.76	₱9,201,616.00	GOOD	YES	2
16-B	MLCSP	300	₱19,100.00	50.22	₱959,202.00	GOOD	YES	2
16-B	MLCSP	150	₱11,200.00	176.25	₱1,974,000.00	GOOD	YES	2
16-B	MLCSP	150	₱11,200.00	174.06	₱1,949,472.00	GOOD	YES	2
16-B	MLCSP	150	₱11,200.00	172.8	₱1,935,360.00	GOOD	YES	2
PACIANO BANGOY	MLCSP	150	₱11,200.00	25.58	₱286,496.00	GOOD	YES	2
PACIANO BANGOY	MLCSP	150	₱11,200.00	82.2	₱920,640.00	GOOD	YES	2
PACIANO BANGOY	MLCSP	150	₱11,200.00	264.25	₱2,959,600.00	GOOD	YES	2
16-B	MLCSP	150	₱11,200.00	0.97	₱10,864.00	GOOD	YES	2
PACIANO BANGOY	MLCSP	150	₱11,200.00	171.17	₱1,917,104.00	GOOD	YES	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	3.66	₱69,906.00	GOOD	YES	2
AGDAO PROPER	MLCSP	300	₱19,100.00	111.52	₱2,130,032.00	GOOD	YES	2
A. ANGLIONGTO	MLCSP	250	₱17,000.00	498.54	₱8,475,180.00	GOOD	YES	2
A. ANGLIONGTO	MLCSP	400	₱20,600.00	16.33	₱336,398.00	GOOD	YES	2
A. ANGLIONGTO	MLCSP	400	₱20,600.00	7.1	₱146,260.00	GOOD	YES	2
RAFAEL CASTILLO	MLCSP	400	₱20,600.00	203.98	₱4,201,988.00	GOOD	YES	2
RAFAEL CASTILLO	MLCSP	400	₱20,600.00	134.22	₱2,764,932.00	GOOD	YES	2
WILFREDO AQUINO	MLCSP	400	₱20,600.00	84.33	₱1,737,198.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	400	₱20,600.00	32.46	₱668,676.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	136.87	₱2,614,217.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	37.85	₱423,920.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	107.71	₱1,206,352.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	140.58	₱1,574,496.00	GOOD	YES	1
SAN ANTONIO	MLCSP	400	₱20,600.00	227.24	₱4,681,144.00	GOOD	YES	2
RAFAEL CASTILLO	MLCSP	400	₱20,600.00	157.1	₱3,236,260.00	GOOD	YES	2
28-C	MLCSP	150	₱11,200.00	41.08	₱460,096.00	GOOD	YES	2
30-C	MLCSP	400	₱20,600.00	85.55	₱1,762,330.00	GOOD	YES	2
30-C	MLCSP	150	₱11,200.00	159.98	₱1,791,776.00	GOOD	YES	2

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
14-B	MLCSP	400	₱20,600.00	71.45	₱1,471,870.00	GOOD	YES	2
30-C	MLCSP	400	₱20,600.00	7.64	₱157,384.00	GOOD	YES	2
14-B	MLCSP	400	₱20,600.00	59.98	₱1,235,588.00	GOOD	YES	2
AGDAO PROPER	MLCSP	200	₱12,500.00	20.1	₱251,250.00	GOOD	YES	2
40-D	MLCSP	250	₱17,000.00	283.77	₱4,824,090.00	GOOD	YES	2
2-A	MLCSP	250	₱17,000.00	7.32	₱124,440.00	GOOD	YES	2
39-D	MLCSP	250	₱17,000.00	196.26	₱3,336,420.00	GOOD	YES	2
19-B	MLCSP	300	₱19,100.00	254.95	₱4,869,545.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	150	₱11,200.00	15.86	₱177,632.00	GOOD	YES	2
PACIANO BANGOY	MLCSP	150	₱11,200.00	5.45	₱61,040.00	GOOD	YES	2
AGDAO PROPER	MLCSP	400	₱20,600.00	421.48	₱8,682,488.00	GOOD	YES	2
MA-A	MLCSP	750	₱48,500.00	163.35	₱7,922,475.00	GOOD	YES	2
MA-A	MLCSP	750	₱48,500.00	16.15	₱783,275.00	GOOD	YES	2
5-A	MLCSP	750	₱48,500.00	196.61	₱9,535,585.00	GOOD	YES	2
2-A	MLCSP	750	₱48,500.00	103.21	₱5,005,685.00	GOOD	YES	2
BUCANA	MLCSP	750	₱48,500.00	224.13	₱10,870,305.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	208.98	₱2,340,576.00	GOOD	YES	1
BAGO GALLERA	MLCSP	350	₱20,800.00	23.71	₱493,168.00	GOOD	YES	1
BAGO APLAYA	MLCSP	350	₱20,800.00	493.05	₱10,255,440.00	GOOD	YES	1
BAGO GALLERA	MLCSP	300	₱19,100.00	4.41	₱84,231.00	GOOD	YES	1
BAGO APLAYA	MLCSP	300	₱19,100.00	8.71	₱166,361.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	294	₱3,292,800.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	400	₱20,600.00	7.72	₱159,032.00	GOOD	YES	1
MA-A	MLCSP	350	₱20,800.00	224.84	₱4,676,672.00	GOOD	YES	2
MA-A	MLCSP	400	₱20,600.00	40.19	₱827,914.00	GOOD	YES	2
MA-A	MLCSP	450	₱24,300.00	35.26	₱856,818.00	GOOD	YES	2
MA-A	MLCSP	500	₱33,200.00	22.76	₱755,632.00	GOOD	YES	2
MA-A	MLCSP	600	₱40,100.00	319.83	₱12,825,183.00	GOOD	YES	2
MA-A	MLCSP	600	₱40,100.00	137.98	₱5,532,998.00	GOOD	YES	2
MA-A	MLCSP	600	₱40,100.00	132.34	₱5,306,834.00	GOOD	YES	2
MA-A	MLCSP	300	₱19,100.00	2.23	₱42,593.00	GOOD	YES	1
MA-A	MLCSP	300	₱19,100.00	336.29	₱6,423,139.00	GOOD	YES	1
MA-A	MLCSP	300	₱19,100.00	13.96	₱266,636.00	GOOD	YES	1

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

BARANGAY	TYPE	SIZE	EXPOSURE			SENSITIVITY		IMPACT
			REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
MA-A	MLCSP	300	₱19,100.00	46.39	₱886,049.00	GOOD	YES	2
MA-A	MLCSP	300	₱19,100.00	175.78	₱3,357,398.00	GOOD	YES	1
MA-A	MLCSP	300	₱19,100.00	118.72	₱2,267,552.00	GOOD	YES	1
MA-A	MLCSP	300	₱19,100.00	32.27	₱616,357.00	GOOD	YES	1
MA-A	MLCSP	300	₱19,100.00	63.45	₱1,211,895.00	GOOD	YES	1
MA-A	MLCSP	150	₱11,200.00	33.21	₱371,952.00	GOOD	YES	2
2-A	MLCSP	300	₱19,100.00	13.62	₱260,142.00	GOOD	YES	2
SASA	MLCSP	250	₱17,000.00	317.51	₱5,397,670.00	GOOD	YES	2
31-D	MLCSP	300	₱19,100.00	105.93	₱2,023,263.00	GOOD	YES	2
31-D	MLCSP	150	₱11,200.00	16.42	₱183,904.00	GOOD	YES	2
35-D	MLCSP	200	₱12,500.00	10.88	₱136,000.00	GOOD	YES	2
MATINA PANGI	MLCSP	800	₱52,800.00	710.84	₱37,532,352.00	GOOD	YES	1
MATINA PANGI	MLCSP	800	₱52,800.00	168.64	₱8,904,192.00	GOOD	YES	1
MATINA PANGI	MLCSP	800	₱52,800.00	71.59	₱3,779,952.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	347.83	₱3,895,696.00	GOOD	YES	1
39-D	MLCSP	300	₱19,100.00	135.63	₱2,590,533.00	GOOD	YES	2
38-D	MLCSP	300	₱19,100.00	7.79	₱148,789.00	GOOD	YES	2
39-D	MLCSP	300	₱19,100.00	18.93	₱361,563.00	GOOD	YES	2
26-C	MLCSP	150	₱11,200.00	156.73	₱1,755,376.00	GOOD	YES	2
23-C	MLCSP	150	₱11,200.00	4.57	₱51,184.00	GOOD	YES	2
26-C	MLCSP	150	₱11,200.00	3.84	₱43,008.00	GOOD	YES	2
23-C	MLCSP	150	₱11,200.00	3.9	₱43,680.00	GOOD	YES	2
32-D	MLCSP	300	₱19,100.00	10.2	₱194,820.00	GOOD	YES	2
31-D	MLCSP	300	₱19,100.00	8.38	₱160,058.00	GOOD	YES	2
31-D	MLCSP	300	₱19,100.00	150.78	₱2,879,898.00	GOOD	YES	2
32-D	MLCSP	300	₱19,100.00	85.03	₱1,624,073.00	GOOD	YES	2
24-C	MLCSP	300	₱19,100.00	18.13	₱346,283.00	GOOD	YES	2
31-D	MLCSP	300	₱19,100.00	3.56	₱67,996.00	GOOD	YES	2
27-C	MLCSP	200	₱12,500.00	18.97	₱237,125.00	GOOD	YES	2
MA-A	MLCSP	300	₱19,100.00	233.32	₱4,456,412.00	GOOD	YES	1
SASA	MLCSP	250	₱17,000.00	178.33	₱3,031,610.00	GOOD	YES	2
12-B	MLCSP	100	₱11,000.00	0.78	₱8,580.00	GOOD	YES	2

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
MATINA CROSSING	MLCSP	350	₱20,800.00	625.57	₱13,011,856.00	GOOD	YES	2
MATINA APLAYA	MLCSP	350	₱20,800.00	98.18	₱2,042,144.00	GOOD	YES	2
MATINA APLAYA	MLCSP	300	₱19,100.00	665.27	₱12,706,657.00	GOOD	YES	2
BAGO APLAYA	MLCSP	350	₱20,800.00	7.81	₱162,448.00	GOOD	YES	2
TIGATTO	MLCSP	400	₱20,600.00	823.75	₱16,969,250.00	GOOD	YES	2
BAGO APLAYA	MLCSP	250	₱17,000.00	7.69	₱130,730.00	GOOD	YES	2
DUMOY	MLCSP	250	₱17,000.00	15	₱255,000.00	GOOD	YES	2
BAGO APLAYA	MLCSP	250	₱17,000.00	5.64	₱95,880.00	GOOD	YES	2
BAGO APLAYA	MLCSP	250	₱17,000.00	28.02	₱476,340.00	GOOD	YES	2
BAGO GALLERA	MLCSP	250	₱17,000.00	6.99	₱118,830.00	GOOD	YES	1
PAMPANGA	MLCSP	300	₱19,100.00	3.45	₱65,895.00	GOOD	YES	2
V. HIZON	MLCSP	250	₱17,000.00	2.68	₱45,560.00	GOOD	YES	2
V. HIZON	MLCSP	250	₱17,000.00	8.89	₱151,130.00	GOOD	YES	2
PANACAN	MLCSP	250	₱17,000.00	43.61	₱741,370.00	GOOD	YES	2
PANACAN	MLCSP	250	₱17,000.00	182.18	₱3,097,060.00	GOOD	YES	2
PANACAN	MLCSP	250	₱17,000.00	359.55	₱6,112,350.00	GOOD	YES	2
PANACAN	MLCSP	250	₱17,000.00	313.82	₱5,334,940.00	GOOD	YES	1
PANACAN	MLCSP	250	₱17,000.00	505.5	₱8,593,500.00	GOOD	YES	2
MATINA CROSSING	MLCSP	300	₱19,100.00	182.35	₱3,482,885.00	GOOD	YES	1
TIGATTO	MLCSP	400	₱20,600.00	796.06	₱16,398,836.00	GOOD	YES	2
TIGATTO	MLCSP	400	₱20,600.00	280.23	₱5,772,738.00	GOOD	YES	1
PANACAN	MLCSP	250	₱17,000.00	40.33	₱685,610.00	GOOD	YES	2
PANACAN	MLCSP	250	₱17,000.00	1,040.48	₱17,688,160.00	GOOD	YES	1
SASA	MLCSP	300	₱19,100.00	79.92	₱1,526,472.00	GOOD	YES	2
6-A	MLCSP	600	₱40,100.00	90.17	₱3,615,817.00	GOOD	YES	2
5-A	MLCSP	600	₱40,100.00	9.16	₱367,316.00	GOOD	YES	2
6-A	MLCSP	600	₱40,100.00	9.89	₱396,589.00	GOOD	YES	2
PAMPANGA	MLCSP	300	₱19,100.00	18.37	₱350,867.00	GOOD	YES	2
SASA	MLCSP	300	₱19,100.00	169.79	₱3,242,989.00	GOOD	YES	2
PAMPANGA	MLCSP	300	₱19,100.00	276.83	₱5,287,453.00	GOOD	YES	2
TALOMO	MLCSP	450	₱24,300.00	34.79	₱845,397.00	GOOD	YES	1
BAGO APLAYA	MLCSP	450	₱24,300.00	199.17	₱4,839,831.00	GOOD	YES	1

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
BAGO APLAYA	MLCSP	450	₱24,300.00	62.16	₱1,510,488.00	GOOD	YES	1
PANACAN	MLCSP	250	₱17,000.00	180.38	₱3,066,460.00	GOOD	YES	2
PANACAN	MLCSP	250	₱17,000.00	0.71	₱12,070.00	GOOD	YES	2
MATINA PANGI	MLCSP	250	₱17,000.00	455.49	₱7,743,330.00	GOOD	YES	1
CATALUNAN GRANDE	MLCSP	250	₱17,000.00	243.39	₱4,137,630.00	GOOD	YES	1
11-B	MLCSP	300	₱19,100.00	11.72	₱223,852.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	108.19	₱2,066,429.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	45.56	₱870,196.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	18.07	₱202,384.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	24.03	₱269,136.00	GOOD	YES	2
TIGATTO	MLCSP	400	₱20,600.00	979.68	₱20,181,408.00	GOOD	YES	1
TIGATTO	MLCSP	400	₱20,600.00	465.86	₱9,596,716.00	GOOD	YES	1
TIGATTO	MLCSP	400	₱20,600.00	495.13	₱10,199,678.00	GOOD	YES	1
BAGO APLAYA	MLCSP	400	₱20,600.00	215.2	₱4,433,120.00	GOOD	YES	2
BAGO APLAYA	MLCSP	400	₱20,600.00	458.49	₱9,444,894.00	GOOD	YES	2
BAGO APLAYA	MLCSP	250	₱17,000.00	39.3	₱668,100.00	GOOD	YES	2
BAGO APLAYA	MLCSP	600	₱40,100.00	223.51	₱8,962,751.00	GOOD	YES	2
BAGO APLAYA	MLCSP	600	₱40,100.00	463.42	₱18,583,142.00	GOOD	YES	2
BUCANA	MLCSP	250	₱17,000.00	184.63	₱3,138,710.00	GOOD	YES	2
MATINA APLAYA	MLCSP	250	₱17,000.00	922.6	₱15,684,200.00	GOOD	YES	2
MATINA APLAYA	MLCSP	250	₱17,000.00	1,041.85	₱17,711,450.00	GOOD	YES	2
20-B	MLCSP	150	₱11,200.00	82.14	₱919,968.00	GOOD	YES	1
20-B	MLCSP	150	₱11,200.00	41.02	₱459,424.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	3.91	₱43,792.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	58.32	₱653,184.00	GOOD	YES	1
PANACAN	MLCSP	400	₱20,600.00	118.38	₱2,438,628.00	GOOD	YES	2
PANACAN	MLCSP	400	₱20,600.00	532.14	₱10,962,084.00	GOOD	YES	1
ILANG	MLCSP	400	₱20,600.00	407.33	₱8,390,998.00	GOOD	YES	2
ILANG	MLCSP	400	₱20,600.00	31.69	₱652,814.00	GOOD	YES	1
ILANG	MLCSP	400	₱20,600.00	988.28	₱20,358,568.00	GOOD	YES	1
ILANG	MLCSP	400	₱20,600.00	268.48	₱5,530,688.00	GOOD	YES	1
MATINA CROSSING	MLCSP	250	₱17,000.00	92.29	₱1,568,930.00	GOOD	YES	1

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
TIGATTO	MLCSP	400	₱20,600.00	333.61	₱6,872,366.00	GOOD	YES	2
TIGATTO	MLCSP	400	₱20,600.00	654.51	₱13,482,906.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	54.26	₱1,036,366.00	GOOD	YES	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	59.75	₱1,141,225.00	GOOD	YES	2
TALOMO	MLCSP	350	₱20,800.00	70.52	₱1,466,816.00	GOOD	YES	2
TALOMO	MLCSP	350	₱20,800.00	479.16	₱9,966,528.00	GOOD	YES	1
TALOMO	MLCSP	250	₱17,000.00	16.21	₱275,570.00	GOOD	YES	2
TALOMO	MLCSP	350	₱20,800.00	5.75	₱119,600.00	GOOD	YES	2
TALOMO	MLCSP	350	₱20,800.00	437.34	₱9,096,672.00	GOOD	YES	2
TALOMO	MLCSP	250	₱17,000.00	328	₱5,576,000.00	GOOD	YES	2
TALOMO	MLCSP	250	₱17,000.00	0.61	₱10,370.00	GOOD	YES	2
MA-A	MLCSP	800	₱52,800.00	157.45	₱8,313,360.00	GOOD	YES	2
TIGATTO	MLCSP	800	₱52,800.00	397.12	₱20,967,936.00	GOOD	YES	2
BUHANGIN	MLCSP	800	₱52,800.00	19.46	₱1,027,488.00	GOOD	YES	2
MA-A	MLCSP	800	₱52,800.00	55.05	₱2,906,640.00	GOOD	YES	2
TALOMO	MLCSP	700	₱44,200.00	353.39	₱15,619,838.00	GOOD	YES	1
TALOMO	MLCSP	700	₱44,200.00	28.93	₱1,278,706.00	GOOD	YES	1
TALOMO	MLCSP	350	₱20,800.00	5.19	₱107,952.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	400	₱20,600.00	12.17	₱250,702.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	71.18	₱797,216.00	GOOD	YES	2
PACIANO BANGOY	MLCSP	150	₱11,200.00	2.02	₱22,624.00	GOOD	YES	2
AGDAO PROPER	MLCSP	400	₱20,600.00	24.87	₱512,322.00	GOOD	YES	2
AGDAO PROPER	MLCSP	400	₱20,600.00	5.86	₱120,716.00	GOOD	YES	2
SAN ANTONIO	MLCSP	400	₱20,600.00	3.88	₱79,928.00	GOOD	YES	2
A. ANGLIONGTO	MLCSP	300	₱19,100.00	348.93	₱6,664,563.00	GOOD	YES	2
LAPU - LAPU	MLCSP	300	₱19,100.00	5.08	₱97,028.00	GOOD	YES	2
V. HIZON	MLCSP	300	₱19,100.00	162.74	₱3,108,334.00	GOOD	YES	2
A. ANGLIONGTO	MLCSP	300	₱19,100.00	23.08	₱440,828.00	GOOD	YES	2
MATINA APLAYA	MLCSP	250	₱17,000.00	341.23	₱5,800,910.00	GOOD	YES	2
MATINA APLAYA	MLCSP	250	₱17,000.00	266.89	₱4,537,130.00	GOOD	YES	2
BUCANA	MLCSP	250	₱17,000.00	434.23	₱7,381,910.00	GOOD	YES	2
AGDAO PROPER	MLCSP	150	₱11,200.00	55.96	₱626,752.00	GOOD	YES	2

Table LU-94. Lifeline Utilities, Level III Water System, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
PACIANO BANGOY	MLCSP	150	₱11,200.00	8.86	₱99,232.00	GOOD	YES	2
AGDAO PROPER	MLCSP	150	₱11,200.00	37.93	₱424,816.00	GOOD	YES	2
15-B	MLCSP	150	₱11,200.00	19.13	₱214,256.00	GOOD	YES	2
SAN ANTONIO	MLCSP	400	₱20,600.00	78.61	₱1,619,366.00	GOOD	YES	2
WILFREDO AQUINO	MLCSP	400	₱20,600.00	58.48	₱1,204,688.00	GOOD	YES	2
WILFREDO AQUINO	MLCSP	400	₱20,600.00	64.24	₱1,323,344.00	GOOD	YES	1
SAN ANTONIO	MLCSP	400	₱20,600.00	367.39	₱7,568,234.00	GOOD	YES	2
ILANG	MLCSP	400	₱20,600.00	21.96	₱452,376.00	GOOD	YES	2
ILANG	MLCSP	400	₱20,600.00	21.96	₱452,376.00	GOOD	YES	1

Degree of Impact for DCWD Well

The six DCWD wells found in Lower Rapnaga, Puan, Barangay Bago Aplaya, Crossing Bago Aplaya, Barangay Bago Aplaya, Km 10, Bago Aplaya, fronting ideal Subdivision, Barangay Bago Aplaya, Davao-Cotabao Road, near Bago Bridge, Barangay Bago Aplaya, and Km 11, Dumoy, near the entrance of the Distal, Barangay Dumoy have moderate degree of impact.

Table LU-95. Lifeline Utilities, DCWD Wells, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE				SENSITIVITY		DEGREE OF IMPACT
LOCATION	PUMP TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
UUHSA, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Km. 8 Ulas, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Puan Junction, Brgy. Talomo	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES	2
Lower Rapnaga, Puan, Brgy. Bago Aplaya	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES	2
Lower Rapnaga, Puan, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Lower Rapnaga, Puan, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Crossing Bago Aplaya, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Km. 10 Bago Aplaya fronting Ideal Subdivision, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Km. 11 Dumoy near the entrance to Dusnai, Brgy. Dumoy	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Bago Gallera Road near Gallera De Oro Subd., Brgy. Bago Gallera	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Km. 9, Puan along Davao Cotabato Road Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Catotal Subdivision near Block 22, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Entrance to Greenland Subdivision, along Davao Cotabato Road, Brgy. Dumoy	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2

Degree of Impact to Cell Sites

For cell sites, a total of 112 cell sites have high degree of impact rating, while there are only 44 with moderate degree of impact. These cell sites could be found in Talomo, Poblacion, Agdao Districts.

Table LU-96. Lifeline Utilities, Cell Sites, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
GLOBE TELECOM, INC.	Brgy. Daliao, Toril,	300 sq. m	₱12 -₱15 million	₱12 -₱15	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Lorenzo Manuel St., San Vicente Daliao, Toril, Davao City,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS,	Brgy. Daliao, Toril	300 sq. m	₱12 -₱15 million	₱12 -₱15	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Mac Arthur Highway, Dumoy,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Barangay Bago Aplaya, Talomo District, Davao City Golf Country Club	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	Doña Luisa Subdivision, Phase 2, Brgy. Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5

Table LU-96. Lifeline Utilities, Cell Sites, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Matina Aplaya (near Lanzano Subd.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	JMS Bldg., #88 Maya Street, Barangay 76A, Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	University Ave., Juna Subd., Martina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Abarquez Prop., University Ave., Juna Subd., Martina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5

Table LU-96. Lifeline Utilities, Cell Sites, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Mc Arthur Hiway, Brgy. 74 -A, Matina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	NCC Mall Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Centerpoint Mall, Brgy. Matina Crossing,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Magno Prop., No. 64 V. Mapa St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	No. 64 V. Mapa St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	JVALL Bldg., McArthur Hiway, (Maa Crossing)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Sandawa, McArthur Hiway, Matina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Sandawa, McArthur Hiway, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	Magallanes St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro corner Quimpo Blvd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5

Table LU-96. Lifeline Utilities, Cell Sites, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	NCCC Mall, Maa,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Matina Hi-way cor. MAA Rd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	#88 Maya St., Brgy. 76A, Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro cor. Quimpo Blvd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Ponciano Reyes St. (crooked Rd.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Magno Bldg., Ponciano Reyes St. (crooked rd.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	Bonifacio St., cor M.L. Quezon Blvd	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	109 Piapi, Quezon Blvd,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Santiago's Lot, Brgy. Sasa Buhangin,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Erlinda Reyes Bldg., 19-Piapi Quezon Blvd.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	5/F Gaisano Ilustre St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Ilustre St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	J.S. Gaisano Mall, Ilustre St., cor. Gen. Luna St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	General Malvar St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5

Table LU-96. Lifeline Utilities, Cell Sites, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	D. Ponce St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Chippens Bldg., 368 Padre Gomez St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Chippens Bldg., 368 Padre Gomez St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Davao Doctors Hospital, Malvar St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Legaspi St. Cor. Bonifacio St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Baguio (Pob.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Km.12, National Highway, Barangay Catalunan Pequeno,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	PLDT Ponciano, PLDT Bldg., Ponciano St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Regency Inn, Villa Abrille St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Gov. Sales St., Brgy. 27	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Jose Co Bldg., Gov. Sales St., Brgy. 27,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	NCC Mall Uyanguren	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5

Table LU-96. Lifeline Utilities, Cell Sites, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	NCC Mall Unaguren	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	PBCOM Bldg., Monte-verde cor. Bangoy St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	PLDT Post fronting Chimes Store, Sales St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Holy Cross College, Sta. Ana Ave. Cor Guerero	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	J.P Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	San Pedro Hospital Guzman St., Brgy. Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., TÁBrgy. Gov. Vicente Duterte,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Gov. Vicente	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Lapu Lapu corner Bangoy Sts., Agdao,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Lapu-lapu St., cor. Bangoy Agdao,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Banco Filipino Bldg., Lapu-lapu St., cor. Dacu-	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5

Table LU-96. Lifeline Utilities, Cell Sites, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
GLOBE TELECOM, INC.	Wescon Suites Cmpd., R. Castillo, Agdao	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Peralta Property, Seminary Rd., Brgy Catalunan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Llanes Prop 1, Cabaguio Ave., Agdao,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Cabaguio Ave., Agdao	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	R. Castillo St., Otero Compound, Lapu-Lapu	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Leonor Property, Camia St., Ubalde Subd., Brgy	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Camia St., Ubalde Subd., Brgy. Ubalde	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5

Table LU-96. Lifeline Utilities, Cell Sites, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	SM Lanang, Km. 6 Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	SM Lanang, Km 6, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	SM Lanang Former Lanang Golf and Country Club, J.P. Laurel Ave., Lanang District, Brgy. San Antonio	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	J.P. Laurel Ave., Monark Compound, Brgy. Rafael Castillo	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	SM Davao Ecoland	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5

Table LU-96. Lifeline Utilities, Cell Sites, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD ESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	SM Davao Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Waterfront Hotel, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Doña Asuncion Road, Brgy. Pampanga, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Km. 9, KMA, Brgy. Sasa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Sitio Nahul, Barangay Baliok,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Sitio Nahul, Brgy. Baliok	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	National Highway Panacan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Lasang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Barilio Lasang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Hao Property, Bario Lasang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Corner National Highway-Lim Street, Brgy. Toril Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Ferriols Compound, Brgy. Toril Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Sto. Cristo St., cor. Rasay St., Brgy. Toril Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2

Table LU-96. Lifeline Utilities, Cell Sites, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE
SMART COMMUNICATIONS, INC.	SM Davao Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Waterfront Hotel, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Doña Asuncion Road, Brgy. Pampanga, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Km. 9, KMA, Brgy. Sasa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Sitio Nahul, Barangay Baliok,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Sitio Nahul, Brgy. Baliok	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
GLOBE TELECOM, INC.	National Highway Panacan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Lasang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Barilio Lasang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Hao Property, Bariio Lasang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	3	2	2.5
SMART COMMUNICATIONS, INC.	Corner National Highway-Lim Street, Brgy. Toril Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Ferriols Compound, Brgy. Toril Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Sto. Cristo St., cor. Rasay St., Brgy. Toril Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Along National Highway, Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2

Table LU-96. Lifeline Utilities, Cell Sites, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
DIGITEL MOBILE PHILIPPINES, INC.	Commandante Property, Along National Highway, Brgy. Bago Aplaya, Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Telstar St., GSIS Subdivision, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Crossing Puan, McArthur Highway	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Bago Aplaya, Talomo	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Vega Property, Cariñosa St. cor Balitaw St., Lanzona Subd., Matina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Carinosa St., cor. Balitaw St., Lanzona Subd., Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Ortis Road, Brgy. Ulas	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Ortis road, Brgy. Uas,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Golden Hardware Bldg.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Golden Hardware Bldg., Km. 5 McArthur Highway, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Guardsman, AGT Bldg., Nacilla Street, Brgy. Ma-a	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Guardsman AGT Bldg., Nacilla Street, Brgy. Ma-a,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2

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EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	PLDT Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
GLOBE TELECOM, INC.	Torres St., Brgy. 9-A (Pob.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	PLDT Maa,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	In front of Luisa Avenue Square Bldg., B. Jacinto Ext. St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Landco Bldg., JP Laurel St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
GLOBE TELECOM, INC.	Corner Palma Gil & Cervantes St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Billboard on Synchar Hotel, J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	J.P. Laurel Avenue, Bajada,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	University of Southern Philippines, Trade School Drive	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Opal St., Obrero,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Opal St., Obrero	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St., Barangay 20-B (Pob.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St. Acacia,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
GLOBE TELECOM, INC.	JP Laurel St., Barangay 20-B (Pob.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2

Table LU-96. Lifeline Utilities, Cell Sites, Degree of Impact Table for Liquefaction, Davao City

EXPOSURE					SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	Km10 Doña Salud Subd., Sasa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Km10 Doña Salud Subd., Sasa,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Pres. Carlos P. Garcia Highway, Brgy. Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	President Carlos P. Garcia Highway (Diversion Road), Brgy. Panacan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGTEL MOBILE PHILIPPINES, INC.	Cruz Property, President. Carlos P. Garcia Highway (Diversion Road), Brgy. Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Malagamot Road, Bayani Diaz Compound, Panacan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGTEL MOBILE PHILIPPINES, INC.	Malagamot Road, Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway, Panacan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGTEL MOBILE PHILIPPINES, INC.	Tefasco Lot, Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGTEL MOBILE PHILIPPINES, INC.	Brgy. Bunawan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Purok 3, (near Market site), Brgy. Bunawan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
GLOBE TELECOM, INC.	Crossing Licanan, Brgy. Alejandra Navarro (Lasang)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2

Degree of Impact for Storm Surge

The roads which have high degree of impact are C.P Garcia Highway, Dacudao Avenue, Davao-Agusan Highway, Florentino Torres St., J.P. Cabaguio, J.P Laurel, Libby Road, McArthur Highway, Old Airport, Pichon St., Quimpo Boulevard, Quimpo Avenue, and McArthur Highway. High degree of impact means estimated direct impacts in terms of value of the property damaged, extent of exposure, and current sensitivity of the system. Other roads which are not mentioned all have moderate degrees of impact.

Table LU-97. Lifeline Utilities, Roads, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE			SENSITIVITY			IMPACT			
ROAD NAME	EXPOSED LENGTH (LINEAR KILOME-	VALUE OF EX- POSED LIFELINE	SURFACE TYPE	EXISTING CONDI- TION	HAZARD RE- SISTANT	DEGREE OF IMPACT			
						GROUP 1	GROUP 2	GROUP 3	AVER- AGE
2nd Avenue	0.2056	12,337,800	concrete	good	Yes	2.0	2.0	2.0	2.0
5th Ave.	0.1964	11,781,900	concrete	good	Yes	2.0	2.0	2.0	2.0
5th Ave.	0.0080	478,753	concrete	good	Yes	2.0	2.0	2.0	2.0
Agdao Flyover	0.3327	18,632,152	concrete	good	Yes	3.0	3.0	3.0	3.0
Agdao Flyover	0.1406	7,876,064	concrete	good	Yes	3.0	3.0	3.0	3.0
Bonifacio Rotonda	0.0839	4,697,403	concrete	good	Yes	2.0	2.0	2.0	2.0
Carlos P. Garcia Highway	0.0067	401,819	concrete	good	Yes	3.0	3.0	3.0	3.0
Carlos P. Garcia Highway	0.0289	1,731,774	concrete	good	Yes	3.0	3.0	3.0	3.0
Carlos P. Garcia Highway	0.0015	91,175	concrete	good	Yes	3.0	3.0	3.0	3.0
Carlos P. Garcia Highway	0.3565	21,391,800	concrete	good	Yes	3.0	3.0	3.0	3.0
Carlos P. Garcia Highway	0.02886	1,731,720	concrete	good	Yes	3.0	3.0	3.0	3.0
Claro M. Recto St.	0.2221	12,436,984	concrete	good	Yes	3.0	3.0	3.0	3.0
Claro M. Recto St.	0.2052	11,491,424	concrete	good	Yes	3.0	3.0	3.0	3.0
Claro M. Recto St.	0.5195	29,089,592	concrete	good	Yes	3.0	3.0	3.0	3.0
Claro M. Recto St.	0.0260	1,457,512	concrete	good	Yes	2.0	2.0	2.0	2.0
Claro M. Recto St.	0.1375	7,700,728	concrete	good	Yes	2.0	2.0	2.0	2.0
Claro M. Recto St.	0.0158	887,303	concrete	good	Yes	3.0	3.0	3.0	3.0
Claro M. Recto St.	0.0891	4,986,834	concrete	good	Yes	3.0	3.0	3.0	3.0
Dacudao Avenue	0.2357	13,197,408	concrete	good	Yes	3.0	3.0	3.0	3.0
Dacudao Avenue	0.4343	24,319,792	concrete	good	Yes	3.0	3.0	3.0	3.0
Dacudao Avenue	0.19586	10,967,936	concrete	good	Yes	3.0	3.0	3.0	3.0
Dacudao Avenue	0.3666	20,530,160	concrete	good	Yes	3.0	3.0	3.0	3.0
Dacudao Avenue	0.0738	4,133,825	concrete	good	Yes	3.0	3.0	3.0	3.0

Table LU-97. Lifeline Utilities, Roads, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE			SENSITIVITY			IMPACT			
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	DEGREE OF IMPACT			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Dacudao Avenue	0.20621	11,547,872	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.2152	8,608,040	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.01540	616,092	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.3174	17,772,104	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.0786	4,403,717	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.8175	45,777,424	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.86126	48,230,560	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	1.3049	73,071,600	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	1.0823	60,606,560	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.05607	3,140,094	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.1872	10,481,408	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.4608	25,806,872	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.28805	16,130,912	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.8330	46,649,176	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.4090	22,906,128	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.91146	51,041,704	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.1423	7,967,736	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.2755	15,430,296	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	1.9411	108,703,840	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.45729	25,608,072	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.5854	32,781,840	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	1.2341	69,110,720	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	1.5330	85,848,560	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.28741	16,095,184	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.5681	31,814,048	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.5142	28,797,104	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.4213	23,592,856	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	1.8633	104,342,000	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.7272	40,724,712	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.24300	13,608,168	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.4561	25,540,704	concrete	good	Yes	2.0	2.0	2.0	2.0
Florentino Torres St	0.0015	98,565	concrete	good	Yes	2.0	2.0	2.0	2.0

Table LU-97. Lifeline Utilities, Roads, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE			SENSITIVITY			IMPACT			
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	DEGREE OF IMPACT			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Florentino Torres St	0.0521	3,388,223	concrete	good	Yes	3.0	3.0	3.0	3.0
Florentino Torres St	0.0223	1,446,556	concrete	good	Yes	2.0	2.0	2.0	2.0
Florentino Torres St	0.34975	22,733,490	concrete	good	Yes	3.0	3.0	3.0	3.0
Florentino Torres St	0.0095	618,499	concrete	good	Yes	3.0	3.0	3.0	3.0
Florentino Torres St	0.16771	10,901,410	concrete	good	Yes	3.0	3.0	3.0	3.0
Florentino Torres St	0.1291	8,391,110	concrete	good	Yes	3.0	3.0	3.0	3.0
Florentino Torres St	0.17450	11,342,630	concrete	good	Yes	3.0	3.0	3.0	3.0
Florentino Torres St	0.0396	2,573,922	concrete	good	Yes	2.0	2.0	2.0	2.0
J.P. Cabaguio Avenue	0.0846	4,739,330	concrete	good	Yes	3.0	3.0	3.0	3.0
J.P. Cabaguio Avenue	0.4031	22,571,248	concrete	good	Yes	2.0	2.0	2.0	2.0
J.P. Cabaguio Avenue	0.1827	10,230,752	concrete	good	Yes	2.0	2.0	2.0	2.0
J.P. Cabaguio Avenue	0.09102	5,096,890	concrete	good	Yes	3.0	3.0	3.0	3.0
J.P. Cabaguio Avenue	0.1908	10,682,000	concrete	good	Yes	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.2920	16,353,736	concrete	good	Yes	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.2001	11,203,528	concrete	good	Yes	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.19268	10,790,304	concrete	good	Yes	3.0	3.0	3.0	3.0
Jose P. Laurel Avenue	0.1487	8,328,040	concrete	good	Yes	3.0	3.0	3.0	3.0
Jose P. Laurel Avenue	0.14527	8,135,120	concrete	good	Yes	3.0	3.0	3.0	3.0
Jose P. Laurel Avenue	0.1008	5,644,800	concrete	good	Yes	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.0300	1,682,223	concrete	good	Yes	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.3206	17,955,000	concrete	good	Yes	3.0	3.0	3.0	3.0
Jose P. Laurel Avenue	0.1157	6,476,624	concrete	good	Yes	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.19115	10,704,624	concrete	good	Yes	3.0	3.0	3.0	3.0
Jose P. Laurel Avenue	0.1200	6,717,424	concrete	good	Yes	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.21591	12,091,016	concrete	good	Yes	3.0	3.0	3.0	3.0
Jose P. Laurel Avenue	0.0008	47,255	concrete	good	Yes	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.2964	16,598,456	concrete	good	Yes	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.2024	11,335,520	concrete	good	Yes	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.06093	3,411,822	concrete	good	Yes	3.0	3.0	3.0	3.0
Jose P. Laurel Avenue	0.2931	16,416,232	concrete	good	Yes	2.0	2.0	2.0	2.0
Pichon St.	0.30630	17,152,744	concrete	good	Yes	3.0	3.0	3.0	3.0
Pichon St.	0.1521	8,516,032	concrete	good	Yes	3.0	3.0	3.0	3.0

Table LU-97. Lifeline Utilities, Roads, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE			SENSITIVITY			IMPACT			
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	DEGREE OF IMPACT			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Quezon Boulevard	0.2429	20,892,582	concrete	good	Yes	2.0	2.0	2.0	2.0
Quezon Boulevard	0.6597	56,732,222	concrete	good	Yes	2.0	2.0	2.0	2.0
Quezon Boulevard	1.1526	99,119,300	concrete	good	Yes	3.0	3.0	3.0	3.0
Quezon Boulevard	0.4056	34,877,988	concrete	good	Yes	3.0	3.0	9.0	5.0
Quezon Boulevard	0.6372	54,801,006	concrete	good	Yes	3.0	3.0	9.0	5.0
Quezon Boulevard	1.1235	96,622,720	concrete	good	Yes	3.0	3.0	9.0	5.0
Quimpo Boulevard	0.4617	23,083,850	concrete	good	Yes	3.0	3.0	9.0	5.0
Quimpo Boulevard	0.0002	11,396	concrete	good	Yes	2.0	2.0	2.0	2.0
Quimpo Boulevard	0.1625	8,122,550	concrete	good	Yes	3.0	3.0	3.0	3.0
Quimpo Boulevard	0.19235	9,617,350	concrete	good	Yes	3.0	3.0	3.0	3.0
Quimpo Boulevard	0.3518	17,590,250	concrete	good	Yes	3.0	3.0	3.0	3.0
Quimpo Boulevard	1.2646	63,231,500	concrete	good	Yes	3.0	3.0	3.0	3.0
Quimpo Boulevard	0.2471	12,352,500	concrete	good	Yes	3.0	3.0	3.0	3.0
Quimpo Boulevard	0.59998	29,999,050	concrete	good	Yes	3.0	3.0	3.0	3.0
Quimpo Boulevard	0.1951	9,755,650	concrete	good	Yes	2.0	2.0	2.0	2.0
Quimpo Boulevard	0.0372	1,859,645	concrete	good	Yes	3.0	3.0	3.0	3.0
Quirino Avenue	0.0546	2,183,380	concrete	good	Yes	3.0	3.0	3.0	3.0
Quirino Avenue	0.2223	8,891,360	concrete	good	Yes	3.0	3.0	3.0	3.0
Quirino Avenue	0.0084	334,358	concrete	good	Yes	3.0	3.0	3.0	3.0
Quirino Avenue	0.2220	8,879,080	concrete	good	Yes	3.0	3.0	3.0	3.0
Quirino Avenue	0.15080	6,031,840	concrete	good	Yes	3.0	3.0	3.0	3.0
Quirino Avenue	0.0763	3,053,348	concrete	good	Yes	3.0	3.0	3.0	3.0
Quirino Avenue	0.20633	8,253,280	concrete	good	Yes	3.0	3.0	3.0	3.0
Quirino Avenue	0.1959	7,835,560	concrete	good	Yes	3.0	3.0	3.0	3.0
Quirino Avenue	0.0633	2,531,616	concrete	good	Yes	3.0	3.0	3.0	3.0
Quirino Avenue	0.10797	4,318,640	concrete	good	Yes	3.0	3.0	3.0	3.0
Quirino Avenue	0.3941	15,762,600	concrete	good	Yes	3.0	3.0	3.0	3.0
Quirino Avenue	0.18925	7,570,120	concrete	good	Yes	3.0	3.0	3.0	3.0
Quirino Avenue	0.0145	579,612	concrete	good	Yes	3.0	3.0	3.0	3.0
Quirino Avenue	0.05555	2,221,916	concrete	good	Yes	3.0	3.0	3.0	3.0
Rafael Castillo St.	0.4876	41,932,912	concrete	good	Yes	2.0	2.0	2.0	2.0
Rafael Castillo St.	0.2671	22,968,966	concrete	good	Yes	2.0	2.0	2.0	2.0

Table LU-97. Lifeline Utilities, Roads, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE			SENSITIVITY			IMPACT			
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	DEGREE OF IMPACT			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Rafael Castillo St.	0.0173	1,490,131	concrete	good	Yes	2.0	2.0	2.0	2.0
Rafael Castillo St.	0.0009	74,717	concrete	good	Yes	3.0	3.0	3.0	3.0
Rafael Castillo St.	0.3657	31,452,006	concrete	good	Yes	2.0	2.0	2.0	2.0
Rafael Castillo St.	0.0016	136,849	concrete	good	Yes	3.0	3.0	3.0	3.0
Rafael Castillo St.	0.8343	71,749,800	concrete	good	Yes	3.0	3.0	3.0	3.0
Rafael Castillo St.	0.9058	77,899,746	concrete	good	Yes	3.0	3.0	3.0	3.0
Rafael Castillo St.	0.2916	25,076,052	concrete	good	Yes	2.0	2.0	2.0	2.0
Ramon Magsaysay Ave.	0.4384	26,304,960	concrete	good	Yes	2.0	2.0	2.0	2.0
Ramon Magsaysay Ave.	0.0217	1,301,472	concrete	good	Yes	2.0	2.0	2.0	2.0
Ramon Magsaysay Ave.	0.0195	1,170,942	concrete	good	Yes	2.0	2.0	2.0	2.0
Ramon Magsaysay Ave.	0.0129	775,980	concrete	good	Yes	3.0	3.0	3.0	3.0
Ramon Magsaysay Ave.	0.4035	24,208,140	concrete	good	Yes	2.0	2.0	2.0	2.0
Ramon Magsaysay Ave.	0.4781	28,685,100	concrete	good	Yes	2.0	2.0	2.0	2.0
Sta. Ana Ave.	0.3457	20,740,680	concrete	good	Yes	2.0	2.0	2.0	2.0
Sta. Ana Ave.	0.2241	13,444,140	concrete	good	Yes	3.0	3.0	3.0	3.0
Sta. Ana Ave.	0.0213	1,275,942	concrete	good	Yes	2.0	2.0	2.0	2.0
Sta. Ana Ave.	0.6951	41,707,080	concrete	good	Yes	2.0	2.0	2.0	2.0
Sta. Ana Ave.	0.0049	292,634	concrete	good	Yes	2.0	2.0	2.0	2.0
Mc. Arthur Highway	0.00003	1,861	concrete	good	Yes	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.00003	1,861	concrete	good	Yes	3.0	3.0	3.0	3.0
Rafael Castillo St.	0.0026	222,664	concrete	good	Yes	2.0	2.0	2.0	2.0
Rafael Castillo St.	0.0026	222,664	concrete	good	Yes	2.0	2.0	2.0	2.0

Degree of Impact for Bridges

The Ilang Bridge has the highest degree of impact upon occurrence of storm surge with 3-meter wave. Meanwhile, Agdao Flyover, Bago Bridge, Bunawan Bridge 1, Bunawan Bridge 2, Panacan Bridge, Sasa Bridge Talomo Bridge 1 and Talomo Bridge 2 also have high degree of impact upon occurrence of storm surge 2-meter wave.

Table LU-98. Lifeline Utilities, Bridges, Degree of Impact Table for Storm Surge, Davao City

ROAD NAME	EXPOSURE			SENSITIVITY			IMPACT			
	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	DEGREE OF IMPACT			AVERAGE
							GROUP 1	GROUP 2	GROUP 3	
Agdao Flyover	382.98	1,200,000.00	459,576,000	Concrete	Good	Yes	3	3	3	3.00
Bago Br.	31.21	1,200,000.00	37,452,000	-	Good	Yes	3	3	3	3.00
Bunawan Br. 1	49.76	1,200,000.00	59,712,000	-	Good	Yes	3	3	3	3.00
Bunawan Br. 2	47.79	1,200,000.00	57,348,000	-	Good	Yes	3	3	3	3.00
Ilang Br.	25.70	1,200,000.00	30,840,000	-	Good	Yes	3	3	3	3.00
Panacan Br.	23.53	1,200,000.00	28,236,000	-	Good	Yes	3	3	3	3.00
Sasa Br.	18.43	1,200,000.00	22,116,000	-	Good	Yes	3	3	3	3.00
Talomo Br. 1	48.10	2,053,000.00	98,749,300	-	Good	Yes	3	3	3	3.00
Talomo Br. 2	48.11	2,053,000.00	98,769,830	-	Good	Yes	3	3	3	3.00
Bago Br.	31.21	1,200,000	37,452,000	-	Good	Yes	2	2	2	2.00
Ilang Br.	25.70	1,200,000	30,840,000	-	Good	Yes	3	3	3	3.00
Talomo Br. 1	48.10	2,053,000	98,749,300	-	Good	Yes	2	2	2	2.00
Talomo Br. 2	48.11	2,053,000	98,769,830	-	Good	Yes	2	2	2	2.00

Degree of Impact for Power Substations

Power Substations with moderate degree of impact are Sta. Ana Substation, Pampang Substation, Don Ramon Substation, Ponciano Reyes Substation, Gaisano Substation, Victoria Substation, Panacan Substation, Bunawan Substation, and Dumoy Substation. These substations are made of mostly of concrete and steel.

Table LU-99. Lifeline Utilities, Power Substations, Degree of Impact Table for Storm Surge with 2-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	GROUP 1	GROUP 2	AVERAGE
Sta Ana Substation	607.00	135 Million	135 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) & Bended Metal Sheets b) Control Building: Concrete Wall and Floor ; with Roof deck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	2	1	1.5
R.Castillo Substation	852.00	125 Million	125 Million	a) Perimeter Fence : Concrete High Wall Fence (3.5m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	1	1
Pampanga Substation	1031.00	118 Million	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	2	2	2
Don Ramon Substation	15540.00	570 Million	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel Structures	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	2	1.5

Table LU-99. Lifeline Utilities, Power Substations, Degree of Impact Table for Storm Surge with 3-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	GROUP 1	GROUP 2	AVERAGE
P.Reyes Substation	825.86	85 Million	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : Concrete POle and Steel Beams	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	2	1.5
Gaisano Substation	454.00	85 Million	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	1	2	1.5
Victoria Substation	595.00	120 Million	120 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Newly Up-graded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	1	2	1.5
Panacan Substation	858.00	85 Million	85 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: Concrete wall and Floor, PU Panel Roof. c) Equipment Support :Concrete POle and Steel Beams	a) Operational b) Last upgraded 10 yrs ago.	Recommended for relocation or Reconstruction	2	2	2
Don Ramon Substation	15,540.00	570 Million	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel Structures	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	2	1.5
Bunawan Substation	1,085.00	110 Million	110 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside b) Control Building: Concrete wall and floor, ; Prepainted Roofing Sheet. c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	1	2	1.5

Table LU-99. Lifeline Utilities, Power Substations, Degree of Impact Table for Storm Surge with 4-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	GROUP 1	GROUP 2	AVERAGE
Don Ramon Substation	15,540	570 Million	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel Structures	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	1	2	1.5
Bunawan Substation	1085	110 Million	110 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside b) Control Building: Concrete wall and floor, ; Prepaint-ed Roofing Sheet. c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	1	2	1.5

Table LU-99. Lifeline Utilities, Power Substations, Degree of Impact Table for Storm Surge with 5-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			Degree of Impact		
NAME OF POWER PLANT	AREA OC-CUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	GROUP 1	GROUP 2	AVERAGE
Dumoy Substation	1,322	118 Million	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgrad-ed 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	1	3	2
Bajada Sub-station		200 Million	200 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	1	1
ERA Substa-tion	11926	200 Million	200 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) On-Going Upgrade	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	1	1

Table LU-99. Lifeline Utilities, Power Substations, Degree of Impact Table for Storm Surge with 5-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			Degree of Impact		
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	GROUP 1	GROUP 2	AVERAGE
Don Ramon Substation	15,540	570 Million	570 Million	a) Perimeter Fence : Concrete High Wall Fence with Steel Grating (3.0m HT) b) Control Building: Concrete Wall and Floor ; G.I. Roof Panels c) Equipment Support : All Steel Structures	a) Operational b) Upgraded 5 years ago.	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	1	2	1.5

Degree of Impact for Level I Water System.

A total of 51 spring sources have high degree of impact. Each has a value of ₱41,586. All have good existing condition but does not have hazard resistant design.

Table LU-100 Lifeline Utilities, Level I Water System, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF THE EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3
MAHAYAG	SPRING	41,586.32	41,586.32	GOOD	NONE	3
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3
TIBUNGCO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
TIBUNGCO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	3

Table LU-100 Lifeline Utilities, Level I Water System, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF THE EXISTING LIFELINE	EXISTING CONDI-TION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	3
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	3
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	3
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	3
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3
BINUGAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
BINUGAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
MAHAYAG	SPRING	41,586.32	41,586.32	GOOD	NONE	3
TIBUNGCO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3
BUNAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	3
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	3
LIZADA	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
DALIAO	SPRING	41,586.32	41,586.32	GOOD	NONE	3
SIRAWAN	SPRING	41,586.32	41,586.32	GOOD	NONE	3

Degree of Impact for Level II

The two (2) wells which are located in Barangay Sirawan have moderate degree of impact.

Table LU-101. Lifeline Utilities, Level II Water System, Degree of Impact Table For Storm Surge, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
SIRAWAN	2HP	46200	46200	FAIR	YES	2
SIRAWAN	2HP	46200	46200	FAIR	YES	2

Degree of Impact for Level III Water Supply

Out of 120 mainline pipes, 9 mainline pipes found in Bago Aplaya, Bucana, Dumoy, Ilang, Matina Aplaya, Matina Crossing, Panacan and Talomo have moderate

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
10-A	MLCSP	150	₱11,200.00	126.87	₱1,420,944.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	33.65	₱376,880.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	162.51	₱1,820,112.00	GOOD	YES	1
12-B	MLCSP	150	₱11,200.00	49.64	₱555,968.00	GOOD	YES	1
12-B	MLCSP	150	₱11,200.00	316.29	₱3,542,448.00	GOOD	YES	1
11-B	MLCSP	150	₱11,200.00	6.39	₱71,568.00	GOOD	YES	1
11-B	MLCSP	150	₱11,200.00	157.9	₱1,768,480.00	GOOD	YES	1
39-D	MLCSP	300	₱19,100.00	156.23	₱2,983,993.00	GOOD	YES	1
37-D	MLCSP	300	₱19,100.00	76.08	₱1,453,128.00	GOOD	YES	1
32-D	MLCSP	300	₱19,100.00	236.99	₱4,526,509.00	GOOD	YES	1
24-C	MLCSP	300	₱19,100.00	2.96	₱56,536.00	GOOD	YES	1
24-C	MLCSP	150	₱11,200.00	187.67	₱2,101,904.00	GOOD	YES	1
32-D	MLCSP	300	₱19,100.00	222.24	₱4,244,784.00	GOOD	YES	1
30-C	MLCSP	300	₱19,100.00	10.29	₱196,539.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
11-B	MLCSP	300	₱19,100.00	117.3	₱2,240,430.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	165.94	₱1,858,528.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	164.76	₱1,845,312.00	GOOD	YES	1
30-C	MLCSP	150	₱11,200.00	117.93	₱1,320,816.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	6.71	₱75,152.00	GOOD	YES	1
32-D	MLCSP	300	₱19,100.00	67.83	₱1,295,553.00	GOOD	YES	1
32-D	MLCSP	400	₱23,600.00	31.07	₱733,252.00	GOOD	YES	1
30-C	MLCSP	400	₱23,600.00	81.18	₱1,915,848.00	GOOD	YES	1
30-C	MLCSP	400	₱23,600.00	419.75	₱9,906,100.00	GOOD	YES	1
12-B	MLCSP	400	₱23,600.00	40.79	₱962,644.00	GOOD	YES	1
30-C	MLCSP	150	₱11,200.00	34.82	₱389,984.00	GOOD	YES	1
11-B	MLCSP	300	₱19,100.00	91.64	₱1,750,324.00	GOOD	YES	1
15-B	MLCSP	400	₱23,600.00	8.27	₱195,172.00	GOOD	YES	1
14-B	MLCSP	400	₱23,600.00	63.08	₱1,488,688.00	GOOD	YES	1
18-B	MLCSP	300	₱19,100.00	194.44	₱3,713,804.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	2.43	₱46,413.00	GOOD	YES	1
18-B	MLCSP	300	₱19,100.00	3.62	₱69,142.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	115.4	₱2,204,140.00	GOOD	YES	1
12-B	MLCSP	150	₱11,200.00	23.32	₱261,184.00	GOOD	YES	1
12-B	MLCSP	150	₱11,200.00	34.69	₱388,528.00	GOOD	YES	1
19-B	MLCSP	150	₱11,200.00	37.77	₱423,024.00	GOOD	YES	1
18-B	MLCSP	300	₱19,100.00	13.35	₱254,985.00	GOOD	YES	1
13-B	MLCSP	300	₱19,100.00	42.75	₱816,525.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	18.93	₱212,016.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	34.32	₱384,384.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	10.91	₱122,192.00	GOOD	YES	1
32-D	MLCSP	300	₱19,100.00	25.83	₱493,353.00	GOOD	YES	1
32-D	MLCSP	300	₱19,100.00	0.48	₱9,168.00	GOOD	YES	1
30-C	MLCSP	300	₱19,100.00	12.67	₱241,997.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	8.52	₱95,424.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	110.26	₱1,234,912.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	59.34	₱664,608.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
11-B	MLCSP	300	₱19,100.00	117.3	₱2,240,430.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	165.94	₱1,858,528.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	164.76	₱1,845,312.00	GOOD	YES	1
30-C	MLCSP	150	₱11,200.00	117.93	₱1,320,816.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	6.71	₱75,152.00	GOOD	YES	1
32-D	MLCSP	300	₱19,100.00	67.83	₱1,295,553.00	GOOD	YES	1
32-D	MLCSP	400	₱23,600.00	31.07	₱733,252.00	GOOD	YES	1
30-C	MLCSP	400	₱23,600.00	81.18	₱1,915,848.00	GOOD	YES	1
30-C	MLCSP	400	₱23,600.00	419.75	₱9,906,100.00	GOOD	YES	1
12-B	MLCSP	400	₱23,600.00	40.79	₱962,644.00	GOOD	YES	1
30-C	MLCSP	150	₱11,200.00	34.82	₱389,984.00	GOOD	YES	1
11-B	MLCSP	300	₱19,100.00	91.64	₱1,750,324.00	GOOD	YES	1
15-B	MLCSP	400	₱23,600.00	8.27	₱195,172.00	GOOD	YES	1
14-B	MLCSP	400	₱23,600.00	63.08	₱1,488,688.00	GOOD	YES	1
18-B	MLCSP	300	₱19,100.00	194.44	₱3,713,804.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	2.43	₱46,413.00	GOOD	YES	1
18-B	MLCSP	300	₱19,100.00	3.62	₱69,142.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	115.4	₱2,204,140.00	GOOD	YES	1
12-B	MLCSP	150	₱11,200.00	23.32	₱261,184.00	GOOD	YES	1
12-B	MLCSP	150	₱11,200.00	34.69	₱388,528.00	GOOD	YES	1
19-B	MLCSP	150	₱11,200.00	37.77	₱423,024.00	GOOD	YES	1
18-B	MLCSP	300	₱19,100.00	13.35	₱254,985.00	GOOD	YES	1
13-B	MLCSP	300	₱19,100.00	42.75	₱816,525.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	18.93	₱212,016.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	34.32	₱384,384.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	10.91	₱122,192.00	GOOD	YES	1
32-D	MLCSP	300	₱19,100.00	25.83	₱493,353.00	GOOD	YES	1
32-D	MLCSP	300	₱19,100.00	0.48	₱9,168.00	GOOD	YES	1
30-C	MLCSP	300	₱19,100.00	12.67	₱241,997.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	8.52	₱95,424.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	110.26	₱1,234,912.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	59.34	₱664,608.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
28-C	MLCSP	150	₱11,200.00	15.83	₱177,296.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	54.8	₱613,760.00	GOOD	YES	1
26-C	MLCSP	150	₱11,200.00	6.5	₱72,800.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	59.36	₱664,832.00	GOOD	YES	1
30-C	MLCSP	150	₱11,200.00	114.89	₱1,286,768.00	GOOD	YES	1
14-B	MLCSP	150	₱11,200.00	0.45	₱5,040.00	GOOD	YES	1
14-B	MLCSP	150	₱11,200.00	100.83	₱1,129,296.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	2.87	₱32,144.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	123.65	₱1,384,880.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	119.84	₱1,342,208.00	GOOD	YES	1
15-B	MLCSP	400	₱23,600.00	160.75	₱3,793,700.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	11.5	₱128,800.00	GOOD	YES	1
AGDAO PROPER	MLCSP	400	₱23,600.00	175.51	₱4,142,036.00	GOOD	YES	1
AGDAO PROPER	MLCSP	150	₱11,200.00	57.96	₱649,152.00	GOOD	YES	1
AGDAO PROPER	MLCSP	150	₱11,200.00	131.04	₱1,467,648.00	GOOD	YES	1
AGDAO PROPER	MLCSP	150	₱11,200.00	25	₱280,000.00	GOOD	YES	1
15-B	MLCSP	150	₱11,200.00	39.81	₱445,872.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	49.8	₱951,180.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	51.94	₱992,054.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	111.4	₱2,127,740.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	2.57	₱28,784.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	213.68	₱2,393,216.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	58.49	₱1,117,159.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	69.38	₱777,056.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	39.95	₱447,440.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	67.51	₱756,112.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	26.46	₱296,352.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	42.92	₱480,704.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	178.52	₱1,999,424.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	2.79	₱31,248.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	8.29	₱92,848.00	GOOD	YES	1
11-B	MLCSP	300	₱19,100.00	65.48	₱1,250,668.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
WILFREDO AQUINO	MLCSP	300	₱19,100.00	8.09	₱154,519.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	37.75	₱721,025.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	34.61	₱661,051.00	GOOD	YES	1
11-B	MLCSP	300	₱19,100.00	50.7	₱968,370.00	GOOD	YES	1
2-A	MLCSP	300	₱19,100.00	113.84	₱2,174,344.00	GOOD	YES	1
32-D	MLCSP	300	₱19,100.00	201.85	₱3,855,335.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	64.28	₱1,227,748.00	GOOD	YES	1
5-A	MLCSP	150	₱11,200.00	128.45	₱1,438,640.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	96.96	₱1,851,936.00	GOOD	YES	1
AGDAO PROPER	MLCSP	400	₱23,600.00	17.76	₱419,136.00	GOOD	YES	1
AGDAO PROPER	MLCSP	400	₱23,600.00	63.34	₱1,494,824.00	GOOD	YES	1
5-A	MLCSP	300	₱19,100.00	100.92	₱1,927,572.00	GOOD	YES	1
BAGO APLAYA	MLCSP	300	₱19,100.00	104.63	₱1,998,433.00	GOOD	YES	1
BAGO APLAYA	MLCSP	300	₱19,100.00	92.16	₱1,760,256.00	GOOD	YES	2
DUMOY	MLCSP	300	₱19,100.00	529.87	₱10,120,517.00	GOOD	YES	2
BAGO APLAYA	MLCSP	300	₱19,100.00	69.16	₱1,320,956.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	61.88	₱693,056.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	154.2	₱1,727,040.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	149.77	₱1,677,424.00	GOOD	YES	1
TALOMO	MLCSP	700	₱44,200.00	101.51	₱4,486,742.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	174.49	₱1,954,288.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	109.92	₱1,231,104.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	110.39	₱1,236,368.00	GOOD	YES	1
TALOMO	MLCSP	600	₱40,100.00	258.8	₱10,377,880.00	GOOD	YES	1
TALOMO	MLCSP	600	₱40,100.00	312.37	₱12,526,037.00	GOOD	YES	1
BAGO APLAYA	MLCSP	500	₱33,200.00	134.63	₱4,469,716.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	125.17	₱1,401,904.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	124.31	₱1,392,272.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	69.95	₱783,440.00	GOOD	YES	2
AGDAO PROPER	MLCSP	400	₱23,600.00	90.43	₱2,134,148.00	GOOD	YES	1
BAGO GALLERA	MLCSP	250	₱17,700.00	7.24	₱128,148.00	GOOD	YES	1
BAGO GALLERA	MLCSP	250	₱17,700.00	232.38	₱4,113,126.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
BAGO APLAYA	MLCSP	250	₱17,700.00	243.45	₱4,309,065.00	GOOD	YES	1
BAGO APLAYA	MLCSP	400	₱23,600.00	318.33	₱7,512,588.00	GOOD	YES	1
BAGO APLAYA	MLCSP	400	₱23,600.00	88.95	₱2,099,220.00	GOOD	YES	2
TALOMO	MLCSP	700	₱44,200.00	150.9	₱6,669,780.00	GOOD	YES	1
TALOMO	MLCSP	700	₱44,200.00	84.93	₱3,753,906.00	GOOD	YES	1
BAGO APLAYA	MLCSP	500	₱33,200.00	18.39	₱610,548.00	GOOD	YES	1
BAGO APLAYA	MLCSP	500	₱33,200.00	121.64	₱4,038,448.00	GOOD	YES	1
TALOMO	MLCSP	700	₱44,200.00	21.82	₱964,444.00	GOOD	YES	1
TALOMO	MLCSP	750	₱48,500.00	18.45	₱894,825.00	GOOD	YES	1
39-D	MLCSP	300	₱19,100.00	23.9	₱456,490.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	95.18	₱1,066,016.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	79	₱884,800.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	12.02	₱134,624.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	14.21	₱159,152.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	95.76	₱1,072,512.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	23.38	₱261,856.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	13.86	₱155,232.00	GOOD	YES	1
7-A	MLCSP	600	₱40,100.00	59.9	₱2,401,990.00	GOOD	YES	1
2-A	MLCSP	350	₱20,800.00	214.03	₱4,451,824.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	80.03	₱896,336.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	1.01	₱11,312.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	78.94	₱884,128.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	175.92	₱1,970,304.00	GOOD	YES	1
AGDAO PROPER	MLCSP	400	₱23,600.00	9.02	₱212,872.00	GOOD	YES	1
15-B	MLCSP	400	₱23,600.00	339.5	₱8,012,200.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	59.92	₱671,104.00	GOOD	YES	1
MA-A	MLCSP	750	₱48,500.00	143.95	₱6,981,575.00	GOOD	YES	1
MA-A	MLCSP	750	₱48,500.00	28.11	₱1,363,335.00	GOOD	YES	1
17-B	MLCSP	300	₱19,100.00	13.23	₱252,693.00	GOOD	YES	1
16-B	MLCSP	300	₱19,100.00	37.68	₱719,688.00	GOOD	YES	1
13-B	MLCSP	300	₱19,100.00	2.1	₱40,110.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
13-B	MLCSP	300	₱19,100.00	49.44	₱944,304.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	75.75	₱848,400.00	GOOD	YES	2
11-B	MLCSP	150	₱11,200.00	13.05	₱146,160.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	142.32	₱1,593,984.00	GOOD	YES	1
11-B	MLCSP	300	₱19,100.00	54.95	₱1,049,545.00	GOOD	YES	1
11-B	MLCSP	300	₱19,100.00	64.27	₱1,227,557.00	GOOD	YES	1
11-B	MLCSP	300	₱19,100.00	29.76	₱568,416.00	GOOD	YES	1
11-B	MLCSP	300	₱19,100.00	21.72	₱414,852.00	GOOD	YES	1
7-A	MLCSP	600	₱40,100.00	40.84	₱1,637,684.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	47.41	₱530,992.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	111.52	₱1,249,024.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	2.36	₱26,432.00	GOOD	YES	1
9-A	MLCSP	150	₱11,200.00	145.74	₱1,632,288.00	GOOD	YES	1
9-A	MLCSP	150	₱11,200.00	11.94	₱133,728.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	1.89	₱21,168.00	GOOD	YES	1
7-A	MLCSP	600	₱40,100.00	150.53	₱6,036,253.00	GOOD	YES	1
7-A	MLCSP	500	₱33,200.00	140.13	₱4,652,316.00	GOOD	YES	1
7-A	MLCSP	600	₱40,100.00	7.69	₱308,369.00	GOOD	YES	1
6-A	MLCSP	600	₱40,100.00	80.98	₱3,247,298.00	GOOD	YES	1
7-A	MLCSP	500	₱33,200.00	3.49	₱115,868.00	GOOD	YES	1
4-A	MLCSP	500	₱33,200.00	182.25	₱6,050,700.00	GOOD	YES	1
6-A	MLCSP	350	₱20,800.00	1.7	₱35,360.00	GOOD	YES	1
5-A	MLCSP	350	₱20,800.00	11.53	₱239,824.00	GOOD	YES	1
2-A	MLCSP	350	₱20,800.00	47.49	₱987,792.00	GOOD	YES	1
2-A	MLCSP	350	₱20,800.00	52.74	₱1,096,992.00	GOOD	YES	1
TALOMO	MLCSP	900	₱56,500.00	78.13	₱4,414,345.00	GOOD	YES	1
TALOMO	MLCSP	800	₱52,800.00	150.02	₱7,921,056.00	GOOD	YES	1
TALOMO	MLCSP	800	₱52,800.00	130.78	₱6,905,184.00	GOOD	YES	1
TALOMO	MLCSP	750	₱48,500.00	62.94	₱3,052,590.00	GOOD	YES	1
TALOMO	MLCSP	750	₱48,500.00	16.57	₱803,645.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	26	₱496,600.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	93.07	₱1,777,637.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
WILFREDO AQUINO	MLCSP	300	₱19,100.00	57.35	₱1,095,385.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	47.99	₱537,488.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	14.63	₱163,856.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	38.75	₱434,000.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	87.81	₱983,472.00	GOOD	YES	1
2-A	MLCSP	300	₱19,100.00	39.19	₱748,529.00	GOOD	YES	1
2-A	MLCSP	350	₱20,800.00	134.66	₱2,800,928.00	GOOD	YES	1
2-A	MLCSP	350	₱20,800.00	38.36	₱797,888.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	28.56	₱319,872.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	0.83	₱9,296.00	GOOD	YES	1
24-C	MLCSP	150	₱11,200.00	84.43	₱945,616.00	GOOD	YES	1
30-C	MLCSP	400	₱23,600.00	65.86	₱1,554,296.00	GOOD	YES	1
32-D	MLCSP	300	₱19,100.00	47.65	₱910,115.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	34.89	₱390,768.00	GOOD	YES	1
11-B	MLCSP	150	₱11,200.00	12.97	₱145,264.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	142.86	₱1,600,032.00	GOOD	YES	1
BAGO APLAYA	MLCSP	300	₱19,100.00	40.05	₱764,955.00	GOOD	YES	1
BAGO APLAYA	MLCSP	300	₱19,100.00	219.77	₱4,197,607.00	GOOD	YES	1
26-C	MLCSP	150	₱11,200.00	3.71	₱41,552.00	GOOD	YES	1
27-C	MLCSP	150	₱11,200.00	155.64	₱1,743,168.00	GOOD	YES	1
27-C	MLCSP	150	₱11,200.00	150.89	₱1,689,968.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	10.44	₱116,928.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	56.38	₱631,456.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	51.4	₱575,680.00	GOOD	YES	1
LEON GARCIA SR.	MLCSP	150	₱11,200.00	9.75	₱109,200.00	GOOD	YES	1
32-D	MLCSP	300	₱19,100.00	118.33	₱2,260,103.00	GOOD	YES	1
32-D	MLCSP	300	₱19,100.00	86.96	₱1,660,936.00	GOOD	YES	1
BAGO APLAYA	MLCSP	600	₱40,100.00	69.46	₱2,785,346.00	GOOD	YES	2
BAGO APLAYA	MLCSP	600	₱40,100.00	230.12	₱9,227,812.00	GOOD	YES	2
BAGO APLAYA	MLCSP	600	₱40,100.00	196.64	₱7,885,264.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	177.11	₱1,983,632.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	169.1	₱1,893,920.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
AGDAO PROPER	MLCSP	150	₱11,200.00	6.83	₱76,496.00	GOOD	YES	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	46.1	₱516,320.00	GOOD	YES	1
20-B	MLCSP	150	₱11,200.00	52.02	₱582,624.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	12.1	₱135,520.00	GOOD	YES	1
20-B	MLCSP	150	₱11,200.00	41.11	₱460,432.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	1.2	₱13,440.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	48.43	₱542,416.00	GOOD	YES	1
20-B	MLCSP	150	₱11,200.00	0	₱0.00	GOOD	YES	1
20-B	MLCSP	150	₱11,200.00	0	₱0.00	GOOD	YES	1
20-B	MLCSP	150	₱11,200.00	1.49	₱16,688.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	5.98	₱66,976.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	170.17	₱1,905,904.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	278.99	₱3,124,688.00	GOOD	YES	1
19-B	MLCSP	150	₱11,200.00	2.77	₱31,024.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	37.07	₱708,037.00	GOOD	YES	1
2-A	MLCSP	300	₱19,100.00	127.25	₱2,430,475.00	GOOD	YES	1
39-D	MLCSP	300	₱19,100.00	5.37	₱102,567.00	GOOD	YES	1
DUMOY	MLCSP	600	₱40,100.00	461.42	₱18,502,942.00	GOOD	YES	1
BAGO APLAYA	MLCSP	600	₱40,100.00	168.6	₱6,760,860.00	GOOD	YES	2
BAGO APLAYA	MLCSP	600	₱40,100.00	345.04	₱13,836,104.00	GOOD	YES	1
31-D	MLCSP	300	₱19,100.00	9.14	₱174,574.00	GOOD	YES	1
37-D	MLCSP	300	₱19,100.00	63.83	₱1,219,153.00	GOOD	YES	1
7-A	MLCSP	600	₱40,100.00	78.89	₱3,163,489.00	GOOD	YES	1
BAGO APLAYA	MLCSP	600	₱40,100.00	347.68	₱13,941,968.00	GOOD	YES	2
BAGO APLAYA	MLCSP	600	₱40,100.00	424.6	₱17,026,460.00	GOOD	YES	1
TALOMO	MLCSP	250	₱17,700.00	85.41	₱1,511,757.00	GOOD	YES	1
TALOMO	MLCSP	300	₱19,100.00	1.65	₱31,515.00	GOOD	YES	1
TALOMO	MLCSP	300	₱19,100.00	152.94	₱2,921,154.00	GOOD	YES	2
BAGO APLAYA	MLCSP	500	₱33,200.00	65.78	₱2,183,896.00	GOOD	YES	1
BAGO APLAYA	MLCSP	400	₱23,600.00	96.4	₱2,275,040.00	GOOD	YES	1
BAGO APLAYA	MLCSP	400	₱23,600.00	29.3	₱691,480.00	GOOD	YES	1
BAGO APLAYA	MLCSP	400	₱23,600.00	17.98	₱424,328.00	GOOD	YES	2

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		IMPACT
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
6-A	MLCSP	600	₱40,100.00	101.25	₱4,060,125.00	GOOD	YES	1
TALOMO	MLCSP	900	₱56,500.00	99.08	₱5,598,020.00	GOOD	YES	1
TALOMO	MLCSP	900	₱56,500.00	20.76	₱1,172,940.00	GOOD	YES	1
TALOMO	MLCSP	900	₱56,500.00	32.44	₱1,832,860.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	58.36	₱653,632.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	65.89	₱737,968.00	GOOD	YES	2
DUMOY	MLCSP	500	₱33,200.00	347.62	₱11,540,984.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	39.52	₱754,832.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	42.46	₱810,986.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	13.94	₱156,128.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	17.73	₱198,576.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	91.74	₱1,027,488.00	GOOD	YES	2
TALOMO	MLCSP	450	₱24,300.00	8.64	₱209,952.00	GOOD	YES	1
BAGO APLAYA	MLCSP	450	₱24,300.00	8.51	₱206,793.00	GOOD	YES	1
BAGO APLAYA	MLCSP	450	₱24,300.00	30.74	₱746,982.00	GOOD	YES	1
TALOMO	MLCSP	600	₱40,100.00	4.63	₱185,663.00	GOOD	YES	1
BAGO APLAYA	MLCSP	600	₱40,100.00	41.6	₱1,668,160.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	15.67	₱175,504.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	344.39	₱3,857,168.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	5.7	₱63,840.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	55.48	₱621,376.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	13.1	₱146,720.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	1.49	₱16,688.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	123.52	₱1,383,424.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	156.25	₱1,750,000.00	GOOD	YES	2
5-A	MLCSP	150	₱11,200.00	56.71	₱635,152.00	GOOD	YES	1
19-B	MLCSP	400	₱23,600.00	13.31	₱314,116.00	GOOD	YES	1
BAGO APLAYA	MLCSP	450	₱24,300.00	362.12	₱8,799,516.00	GOOD	YES	1
BAGO APLAYA	MLCSP	450	₱24,300.00	476.45	₱11,577,735.00	GOOD	YES	1
BAGO APLAYA	MLCSP	700	₱44,200.00	13.77	₱608,634.00	GOOD	YES	1
TALOMO	MLCSP	700	₱44,200.00	219.87	₱9,718,254.00	GOOD	YES	1
BAGO APLAYA	MLCSP	700	₱44,200.00	7.87	₱347,854.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					SENSITIVITY		IMPACT
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
19-B	MLCSP	400	₱23,600.00	235.19	₱5,550,484.00	GOOD	YES	1
BUCANA	MLCSP	150	₱11,200.00	6.06	₱67,872.00	GOOD	YES	2
BUCANA	MLCSP	150	₱11,200.00	57.01	₱638,512.00	GOOD	YES	2
7-A	MLCSP	600	₱40,100.00	20.93	₱839,293.00	GOOD	YES	1
7-A	MLCSP	600	₱40,100.00	53.93	₱2,162,593.00	GOOD	YES	1
31-D	MLCSP	300	₱19,100.00	33.02	₱630,682.00	GOOD	YES	1
37-D	MLCSP	300	₱19,100.00	104.48	₱1,995,568.00	GOOD	YES	1
31-D	MLCSP	300	₱19,100.00	12.87	₱245,817.00	GOOD	YES	1
37-D	MLCSP	300	₱19,100.00	97.71	₱1,866,261.00	GOOD	YES	1
38-D	MLCSP	300	₱19,100.00	13.57	₱259,187.00	GOOD	YES	1
37-D	MLCSP	300	₱19,100.00	227.02	₱4,336,082.00	GOOD	YES	1
AGDAO PROPER	MLCSP	300	₱19,100.00	239.57	₱4,575,787.00	GOOD	YES	1
AGDAO PROPER	MLCSP	400	₱23,600.00	53.67	₱1,266,612.00	GOOD	YES	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	206.29	₱4,868,444.00	GOOD	YES	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	116.45	₱2,748,220.00	GOOD	YES	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	20.82	₱491,352.00	GOOD	YES	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	66.75	₱1,575,300.00	GOOD	YES	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	124.74	₱2,943,864.00	GOOD	YES	1
UBALDE	MLCSP	400	₱23,600.00	173.79	₱4,101,444.00	GOOD	YES	1
UBALDE	MLCSP	400	₱23,600.00	21.83	₱515,188.00	GOOD	YES	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	368.65	₱8,700,140.00	GOOD	YES	1
SAN ANTONIO	MLCSP	400	₱23,600.00	195.03	₱4,602,708.00	GOOD	YES	1
UBALDE	MLCSP	400	₱23,600.00	9.54	₱225,144.00	GOOD	YES	1
LAPU - LAPU	MLCSP	400	₱23,600.00	180.35	₱4,256,260.00	GOOD	YES	1
LAPU - LAPU	MLCSP	400	₱23,600.00	490.41	₱11,573,676.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	22.87	₱436,817.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	14.15	₱270,265.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	39.11	₱747,001.00	GOOD	YES	1
32-D	MLCSP	500	₱33,200.00	19.37	₱643,084.00	GOOD	YES	1
10-A	MLCSP	500	₱33,200.00	173.65	₱5,765,180.00	GOOD	YES	1
4-A	MLCSP	500	₱33,200.00	147.97	₱4,912,604.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	93.24	₱1,044,288.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
10-A	MLCSP	150	₱11,200.00	75.77	₱848,624.00	GOOD	YES	1
4-A	MLCSP	150	₱11,200.00	2.89	₱32,368.00	GOOD	YES	1
4-A	MLCSP	500	₱33,200.00	257.51	₱8,549,332.00	GOOD	YES	1
4-A	MLCSP	500	₱33,200.00	6.13	₱203,516.00	GOOD	YES	1
4-A	MLCSP	500	₱33,200.00	36.32	₱1,205,824.00	GOOD	YES	1
UBALDE	MLCSP	400	₱23,600.00	56.8	₱1,340,480.00	GOOD	YES	1
LAPU - LAPU	MLCSP	400	₱23,600.00	162.28	₱3,829,808.00	GOOD	YES	1
CENTRO	MLCSP	400	₱23,600.00	93.72	₱2,211,792.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	16.87	₱188,944.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	32.12	₱359,744.00	GOOD	YES	1
MATINA CROSSING	MLCSP	150	₱11,200.00	11.21	₱125,552.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	21.56	₱241,472.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	59.72	₱668,864.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	83.29	₱932,848.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	42.48	₱475,776.00	GOOD	YES	2
MATINA CROSSING	MLCSP	150	₱11,200.00	0.4	₱4,480.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	38.45	₱430,640.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	1.58	₱17,696.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	40.8	₱456,960.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	41.65	₱466,480.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	1.93	₱21,616.00	GOOD	YES	2
MATINA APLAYA	MLCSP	150	₱11,200.00	52.77	₱591,024.00	GOOD	YES	2
AGDAO PROPER	MLCSP	150	₱11,200.00	72.06	₱807,072.00	GOOD	YES	1
TALOMO	MLCSP	250	₱17,700.00	65.6	₱1,161,120.00	GOOD	YES	1
TALOMO	MLCSP	250	₱17,700.00	44.64	₱790,128.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	9.58	₱119,750.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	87.85	₱1,098,125.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	154.15	₱1,926,875.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	208.51	₱2,606,375.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	49.17	₱614,625.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	164.74	₱2,059,250.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	61.23	₱765,375.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
SASA	MLCSP	200	₱12,500.00	601.31	₱7,516,375.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	105.05	₱1,313,125.00	GOOD	YES	1
V. HIZON	MLCSP	250	₱17,700.00	130.5	₱2,309,850.00	GOOD	YES	1
A. ANGLIONGTO	MLCSP	250	₱17,700.00	38.27	₱677,379.00	GOOD	YES	1
A. ANGLIONGTO	MLCSP	250	₱17,700.00	7.29	₱129,033.00	GOOD	YES	1
V. HIZON	MLCSP	300	₱19,100.00	15.35	₱293,185.00	GOOD	YES	1
PAMPANGA	MLCSP	300	₱19,100.00	118.53	₱2,263,923.00	GOOD	YES	1
PAMPANGA	MLCSP	300	₱19,100.00	45.71	₱873,061.00	GOOD	YES	1
V. HIZON	MLCSP	250	₱17,700.00	2.88	₱50,976.00	GOOD	YES	1
PAMPANGA	MLCSP	250	₱17,700.00	12.43	₱220,011.00	GOOD	YES	1
SASA	MLCSP	250	₱17,700.00	75.16	₱1,330,332.00	GOOD	YES	1
PAMPANGA	MLCSP	250	₱17,700.00	223.75	₱3,960,375.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	96.35	₱1,204,375.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	6.01	₱75,125.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	3.12	₱39,000.00	GOOD	YES	1
SASA	MLCSP	250	₱17,700.00	22.6	₱400,020.00	GOOD	YES	1
SASA	MLCSP	250	₱17,700.00	154.43	₱2,733,411.00	GOOD	YES	1
SASA	MLCSP	250	₱17,700.00	167.17	₱2,958,909.00	GOOD	YES	1
SASA	MLCSP	250	₱17,700.00	84.53	₱1,496,181.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	15.76	₱197,000.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	178.68	₱2,233,500.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	55.47	₱693,375.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	15.42	₱192,750.00	GOOD	YES	1
V. HIZON	MLCSP	250	₱17,700.00	386.97	₱6,849,369.00	GOOD	YES	1
PAMPANGA	MLCSP	250	₱17,700.00	23.61	₱417,897.00	GOOD	YES	1
PAMPANGA	MLCSP	250	₱17,700.00	23.06	₱408,162.00	GOOD	YES	1
PAMPANGA	MLCSP	300	₱19,100.00	336.36	₱6,424,476.00	GOOD	YES	1
SASA	MLCSP	250	₱17,700.00	112.27	₱1,987,179.00	GOOD	YES	1
SASA	MLCSP	250	₱17,700.00	152.72	₱2,703,144.00	GOOD	YES	1
SASA	MLCSP	250	₱17,700.00	131.4	₱2,325,780.00	GOOD	YES	1
SASA	MLCSP	250	₱17,700.00	110.93	₱1,963,461.00	GOOD	YES	1
V. HIZON	MLCSP	250	₱17,700.00	279.12	₱4,940,424.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
V. HIZON	MLCSP	250	₱17,700.00	384.89	₱6,812,553.00	GOOD	YES	1
V. HIZON	MLCSP	250	₱17,700.00	107.3	₱1,899,210.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	149.99	₱1,874,875.00	GOOD	YES	1
SASA	MLCSP	200	₱12,500.00	155.39	₱1,942,375.00	GOOD	YES	1
BAGO GALLERA	MLCSP	350	₱20,800.00	201.34	₱4,187,872.00	GOOD	YES	1
BAGO GALLERA	MLCSP	350	₱20,800.00	0	₱0.00	GOOD	YES	1
BAGO GALLERA	MLCSP	350	₱20,800.00	0	₱0.00	GOOD	YES	1
BAGO GALLERA	MLCSP	350	₱20,800.00	217.28	₱4,519,424.00	GOOD	YES	1
BAGO APLAYA	MLCSP	350	₱20,800.00	25.65	₱533,520.00	GOOD	YES	1
BAGO APLAYA	MLCSP	350	₱20,800.00	256.4	₱5,333,120.00	GOOD	YES	1
BAGO GALLERA	MLCSP	350	₱20,800.00	120.55	₱2,507,440.00	GOOD	YES	1
BAGO APLAYA	MLCSP	350	₱20,800.00	105.58	₱2,196,064.00	GOOD	YES	1
BAGO APLAYA	MLCSP	350	₱20,800.00	449.95	₱9,358,960.00	GOOD	YES	1
BAGO APLAYA	MLCSP	350	₱20,800.00	97.58	₱2,029,664.00	GOOD	YES	1
BAGO APLAYA	MLCSP	350	₱20,800.00	346.5	₱7,207,200.00	GOOD	YES	1
BAGO APLAYA	MLCSP	250	₱17,700.00	14.99	₱265,323.00	GOOD	YES	1
BAGO GALLERA	MLCSP	350	₱20,800.00	187.42	₱3,898,336.00	GOOD	YES	1
BAGO GALLERA	MLCSP	350	₱20,800.00	217.59	₱4,525,872.00	GOOD	YES	1
BAGO APLAYA	MLCSP	350	₱20,800.00	38.7	₱804,960.00	GOOD	YES	1
BAGO APLAYA	MLCSP	350	₱20,800.00	243.39	₱5,062,512.00	GOOD	YES	1
11-B	MLCSP	300	₱19,100.00	60.43	₱1,154,213.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	190.87	₱3,645,617.00	GOOD	YES	1
V. HIZON	MLCSP	300	₱19,100.00	261.76	₱4,999,616.00	GOOD	YES	1
V. HIZON	MLCSP	300	₱19,100.00	314.57	₱6,008,287.00	GOOD	YES	1
PAMPANGA	MLCSP	300	₱19,100.00	73.97	₱1,412,827.00	GOOD	YES	1
V. HIZON	MLCSP	300	₱19,100.00	10.52	₱200,932.00	GOOD	YES	1
16-B	MLCSP	300	₱19,100.00	13.62	₱260,142.00	GOOD	YES	1
15-B	MLCSP	300	₱19,100.00	323.39	₱6,176,749.00	GOOD	YES	1
15-B	MLCSP	300	₱19,100.00	158.37	₱3,024,867.00	GOOD	YES	1
16-B	MLCSP	300	₱19,100.00	50.22	₱959,202.00	GOOD	YES	1
16-B	MLCSP	150	₱11,200.00	176.25	₱1,974,000.00	GOOD	YES	1
16-B	MLCSP	150	₱11,200.00	59.1	₱661,920.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
16-B	MLCSP	150	₱11,200.00	114.97	₱1,287,664.00	GOOD	YES	1
16-B	MLCSP	150	₱11,200.00	4.43	₱49,616.00	GOOD	YES	1
16-B	MLCSP	150	₱11,200.00	168.37	₱1,885,744.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	25.58	₱286,496.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	82.2	₱920,640.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	215.35	₱2,411,920.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	48.89	₱547,568.00	GOOD	YES	1
16-B	MLCSP	150	₱11,200.00	0.97	₱10,864.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	171.17	₱1,917,104.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	3.66	₱69,906.00	GOOD	YES	1
AGDAO PROPER	MLCSP	300	₱19,100.00	111.52	₱2,130,032.00	GOOD	YES	1
A. ANGLIONGTO	MLCSP	250	₱17,700.00	252.42	₱4,467,834.00	GOOD	YES	1
A. ANGLIONGTO	MLCSP	250	₱17,700.00	176.14	₱3,117,678.00	GOOD	YES	1
A. ANGLIONGTO	MLCSP	250	₱17,700.00	69.97	₱1,238,469.00	GOOD	YES	1
A. ANGLIONGTO	MLCSP	400	₱23,600.00	16.33	₱385,388.00	GOOD	YES	1
A. ANGLIONGTO	MLCSP	400	₱23,600.00	6.36	₱150,096.00	GOOD	YES	1
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	124.49	₱2,937,964.00	GOOD	YES	1
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	78.76	₱1,858,736.00	GOOD	YES	1
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	53.09	₱1,252,924.00	GOOD	YES	1
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	81.13	₱1,914,668.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	400	₱23,600.00	72.27	₱1,705,572.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	400	₱23,600.00	12.06	₱284,616.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	400	₱23,600.00	58.37	₱1,377,532.00	GOOD	YES	1
BUHANGIN	MLCSP	400	₱23,600.00	1.98	₱46,728.00	GOOD	YES	1
BUHANGIN	MLCSP	400	₱23,600.00	13.48	₱318,128.00	GOOD	YES	1
SAN ANTONIO	MLCSP	400	₱23,600.00	207.81	₱4,904,316.00	GOOD	YES	1
SAN ANTONIO	MLCSP	400	₱23,600.00	19.44	₱458,784.00	GOOD	YES	1
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	113.36	₱2,675,296.00	GOOD	YES	1
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	43.75	₱1,032,500.00	GOOD	YES	1
28-C	MLCSP	150	₱11,200.00	41.08	₱460,096.00	GOOD	YES	1
30-C	MLCSP	400	₱23,600.00	85.55	₱2,018,980.00	GOOD	YES	1
30-C	MLCSP	150	₱11,200.00	159.98	₱1,791,776.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
14-B	MLCSP	400	₱23,600.00	71.45	₱1,686,220.00	GOOD	YES	1
30-C	MLCSP	400	₱23,600.00	7.64	₱180,304.00	GOOD	YES	1
14-B	MLCSP	400	₱23,600.00	59.98	₱1,415,528.00	GOOD	YES	1
AGDAO PROPER	MLCSP	200	₱12,500.00	20.1	₱251,250.00	GOOD	YES	1
40-D	MLCSP	250	₱17,700.00	283.77	₱5,022,729.00	GOOD	YES	1
2-A	MLCSP	250	₱17,700.00	7.32	₱129,564.00	GOOD	YES	1
39-D	MLCSP	250	₱17,700.00	45.97	₱813,669.00	GOOD	YES	1
39-D	MLCSP	250	₱17,700.00	150.29	₱2,660,133.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	55.61	₱1,062,151.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	106.45	₱2,033,195.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	92.88	₱1,774,008.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	150	₱11,200.00	15.86	₱177,632.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	5.45	₱61,040.00	GOOD	YES	1
AGDAO PROPER	MLCSP	400	₱23,600.00	421.48	₱9,946,928.00	GOOD	YES	1
MA-A	MLCSP	750	₱48,500.00	67.96	₱3,296,060.00	GOOD	YES	1
MA-A	MLCSP	750	₱48,500.00	95.39	₱4,626,415.00	GOOD	YES	1
MA-A	MLCSP	750	₱48,500.00	16.15	₱783,275.00	GOOD	YES	1
5-A	MLCSP	750	₱48,500.00	150.79	₱7,313,315.00	GOOD	YES	1
5-A	MLCSP	750	₱48,500.00	45.83	₱2,222,755.00	GOOD	YES	1
2-A	MLCSP	750	₱48,500.00	13.62	₱660,570.00	GOOD	YES	1
2-A	MLCSP	750	₱48,500.00	35.84	₱1,738,240.00	GOOD	YES	1
BUCANA	MLCSP	750	₱48,500.00	43.9	₱2,129,150.00	GOOD	YES	1
BUCANA	MLCSP	750	₱48,500.00	210.73	₱10,220,405.00	GOOD	YES	1
BAGO GALLERA	MLCSP	350	₱20,800.00	23.71	₱493,168.00	GOOD	YES	1
BAGO APLAYA	MLCSP	350	₱20,800.00	148.52	₱3,089,216.00	GOOD	YES	1
BAGO APLAYA	MLCSP	350	₱20,800.00	397	₱8,257,600.00	GOOD	YES	1
BAGO GALLERA	MLCSP	300	₱19,100.00	4.41	₱84,231.00	GOOD	YES	2
BAGO APLAYA	MLCSP	300	₱19,100.00	8.71	₱166,361.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	400	₱23,600.00	7.72	₱182,192.00	GOOD	YES	1
2-A	MLCSP	300	₱19,100.00	13.62	₱260,142.00	GOOD	YES	1
SASA	MLCSP	250	₱17,700.00	317.51	₱5,619,927.00	GOOD	YES	1
31-D	MLCSP	300	₱19,100.00	105.93	₱2,023,263.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
31-D	MLCSP	150	₱11,200.00	16.42	₱183,904.00	GOOD	YES	1
35-D	MLCSP	200	₱12,500.00	10.88	₱136,000.00	GOOD	YES	1
18-B	MLCSP	150	₱11,200.00	347.83	₱3,895,696.00	GOOD	YES	1
39-D	MLCSP	300	₱19,100.00	70.35	₱1,343,685.00	GOOD	YES	1
39-D	MLCSP	300	₱19,100.00	65.28	₱1,246,848.00	GOOD	YES	1
38-D	MLCSP	300	₱19,100.00	7.79	₱148,789.00	GOOD	YES	1
39-D	MLCSP	300	₱19,100.00	18.93	₱361,563.00	GOOD	YES	1
26-C	MLCSP	150	₱11,200.00	156.73	₱1,755,376.00	GOOD	YES	1
23-C	MLCSP	150	₱11,200.00	4.57	₱51,184.00	GOOD	YES	1
26-C	MLCSP	150	₱11,200.00	3.84	₱43,008.00	GOOD	YES	1
23-C	MLCSP	150	₱11,200.00	3.9	₱43,680.00	GOOD	YES	1
32-D	MLCSP	300	₱19,100.00	10.2	₱194,820.00	GOOD	YES	1
31-D	MLCSP	300	₱19,100.00	8.38	₱160,058.00	GOOD	YES	1
31-D	MLCSP	300	₱19,100.00	150.78	₱2,879,898.00	GOOD	YES	1
32-D	MLCSP	300	₱19,100.00	85.03	₱1,624,073.00	GOOD	YES	1
24-C	MLCSP	300	₱19,100.00	18.13	₱346,283.00	GOOD	YES	1
31-D	MLCSP	300	₱19,100.00	3.56	₱67,996.00	GOOD	YES	1
27-C	MLCSP	200	₱12,500.00	18.97	₱237,125.00	GOOD	YES	1
SASA	MLCSP	250	₱17,700.00	178.33	₱3,156,441.00	GOOD	YES	1
12-B	MLCSP	100	₱11,000.00	0.78	₱8,580.00	GOOD	YES	1
TALOMO	MLCSP	450	₱24,300.00	5.47	₱132,921.00	GOOD	YES	1
TALOMO	MLCSP	450	₱24,300.00	23.69	₱575,667.00	GOOD	YES	1
TALOMO	MLCSP	450	₱24,300.00	65.2	₱1,584,360.00	GOOD	YES	1
TALOMO	MLCSP	450	₱24,300.00	2.35	₱57,105.00	GOOD	YES	1
MATINA CROSSING	MLCSP	350	₱20,800.00	162.66	₱3,383,328.00	GOOD	YES	1
MATINA CROSSING	MLCSP	350	₱20,800.00	239.21	₱4,975,568.00	GOOD	YES	1
MATINA APLAYA	MLCSP	350	₱20,800.00	98.18	₱2,042,144.00	GOOD	YES	1
MATINA APLAYA	MLCSP	300	₱19,100.00	56.03	₱1,070,173.00	GOOD	YES	2
MATINA APLAYA	MLCSP	300	₱19,100.00	258.46	₱4,936,586.00	GOOD	YES	1
MATINA APLAYA	MLCSP	300	₱19,100.00	180.87	₱3,454,617.00	GOOD	YES	1
MATINA APLAYA	MLCSP	300	₱19,100.00	169.9	₱3,245,090.00	GOOD	YES	2
BAGO APLAYA	MLCSP	350	₱20,800.00	7.81	₱162,448.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
BAGO APLAYA	MLCSP	250	₱17,700.00	7.69	₱136,113.00	GOOD	YES	1
DUMOY	MLCSP	250	₱17,700.00	15	₱265,500.00	GOOD	YES	1
BAGO APLAYA	MLCSP	250	₱17,700.00	5.64	₱99,828.00	GOOD	YES	1
BAGO APLAYA	MLCSP	250	₱17,700.00	26.25	₱464,625.00	GOOD	YES	1
BAGO APLAYA	MLCSP	250	₱17,700.00	1.77	₱31,329.00	GOOD	YES	1
BAGO GALLERA	MLCSP	250	₱17,700.00	6.99	₱123,723.00	GOOD	YES	1
PAMPANGA	MLCSP	300	₱19,100.00	3.45	₱65,895.00	GOOD	YES	1
V. HIZON	MLCSP	250	₱17,700.00	2.68	₱47,436.00	GOOD	YES	1
V. HIZON	MLCSP	250	₱17,700.00	8.89	₱157,353.00	GOOD	YES	1
PANACAN	MLCSP	250	₱17,700.00	43.61	₱771,897.00	GOOD	YES	1
PANACAN	MLCSP	250	₱17,700.00	182.18	₱3,224,586.00	GOOD	YES	1
PANACAN	MLCSP	250	₱17,700.00	27.61	₱488,697.00	GOOD	YES	2
PANACAN	MLCSP	250	₱17,700.00	20.56	₱363,912.00	GOOD	YES	1
PANACAN	MLCSP	250	₱17,700.00	337.97	₱5,982,069.00	GOOD	YES	1
PANACAN	MLCSP	250	₱17,700.00	27.17	₱480,909.00	GOOD	YES	2
PANACAN	MLCSP	250	₱17,700.00	149.5	₱2,646,150.00	GOOD	YES	1
PANACAN	MLCSP	250	₱17,700.00	355.99	₱6,301,023.00	GOOD	YES	1
TIBUNGCO	MLCSP	400	₱23,600.00	21.98	₱518,728.00	GOOD	YES	1
TIBUNGCO	MLCSP	400	₱23,600.00	50.15	₱1,183,540.00	GOOD	YES	1
TIBUNGCO	MLCSP	400	₱23,600.00	99.02	₱2,336,872.00	GOOD	YES	1
PANACAN	MLCSP	250	₱17,700.00	137.02	₱2,425,254.00	GOOD	YES	1
PANACAN	MLCSP	250	₱17,700.00	98.2	₱1,738,140.00	GOOD	YES	1
PANACAN	MLCSP	250	₱17,700.00	482.76	₱8,544,852.00	GOOD	YES	1
SASA	MLCSP	300	₱19,100.00	79.92	₱1,526,472.00	GOOD	YES	1
6-A	MLCSP	600	₱40,100.00	76.07	₱3,050,407.00	GOOD	YES	1
6-A	MLCSP	600	₱40,100.00	14.1	₱565,410.00	GOOD	YES	1
5-A	MLCSP	600	₱40,100.00	9.16	₱367,316.00	GOOD	YES	1
6-A	MLCSP	600	₱40,100.00	9.89	₱396,589.00	GOOD	YES	1
PAMPANGA	MLCSP	300	₱19,100.00	18.37	₱350,867.00	GOOD	YES	1
SASA	MLCSP	300	₱19,100.00	169.79	₱3,242,989.00	GOOD	YES	1
PAMPANGA	MLCSP	300	₱19,100.00	276.83	₱5,287,453.00	GOOD	YES	1
BAGO APLAYA	MLCSP	450	₱24,300.00	40.05	₱973,215.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
BAGO APLAYA	MLCSP	450	₱24,300.00	150.52	₱3,657,636.00	GOOD	YES	1
BAGO APLAYA	MLCSP	450	₱24,300.00	12.26	₱297,918.00	GOOD	YES	1
BAGO APLAYA	MLCSP	450	₱24,300.00	49.9	₱1,212,570.00	GOOD	YES	1
PANACAN	MLCSP	250	₱17,700.00	180.38	₱3,192,726.00	GOOD	YES	1
PANACAN	MLCSP	250	₱17,700.00	0.71	₱12,567.00	GOOD	YES	1
11-B	MLCSP	300	₱19,100.00	11.72	₱223,852.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	100.29	₱1,915,539.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	7.9	₱150,890.00	GOOD	YES	1
19-B	MLCSP	300	₱19,100.00	45.56	₱870,196.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	18.07	₱202,384.00	GOOD	YES	1
MATINA APLAYA	MLCSP	150	₱11,200.00	24.03	₱269,136.00	GOOD	YES	1
BAGO APLAYA	MLCSP	400	₱23,600.00	3.98	₱93,928.00	GOOD	YES	1
BAGO APLAYA	MLCSP	400	₱23,600.00	106.19	₱2,506,084.00	GOOD	YES	1
BAGO APLAYA	MLCSP	400	₱23,600.00	105.04	₱2,478,944.00	GOOD	YES	2
BAGO APLAYA	MLCSP	400	₱23,600.00	308.85	₱7,288,860.00	GOOD	YES	1
BAGO APLAYA	MLCSP	400	₱23,600.00	149.64	₱3,531,504.00	GOOD	YES	2
BAGO APLAYA	MLCSP	250	₱17,700.00	16.85	₱298,245.00	GOOD	YES	1
BAGO APLAYA	MLCSP	250	₱17,700.00	22.45	₱397,365.00	GOOD	YES	1
BAGO APLAYA	MLCSP	600	₱40,100.00	133.67	₱5,360,167.00	GOOD	YES	1
BAGO APLAYA	MLCSP	600	₱40,100.00	89.84	₱3,602,584.00	GOOD	YES	1
BAGO APLAYA	MLCSP	600	₱40,100.00	309.24	₱12,400,524.00	GOOD	YES	1
BAGO APLAYA	MLCSP	600	₱40,100.00	154.19	₱6,183,019.00	GOOD	YES	1
BUCANA	MLCSP	250	₱17,700.00	35.28	₱624,456.00	GOOD	YES	1
BUCANA	MLCSP	250	₱17,700.00	149.35	₱2,643,495.00	GOOD	YES	1
MATINA APLAYA	MLCSP	250	₱17,700.00	922.6	₱16,330,020.00	GOOD	YES	1
MATINA APLAYA	MLCSP	250	₱17,700.00	1,041.85	₱18,440,745.00	GOOD	YES	1
20-B	MLCSP	150	₱11,200.00	60.44	₱676,928.00	GOOD	YES	1
20-B	MLCSP	150	₱11,200.00	21.7	₱243,040.00	GOOD	YES	1
20-B	MLCSP	150	₱11,200.00	41.02	₱459,424.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	3.91	₱43,792.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	40.94	₱458,528.00	GOOD	YES	1
10-A	MLCSP	150	₱11,200.00	17.38	₱194,656.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CON-DITION	HAZARD RESISTANT DESIGN	DEGREE OF IM-PACT
PANACAN	MLCSP	400	₱23,600.00	128.05	₱3,021,980.00	GOOD	YES	1
PANACAN	MLCSP	400	₱23,600.00	394.81	₱9,317,516.00	GOOD	YES	1
PANACAN	MLCSP	400	₱23,600.00	127.58	₱3,010,888.00	GOOD	YES	1
ILANG	MLCSP	400	₱23,600.00	175.96	₱4,152,656.00	GOOD	YES	2
ILANG	MLCSP	400	₱23,600.00	0	₱0.00	GOOD	YES	2
ILANG	MLCSP	400	₱23,600.00	0	₱0.00	GOOD	YES	2
ILANG	MLCSP	400	₱23,600.00	110.08	₱2,597,888.00	GOOD	YES	1
ILANG	MLCSP	400	₱23,600.00	1,130.94	₱26,690,184.00	GOOD	YES	1
ILANG	MLCSP	400	₱23,600.00	268.62	₱6,339,432.00	GOOD	YES	2
TIBUNGCO	MLCSP	400	₱23,600.00	109.09	₱2,574,524.00	GOOD	YES	1
TIBUNGCO	MLCSP	400	₱23,600.00	101.99	₱2,406,964.00	GOOD	YES	1
TIBUNGCO	MLCSP	400	₱23,600.00	200.18	₱4,724,248.00	GOOD	YES	1
ILANG	MLCSP	400	₱23,600.00	4.44	₱104,784.00	GOOD	YES	2
ILANG	MLCSP	400	₱23,600.00	25.45	₱600,620.00	GOOD	YES	1
ILANG	MLCSP	400	₱23,600.00	710.32	₱16,763,552.00	GOOD	YES	1
ILANG	MLCSP	400	₱23,600.00	316.97	₱7,480,492.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	54.26	₱1,036,366.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	59.75	₱1,141,225.00	GOOD	YES	1
TALOMO	MLCSP	450	₱24,300.00	6.06	₱147,258.00	GOOD	YES	1
TALOMO	MLCSP	750	₱48,500.00	17.28	₱838,080.00	GOOD	YES	2
TALOMO	MLCSP	750	₱48,500.00	411.28	₱19,947,080.00	GOOD	YES	1
TALOMO	MLCSP	750	₱48,500.00	45.2	₱2,192,200.00	GOOD	YES	1
TALOMO	MLCSP	750	₱48,500.00	69.41	₱3,366,385.00	GOOD	YES	1
TALOMO	MLCSP	350	₱20,800.00	39.38	₱819,104.00	GOOD	YES	1
TALOMO	MLCSP	350	₱20,800.00	569.71	₱11,849,968.00	GOOD	YES	1
TALOMO	MLCSP	250	₱17,700.00	16.21	₱286,917.00	GOOD	YES	1
TALOMO	MLCSP	350	₱20,800.00	5.75	₱119,600.00	GOOD	YES	1
TALOMO	MLCSP	350	₱20,800.00	347.65	₱7,231,120.00	GOOD	YES	1
TALOMO	MLCSP	350	₱20,800.00	89.7	₱1,865,760.00	GOOD	YES	1
TALOMO	MLCSP	250	₱17,700.00	161.17	₱2,852,709.00	GOOD	YES	1
TALOMO	MLCSP	250	₱17,700.00	166.83	₱2,952,891.00	GOOD	YES	1
TALOMO	MLCSP	250	₱17,700.00	0.61	₱10,797.00	GOOD	YES	1

Table LU-102. Lifeline Utilities, Level III Water System, Waterlines, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFE-LINE	EXISTING CONDI-TION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
TALOMO	MLCSP	700	₱44,200.00	275.23	₱12,165,166.00	GOOD	YES	2
TALOMO	MLCSP	700	₱44,200.00	78.15	₱3,454,230.00	GOOD	YES	1
TALOMO	MLCSP	700	₱44,200.00	316.94	₱14,008,748.00	GOOD	YES	1
TALOMO	MLCSP	350	₱20,800.00	217.93	₱4,532,944.00	GOOD	YES	1
TALOMO	MLCSP	350	₱20,800.00	8.74	₱181,792.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	400	₱23,600.00	12.17	₱287,212.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	71.18	₱797,216.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	2.02	₱22,624.00	GOOD	YES	1
AGDAO PROPER	MLCSP	400	₱23,600.00	24.87	₱586,932.00	GOOD	YES	1
AGDAO PROPER	MLCSP	400	₱23,600.00	5.86	₱138,296.00	GOOD	YES	1
SAN ANTONIO	MLCSP	400	₱23,600.00	3.88	₱91,568.00	GOOD	YES	1
A. ANGLIONGTO	MLCSP	300	₱19,100.00	348.51	₱6,656,541.00	GOOD	YES	1
LAPU - LAPU	MLCSP	300	₱19,100.00	5.08	₱97,028.00	GOOD	YES	1
V. HIZON	MLCSP	300	₱19,100.00	37.03	₱707,273.00	GOOD	YES	1
V. HIZON	MLCSP	300	₱19,100.00	125.42	₱2,395,522.00	GOOD	YES	1
A. ANGLIONGTO	MLCSP	300	₱19,100.00	23.08	₱440,828.00	GOOD	YES	1
MATINA APLAYA	MLCSP	250	₱17,700.00	27.27	₱482,679.00	GOOD	YES	1
MATINA APLAYA	MLCSP	250	₱17,700.00	244.85	₱4,333,845.00	GOOD	YES	1
MATINA APLAYA	MLCSP	250	₱17,700.00	69.11	₱1,223,247.00	GOOD	YES	1
MATINA APLAYA	MLCSP	250	₱17,700.00	266.89	₱4,723,953.00	GOOD	YES	1
BUCANA	MLCSP	250	₱17,700.00	240.33	₱4,253,841.00	GOOD	YES	1
BUCANA	MLCSP	250	₱17,700.00	193.89	₱3,431,853.00	GOOD	YES	1
TIBUNGCO	MLCSP	400	₱23,600.00	10.06	₱237,416.00	GOOD	YES	1
TIBUNGCO	MLCSP	350	₱20,800.00	21.54	₱448,032.00	GOOD	YES	1
TIBUNGCO	MLCSP	350	₱20,800.00	5.56	₱115,648.00	GOOD	YES	1
TIBUNGCO	MLCSP	350	₱20,800.00	22.6	₱470,080.00	GOOD	YES	1
AGDAO PROPER	MLCSP	150	₱11,200.00	55.96	₱626,752.00	GOOD	YES	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	8.48	₱94,976.00	GOOD	YES	1
AGDAO PROPER	MLCSP	150	₱11,200.00	37.93	₱424,816.00	GOOD	YES	1
15-B	MLCSP	150	₱11,200.00	19.13	₱214,256.00	GOOD	YES	1
SAN ANTONIO	MLCSP	400	₱23,600.00	78.61	₱1,855,196.00	GOOD	YES	1
WILFREDO AQUINO	MLCSP	400	₱23,600.00	122.72	₱2,896,192.00	GOOD	YES	1
SAN ANTONIO	MLCSP	400	₱23,600.00	79.36	₱1,872,896.00	GOOD	YES	1
SAN ANTONIO	MLCSP	400	₱23,600.00	166.74	₱3,935,064.00	GOOD	YES	1
SAN ANTONIO	MLCSP	400	₱23,600.00	121.28	₱2,862,208.00	GOOD	YES	1

Degree of Impact for DCWD Wells

A total of 14 DCWD wells have moderate degree of impact. They have good existing condition and with hazard resistant design.

Table LU-103. Lifeline Utilities, DCWD Production Wells, Degree of Impact Table for Storm Surge, Davao City

EXPOSURE			SENSITIVITY			DEGREE OF IMPACT
LOCATION	PUMP TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	
Km. 7, Talomo Sump Bangkal, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
UUHSA, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Km. 8 Ulas, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Puan Junction, Brgy. Talomo	SUBMERSIBLE	6,500,000.00	6,500,000.00	GOOD	YES	2
Lower Rapnaga, Puan, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Lower Rapnaga, Puan, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Crossing Bago Aplaya, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Km. 10 Bago Aplaya fronting Ideal Subdivision, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Km. 11 Dumoy near the entrance to Dusnai, Brgy. Dumoy	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Bago Gallera Road near Gallera De Oro Subd., Brgy. Bago Gallera	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Km. 9, Puan along Davao Cotabato Road Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Catotal Subdivision near Block 22, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2
Gallera de Oro Subdivision near Block 8, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	GOOD	YES	2

Degree of Impact for Cell Sites

Cell sites in Bucana, Panacan, Matina Aplaya, and Bago Aplaya have high degree of impact.

Table LU-104. Lifeline Utilities, Cell Sites, Degree of Impact Table for Storm Surge with 2-meter wave, Davao City

EXPOSURE (Storm Surge - 2m)				SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
DIGITEL MOBILE PHILIPPINES, INC.	Lorenzo Manuel St., San Vicente Daliao, Toril, Davao City,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
GLOBE TELECOM, INC.	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
GLOBE TELECOM, INC.	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	JMS Bldg., #88 Maya Street, Barangay 76A, Ecoland,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Magno Prop., No. 64 V. Mapa St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	No. 64 V. Mapa St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro corner Quimpo Blvd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
GLOBE TELECOM, INC.	Bonifacio St., cor M.L. Quezon Blvd	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	1	1.5
DIGITEL MOBILE PHILIPPINES, INC.	109 Piapi, Quezon Blvd,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Santiago's Lot, Brgy. Sasa Buhangin,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Erlinda Reyes Bldg., 19-Piapi Quezon Blvd.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	D. Ponce St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1

Table LU-104. Lifeline Utilities, Cell Sites, Degree of Impact Table for Storm Surge with 2-meter wave, Davao City

EXPOSURE (Storm Surge - 2m)				SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
DIGITEL MOBILE PHILIPPINES, INC.	Chippens Bldg., 368 Padre Gomez St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Chippens Bldg., 368 Padre Gomez St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Gov. Sales St., Brgy. 27	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Jose Co Bldg., Gov. Sales St., Brgy. 27,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	NCC Mall Uyanguren	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	1	1.5
SMART COMMUNICATIONS, INC.	NCC Mall Unaguren	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	1	1.5
SMART COMMUNICATIONS, INC.	PBCOM Bldg., Monteverde cor. Bangoy St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	1	1.5
SMART COMMUNICATIONS, INC.	PLDT Post fronting Chimes Store, Sales St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
DIGITEL MOBILE PHILIPPINES, INC.	Lapu Lapu corner Bangoy Sts., Agdao,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Lapu-lapu St., cor. Bangoy Agdao,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Banco Filipino Bldg., Lapu-lapu St., cor. Dacudao Ave.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
GLOBE TELECOM, INC.	Wescon Suites Cmpd., R. Castillo, Agdao	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Llanes Prop 1, Cabaguio Ave., Agdao,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	1	1.5
SMART COMMUNICATIONS, INC.	Cabaguio Ave., Agdao	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	1	1.5
GLOBE TELECOM, INC.	R. Castillo St., Otero Compound, Lapu-Lapu	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Leonor Property, Camia St., Ubalde Subd.,Brgy. Ubalde	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Camia St., Ubalde Subd., Brgy. Ubalde	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Waterfront Hotel, Lanang,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1

Table LU-104. Lifeline Utilities, Cell Sites, Degree of Impact Table for Storm Surge with 2-meter wave, Davao City

EXPOSURE (Storm Surge - 2m)				SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	Doña Asuncion Road, Brgy. Pampanga, Lanang,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Km. 9, KMA, Brgy. Sasa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Sitio Nahul, Barangay Baliok,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Sitio Nahul, Brgy. Baliok	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
GLOBE TELECOM, INC.	National Highway Panacan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2

Table LU-104. Lifeline Utilities, Cell Sites, Degree of Impact Table for Storm Surge with 3-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			Degree of Impact		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
GLOBE TELECOM, INC.	Brgy. Daliao, Toril,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
SMART COMMUNICATIONS, INC.	Brgy. Daliao, Toril	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Sandawa, McArthur Hi-Way, Matina,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
SMART COMMUNICATIONS, INC.	Sandawa, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
GLOBE TELECOM, INC.	Magallanes St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
SMART COMMUNICATIONS, INC.	#88 Maya St., Brgy. 76A, Ecoland,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro cor. Quimpo Blvd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	1	1.5
SMART COMMUNICATIONS, INC.	Ponciano Reyes St. (crooked Rd.)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
DIGITEL MOBILE PHILIPPINES, INC.	Magno Bldg., Ponciano Reyes St. (crooked rd.),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1

Table LU-105 Lifeline Utilities, Cell Sites, Degree of Impact Table for Storm Surge with 3-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			Degree of Impact		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Baguio (Pob.),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
DIGITEL MOBILE PHILIPPINES, INC.	Km.12, National Highway, Barangay Catalunan Pequeno,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	PLDT Ponciano, PLDT Bldg., Ponciano St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
DIGITEL MOBILE PHILIPPINES, INC.	Regency Inn, Villa Abrille St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Holy Cross College, Sta. Ana Ave. Cor Guerero	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
GLOBE TELECOM, INC.	San Pedro Hospital Guzman St., Brgy. Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Brgy. Gov. Vicente Duterte,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
GLOBE TELECOM, INC.	Corner Palma Gil & Cervantes St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	University of Southern Philippines, Trade School Drive	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Opal St., Obrero,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Opal St., Obrero	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	SM Lanang, Km. 6 Lanang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	SM Lanang, Km 6, Lanang,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1

Table LU-105 Lifeline Utilities, Cell Sites, Degree of Impact Table for Storm Surge with 3-meter wave, Davao City

EXPOSURE				SENSITIVITY/VULNERABILITY			Degree of Impact		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
SMART COMMUNICATIONS, INC.	SM Davao Ecoland	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5
SMART COMMUNICATIONS, INC.	SM Davao Ecoland,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	2	1.5

Table LU-105. Lifeline Utilities, Cell Sites, Degree of Impact Table for Storm Surge with 4-meter wave, Davao City

EXPOSURE (Storm Surge - 4m)				SENSITIVITY/VULNERABILITY			Degree of Impact		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	Barangay Bago Aplaya, Talomo District, Davao City Golf Country Club	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	3	3	3
SMART COMMUNICATIONS, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	3	3	3
SMART COMMUNICATIONS, INC.	Crossing Puan, McArthur Highway	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Bago Aplaya, Talomo	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Ortis Road, Brgy. Ulas	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Ortis road, Brgy. Ulas,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5

Table LU-105. Lifeline Utilities, Cell Sites, Degree of Impact Table for Storm Surge with 4-meter wave, Davao City

EXPOSURE (Storm Surge - 4m)				SENSITIVITY/VULNERABILITY			Degree of Impact		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
SMART COMMUNICATIONS, INC.	5/F Gaisano Ilustre St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
DIGITEL MOBILE PHILIPPINES, INC.	Ilustre St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	J.S. Gaisano Mall, Ilustre St., cor. Gen. Luna St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	General Malvar St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Legaspi St. Cor. Bonifacio St.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	J.P Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Infront of Luisa Avenue Square Bldg., B. Jacinto Ext. St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Landco Bldg., JP Laurel St.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Billboard on Synchar Hotel, J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	J.P. Laurel Avenue, Bajada,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
GLOBE TELECOM, INC.	SM Lanang Former Lanang Golf and Country Club, J.P. Laurel Ave., Lanang District, Brgy. San Antonio	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1

Table LU-105. Lifeline Utilities, Cell Sites, Degree of Impact Table for Storm Surge with 4-meter wave, Davao City

EXPOSURE (Storm Surge - 4m)				SENSITIVITY/VULNERABILITY			Degree of Impact		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
GLOBE TELECOM, INC.	J.P. Laurel Ave., Monark Compound, Brgy. Rafael Castillo	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Malagamot Road, Panacan,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway, Panacan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
DIGITEL MOBILE PHILIPPINES, INC.	Mercado Property, Purok 3, (Near Market Site), Brgy. Bunawan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Purok 3, (near Market site), Brgy. Bunawan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Lasang	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2

Table LU-105. Lifeline Utilities, Cell Sites, Degree of Impact Table for Storm Surge with 5-meter wave, Davao City

EXPOSURE (Storm Surge - 5m)				SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	Along National Highway, Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	1	1.5
DIGITEL MOBILE PHILIPPINES, INC.	Commandante Property, Along National Highway, Brgy. Bago Aplaya, Talomo District,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
GLOBE TELECOM, INC.	Doña Luisa Subdivision, Phase 2, Brgy. Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	3	2.5
SMART COMMUNICATIONS, INC.	University Ave., Juna Subd., Martina	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Abarquez Prop., University Ave., Juna Subd., Martina,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St., Barangay 20-B (Pob.)	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St. Acacia,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1
GLOBE TELECOM, INC.	JP Laurel St., Barangay 20-B (Pob.),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1	1	1

Table LU-105. Lifeline Utilities, Cell Sites, Degree of Impact Table for Storm Surge with 5-meter wave, Davao City

EXPOSURE (Storm Surge - 5m)				SENSITIVITY/VULNERABILITY			DEGREE OF IMPACT		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	G1	G2	AVE.
SMART COMMUNICATIONS, INC.	Malagamot Road, Bayani Diaz Compound, Panacan	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
DIGITEL MOBILE PHILIPPINES, INC.	Tefasco Lot, Panacan,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2
SMART COMMUNICATIONS, INC.	Panacan,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	2	2	2

Degree of Impact on National Roads

Davao-Bukidnon Road, Fatima-Malabog Road, Inawayan-Baracatan-Road, Fatima-Malabog Road and McArthur Highway have high degree of impact due to the exposure to the fault lines.

Table LU-106. Lifeline Utilities, Roads, Degree of Impact Table for Faultline, Davao City

ROAD NAME	EXPOSURE		SENSITIVITY			IMPACT			
	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	DEGREE OF IMPACT			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Calinan-Baguio-Cadalian Road	0.0106	372,526	concrete	good	Yes	1.0	1.0	1.0	1.0
Calinan-Baguio-Cadalian Road	0.0108	378,000	concrete	good	Yes	1.0	1.0	1.0	1.0
Davao-Bukidnon Road	0.0100	400,800	concrete	good	Yes	3.0	3.0	3.0	3.0
Calinan-Baguio-Cadalian Road	0.0106	372,526	concrete	good	Yes	1.0	1.0	1.0	1.0
Calinan-Baguio-Cadalian Road	0.0108	378,000	concrete	good	Yes	1.0	1.0	1.0	1.0
Davao-Bukidnon Road	0.0100	400,800	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.0100	400,064	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.0117	469,160	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.0179	714,648	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.0264	1,057,104	concrete	good	Yes	3.0	3.0	3.0	3.0
Fatima-Malabog Road	0.0319	1,723,275	concrete	good	Yes	2.0	3.0	3.0	2.7
Fatima-Malabog Road	0.0108	583,146	concrete	good	Yes	2.0	3.0	3.0	2.7
Inawayan-Baracatan Road	0.0100	350,004	concrete	good	Yes	2.0	3.0	3.0	2.7
Mc. Arthur Highway	0.0611	3,422,031	concrete	good	Yes	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.1842	10,315,648	concrete	good	Yes	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.0101	563,153	concrete	good	Yes	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.1541	8,630,328	concrete	good	Yes	3.0	3.0	3.0	3.0

Table LU-106. Lifeline Utilities, Roads, Degree of Impact Table for Faultline, Davao City

EXPOSURE			SENSITIVITY			IMPACT			
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	DEGREE OF IMPACT			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Calinan-Baguio-Cadalian Road	0.0106	372,526	concrete	good	Yes	1.0	1.0	1.0	1.0
Calinan-Baguio-Cadalian Road	0.0108	378,000	concrete	good	Yes	1.0	1.0	1.0	1.0
Davao-Bukidnon Road	0.0100	400,800	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.0100	400,064	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.0117	469,160	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.0179	714,648	concrete	good	Yes	3.0	3.0	3.0	3.0
Davao-Bukidnon Road	0.0264	1,057,104	concrete	good	Yes	3.0	3.0	3.0	3.0
Fatima-Malabog Road	0.0319	1,723,275	concrete	good	Yes	2.0	3.0	3.0	2.7
Fatima-Malabog Road	0.0108	583,146	concrete	good	Yes	2.0	3.0	3.0	2.7
Inawayan-Baracatan Road	0.0100	350,004	concrete	good	Yes	2.0	3.0	3.0	2.7
Mc. Arthur Highway	0.0611	3,422,031	concrete	good	Yes	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.1842	10,315,648	concrete	good	Yes	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.0101	563,153	concrete	good	Yes	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.1541	8,630,328	concrete	good	Yes	3.0	3.0	3.0	3.0

Degree of Impact on Bridges

For the bridges, Lipada Bridge 1 and Lipadas Bridge 2 have high degree of impact due to its exposure to Dacudao Fault.

Table LU-107. Lifeline Utilities, Bridges, Degree of Impact Table for Faultline, Davao City

EXPOSURE				SENSITIVITY			IMPACT			
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	Degree of Impact			
							GROUP 1	GROUP 2	GROUP 3	Average
Lipadas Br. I	37.80	1,200,000.00	45,360,000	Concrete	Good	Yes	3	3	3	3.00
Lipadas Br. II	40.00	1,200,000.00	48,000,000	Concrete	Good	Yes	3	3	3	3.00

Degree of Impact on Level II Water Supply System

For the Level II Water Supply System, Manambulan, with its 3 HP well, has high degree of impact.

Table LU-108. Lifeline Utilities Level II Water System Degree of Impact Table for Faultline, Davao City

EXPOSURE				SENSITIVITY		IMPACT
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
MANAMBULAN	3 HP	60,500	60,500	FAIR	YES	3

Degree of Impact on Level III Water Supply System

Mainline pipes in Wangan, Calinan, Tugbok, Mintal, Catalunan Grande, Talomo, Los Amigos have moderate degree of impact.

Table LU-109. Lifeline Utilities Degree of Impact, Level III, Water System, Degree of Impact Table for Faultline, Davao City

EXPOSURE						SENSITIVITY		IMPACT
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	DEGREE OF IMPACT
WANGAN	MLCSP	200	₱12,500.00	0.12	₱1,500.00	GOOD	YES	2
CALINAN	MLCSP	200	₱12,500.00	0.09	₱1,125.00	GOOD	YES	2
TUGBOK	MLCSP	500	₱33,200.00	10.04	₱333,328.00	GOOD	YES	2
MINTAL	MLCSP	350	₱20,800.00	11.19	₱232,752.00	GOOD	YES	2
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	10.37	₱215,696.00	GOOD	YES	2
TALOMO	MLCSP	350	₱20,800.00	10.02	₱208,416.00	GOOD	YES	2
LOS AMIGOS	MLCSP	250	₱17,700.00	35.73	₱632,421.00	GOOD	YES	2
WANGAN	MLCSP	200	₱12,500.00	4.52	₱56,500.00	GOOD	YES	2
WANGAN	MLCSP	200	₱12,500.00	4.52	₱56,500.00	GOOD	YES	2
CALINAN	MLCSP	200	₱12,500.00	5.27	₱65,875.00	GOOD	YES	2
CALINAN	MLCSP	200	₱12,500.00	5.27	₱65,875.00	GOOD	YES	2

ADAPTIVE CAPACITY

Roads

The 2nd Avenue, a minor road supplementary to major thoroughfares in Talomo has the lowest adaptive capacity. This road do not also have insurance fund for rehabilitation. Carlos P Garcia Highway Davao, Bukidnon Road, and Davao-Agusan Highway have moderate adaptive capacity. Moderate adaptive capacity means that addressing the impacts will require significant cost but it is still within the capacity of the system to adapt to potential impacts. It can accommodate within its resources, the cost for adapting and mitigating impacts.

Table LU-110. Lifeline Utilities, Roads, Adaptive Capacity Table for Flood, Davao City

ROAD NAME	EXPOSURE			IMPACT	SENSITIVITY	ADAPTIVE CAPACITY						
	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	ADAPTIVE CAPACITY SCORE			
									GROUP 1	GROUP 2	GROUP 3	AVE.
2nd Avenue	0.0055	60,000,000.00	327,355	1.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	3	3	3	3.0
Agdao Flyover	0.4734	56,000,000.00	26,508,216	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	2	2	2.0
Calinan-Baguio-Cadalian Road	2.4488	35,000,000.00	85,708,700	1.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	2	2	2.0
Calinan-Baguio-Cadalian Road	0.4303	35,000,000.00	15,059,240	1.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	2	2	2.0
Carlos P. Garcia Highway	0.1052	60,000,000.00	6,310,020	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	2	3	2.3

Table LU-110. Lifeline Utilities, Roads, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	SENSITIVITY	ADAPTIVE CAPACITY						
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFE-LINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	ADAPTIVE CAPACITY SCORE			
									GROUP 1	GROUP 2	GROUP 3	AVE.
Carlos P. Garcia Highway	0.0399	60,000,000.00	2,394,378	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	2	3	2.3
Carlos P. Garcia Highway	0.0817	60,000,000.00	4,899,636	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	2	3	2.3
Carlos P. Garcia Highway	0.3295	60,000,000.00	19,772,940	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	2	3	2.3
Carlos P. Garcia Highway	0.0314	60,000,000.00	1,886,508	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	2	3	2.3
Carlos P. Garcia Highway	0.3522	60,000,000.00	21,129,360	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	2	3	2.3
Carlos P. Garcia Highway	0.1119	60,000,000.00	6,711,120	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	2	3	2.3
Carlos P. Garcia Highway	0.0129	60,000,000.00	775,470	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Carlos P. Garcia Highway	0.0063	60,000,000.00	375,574	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3

Table LU-110. Lifeline Utilities, Roads, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	SENSITIVITY	ADAPTIVE CAPACITY						
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	ADAPTIVE CAPACITY SCORE			
									GROUP 1	GROUP 2	GROUP 3	AVE.
Carlos P. Garcia Highway	0.3292	60,000,000.00	19,751,820	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	VHF	2	3	2	2.3
Carlos P. Garcia Highway	0.2961	60,000,000.00	17,768,520	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	VHF	2	3	2	2.3
Dacudao Avenue	1.1168	56,000,000.00	62,540,800	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Davao-Bukidnon Road	2.2435	40,000,000.00	89,739,600	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Davao-Bukidnon Road	0.5888	40,000,000.00	23,551,720	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Davao-Bukidnon Road	0.9692	40,000,000.00	38,769,520	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Davao-Bukidnon Road	0.3905	40,000,000.00	15,621,320	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Davao-Bukidnon Road	1.6118	40,000,000.00	64,471,600	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3

Table LU-110. Lifeline Utilities, Roads, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	SENSITIVITY	ADAPTIVE CAPACITY						
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	ADAPTIVE CAPACITY SCORE			
									GROUP 1	GROUP 2	GROUP 3	AVE.
Davao-Bukidnon Road	0.6323	40,000,000.00	25,293,080	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Davao-Bukidnon Road	0.9835	40,000,000.00	39,340,080	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Davao-Bukidnon Road	0.8472	40,000,000.00	33,889,920	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Davao-Bukidnon Road	0.2592	40,000,000.00	10,369,640	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Davao-Bukidnon Road	1.9633	40,000,000.00	78,531,600	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Davao-Bukidnon Road	1.1280	40,000,000.00	45,121,200	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Davao-Bukidnon Road	0.5791	40,000,000.00	23,165,360	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Davao-Bukidnon Road	0.6943	40,000,000.00	27,773,760	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3

Table LU-110. Lifeline Utilities, Roads, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	SENSITIVITY	ADAPTIVE CAPACITY						
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	ADAPTIVE CAPACITY SCORE			
									GROUP 1	GROUP 2	GROUP 3	AVE.
Davao-Bukidnon Road	0.0412	40,000,000.00	1,647,920	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Davao-Bukidnon Road	0.5601	40,000,000.00	22,405,360	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Davao-Bukidnon Road	0.3309	40,000,000.00	13,237,880	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	VHF	2	3	2	2.3
Davao-Bukidnon Road	2.0777	40,000,000.00	83,107,600	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	VHF	2	3	2	2.3
Davao-Bukidnon Road	1.6613	40,000,000.00	66,450,400	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	VHF	2	3	2	2.3
Davao-Bukidnon Road	0.2861	40,000,000.00	11,445,040	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Davao-Bukidnon Road	2.4449	40,000,000.00	97,797,600	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Davao - Agusan Highway	0.0825	56,000,000.00	4,621,092	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3

Table LU-110. Lifeline Utilities, Roads, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	SENSITIVITY	ADAPTIVE CAPACITY						
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	ADAPTIVE CAPACITY SCORE			
									GROUP 1	GROUP 2	GROUP 3	AVE.
Davao - Agusan Highway	0.0331	56,000,000.00	1,851,041	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Davao - Agusan Highway	0.0126	56,000,000.00	704,346	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Davao - Agusan Highway	0.2037	56,000,000.00	11,408,544	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Davao - Agusan Highway	0.1551	56,000,000.00	8,688,064	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Davao - Agusan Highway	0.6234	56,000,000.00	34,908,384	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Davao - Agusan Highway	0.0860	56,000,000.00	4,813,519	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	3	2	2	2.3
Davao - Agusan Highway	0.0480	56,000,000.00	2,690,055	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	3	2	2	2.3
Davao - Agusan Highway	0.0329	56,000,000.00	1,843,610	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	3	2	2	2.3

Table LU-110. Lifeline Utilities, Roads, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	SENSITIVITY	ADAPTIVE CAPACITY						
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	ADAPTIVE CAPACITY SCORE			
									GROUP 1	GROUP 2	GROUP 3	AVE.
Davao - Agusan Highway	0.0842	56,000,000.00	4,716,370	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	VHF	3	2	2	2.3
Davao - Agusan Highway	0.1324	56,000,000.00	7,415,800	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	3	2	2	2.3
Davao - Agusan Highway	0.0685	56,000,000.00	3,835,726	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	3	2	2	2.3
Davao - Agusan Highway	0.1062	56,000,000.00	5,948,488	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	3	2	2	2.3
Davao - Agusan Highway	0.0245	56,000,000.00	1,374,548	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	3	2	2	2.3
Davao - Agusan Highway	0.0880	56,000,000.00	4,928,465	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	3	2	2	2.3
Davao - Agusan Highway	0.0993	56,000,000.00	5,559,999	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	3	2	2	2.3
Davao - Agusan Highway	0.0226	56,000,000.00	1,262,839	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	3	2	2	2.3

Table LU-110. Lifeline Utilities, Roads, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	SENSITIVITY	ADAPTIVE CAPACITY						
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	ADAPTIVE CAPACITY SCORE			
									GROUP 1	GROUP 2	GROUP 3	AVE.
Davao - Agusan Highway	0.0444	56,000,000.00	2,484,166	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	3	2	2	2.3
Davao - Agusan Highway	0.0796	56,000,000.00	4,456,368	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	3	2	2	2.3
Davao - Agusan Highway	0.0262	56,000,000.00	1,469,451	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	VHF	3	2	2	2.3
Don Julian Rodriguez Ave. (Maa Road)	0.5272	28,000,000.00	14,760,536	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	3	2	2	2.3
Don Julian Rodriguez Ave. (Maa Road)	0.3069	28,000,000.00	8,593,004	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	3	2	2	2.3
Don Julian Rodriguez Ave. (Maa Road)	0.3612	28,000,000.00	10,113,488	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	3	2	2	2.3
Eden-Tagurano Road	0.1210	35,000,000.00	4,235,595	2.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	2	2	2.0
Inawayan-Baracatan Road	0.0328	35,000,000.00	1,146,572	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3

Table LU-110. Lifeline Utilities, Roads, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	SENSITIVITY	ADAPTIVE CAPACITY						
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	ADAPTIVE CAPACITY SCORE			
									GROUP 1	GROUP 2	GROUP 3	AVE.
J.P. Cabaguio Avenue	1.4047	56,000,000.00	78,662,080	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Leon Garcia St.	0.2600	49,000,000.00	12,740,588	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	2	2	2.0
Libby Road	0.0494	25,000,000.00	1,235,630	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	2	2	2.0
Libby Road	0.0075	25,000,000.00	186,545	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	2	2	2.0
Libby Road	1.7755	25,000,000.00	44,387,750	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	2	2	2.0
Maa Radio Station St.	0.1871	28,000,000.00	5,238,352	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Maa Radio Station St.	0.1576	28,000,000.00	4,411,904	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Mabuhay-Pañalum-Paquibato Road	0.2632	44,000,000.00	11,582,604	2.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	2	2	2.0

Table LU-110. Lifeline Utilities, Roads, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	SENSITIVITY	ADAPTIVE CAPACITY						
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	ADAPTIVE CAPACITY SCORE			
									GROUP 1	GROUP 2	GROUP 3	AVE.
Mabuhay-Pañalum-Paquibato Road	0.1382	44,000,000.00	6,081,108	2.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	2	2	2.0
Manggahan St.	0.5772	25,000,000.00	14,431,225	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	2	2	2.0
Mc. Arthur Highway	0.0730	56,000,000.00	4,087,412	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Mc. Arthur Highway	0.1741	56,000,000.00	9,750,720	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Mc. Arthur Highway	0.7103	56,000,000.00	39,776,016	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Mc. Arthur Highway	0.1954	56,000,000.00	10,942,848	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Mc. Arthur Highway	0.2950	56,000,000.00	16,518,208	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Mc. Arthur Highway	0.7051	56,000,000.00	39,485,432	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3

Table LU-110. Lifeline Utilities, Roads, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	SENSITIVITY	ADAPTIVE CAPACITY						
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	ADAPTIVE CAPACITY SCORE			
									GROUP 1	GROUP 2	GROUP 3	AVE.
Mc. Arthur Highway	0.1347	56,000,000.00	7,544,768	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Mc. Arthur Highway	0.2224	56,000,000.00	12,452,832	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Mc. Arthur Highway	0.1283	56,000,000.00	7,186,872	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Mc. Arthur Highway	0.2059	56,000,000.00	11,531,912	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Mc. Arthur Highway	0.4105	56,000,000.00	22,990,352	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Mc. Arthur Highway	0.4010	56,000,000.00	22,458,464	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Mc. Arthur Highway	0.1792	56,000,000.00	10,035,200	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Mc. Arthur Highway	0.2129	56,000,000.00	11,922,904	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3

Table LU-110. Lifeline Utilities, Roads, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	SENSITIVITY	ADAPTIVE CAPACITY						
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	ADAPTIVE CAPACITY SCORE			
									GROUP 1	GROUP 2	GROUP 3	AVE.
Mc. Arthur Highway	0.4510	56,000,000.00	25,258,128	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	VHF	2	3	2	2.3
Mc. Arthur Highway	0.2950	56,000,000.00	16,520,392	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	VHF	2	3	2	2.3
Mc. Arthur Highway	1.1842	56,000,000.00	66,314,080	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Pakiputan Wharf Road	0.4554	56,000,000.00	25,500,328	2.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	2	2	2.0
Pichon St.	0.1014	56,000,000.00	5,677,560	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Quimpo Boulevard	0.5484	50,000,000.00	27,422,300	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Quimpo Boulevard	0.0351	50,000,000.00	1,756,095	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Quimpo Boulevard	0.3839	50,000,000.00	19,194,450	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3

Table LU-110. Lifeline Utilities, Roads, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	SENSITIVITY	ADAPTIVE CAPACITY						
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	ADAPTIVE CAPACITY SCORE			
									GROUP 1	GROUP 2	GROUP 3	AVE.
Quimpo Boulevard	0.4730	50,000,000.00	23,650,750	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	VHF	2	3	2	2.3
Quirino Avenue	0.2199	40,000,000.00	8,794,920	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	VHF	2	3	2	2.3
Rafael Castillo St.	0.8161	86,000,000.00	70,183,224	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3
Toril-Bayabas-Eden Road	0.2472	30,000,000.00	7,414,650	2.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	2	2	2.0
Toril-Bayabas-Eden Road	0.2321	30,000,000.00	6,962,490	2.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	2	2	2.0
Toril-Bayabas-Eden Road	0.0626	30,000,000.00	1,877,580	2.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	2	2	2.0
Toril-Bayabas-Eden Road	0.2519	30,000,000.00	7,555,530	2.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	2	2	2.0
Carlos P. Garcia Highway	0.0003	60,000,000.00	17,217	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3

Table LU-110. Lifeline Utilities, Roads, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	SENSITIVITY	ADAPTIVE CAPACITY						
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	ADAPTIVE CAPACITY SCORE			
									GROUP 1	GROUP 2	GROUP 3	AVE.
Davao-Bukidnon Road	0.0002	40,000,000.00	8,169	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	VHF	2	2	3	2.3
J.P. Cabaguio Avenue	0.0001	56,000,000.00	6,043	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	2	3	2.3
Pichon St.	0.0005	56,000,000.00	28,962	2.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	2	2	2.0
Quimpo Boulevard	0.0001	50,000,000.00	5,460	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Quimpo Boulevard	0.0001	50,000,000.00	4,624	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Quimpo Boulevard	0.0001	50,000,000.00	4,624	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	VHF	2	3	2	2.3
Quimpo Boulevard	0.0008	50,000,000.00	38,908	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Quimpo Boulevard	0.0008	50,000,000.00	38,908	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	VHF	2	3	2	2.3

Table LU-110. Lifeline Utilities, Roads, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	SENSITIVITY	ADAPTIVE CAPACITY						
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	ADAPTIVE CAPACITY SCORE			
									GROUP 1	GROUP 2	GROUP 3	AVE.
Quirino Avenue	0.0001	40,000,000.00	3,889	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	VHF	2	3	2	2.3
Rafael Castillo St.	0.0003	86,000,000.00	25,057	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	HF	2	3	2	2.3
Rafael Castillo St.	0.0003	86,000,000.00	26,521	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	MF	2	3	2	2.3

Adaptive Capacity for Bridges

Davao River Bridge, Pangi Bridge, Suawan Bridge, Tamugan Bridge, Angalan Bridge III, Angalan Bridge IV, Angalan Bridge VI, Bato Bridge, Bolton Bridge 2, Generoso Bridge I, Libby Bridge, Lipadas Bridge I, Lipadas Bridge II, Pagan Grande, Pagan Pequeño, Piedad Bridge, and Talomo Bridge I have moderate adaptive capacity. All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.

Table LU-111. Lifeline Utilities, Bridges, Adaptive Capacity Table for Flood, Davao City

NAME	HAZARD SUSCEPTIBILITY	EXPOSURE			IMPACT DEGREE OF IMPACT	INSURANCE COVERAGE	ADAPTIVE CAPACITY AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
		EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE				GROUP 1	GROUP 2	GROUP 3	AVE.
Agdao Flyover	M	382.98	1,200,000	459,576,000	2.3	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	2	2	1.67
Angalan Br. I	H	12.10	1,200,000	14,520,000	2.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	1	1	1.00

Table LU-111. Lifeline Utilities, Bridges, Adaptive Capacity Table for Flood, Davao City

NAME	HAZARD SUSCEPTIBILITY	EXPOSURE			IMPACT DEGREE OF IMPACT	INSURANCE COVERAGE	ADAPTIVE CAPACITY AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
		EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE				GROUP 1	GROUP 2	GROUP 3	AVE.
Angalan Br. II	H	11.92	1,200,000	14,304,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	1	1	1.00
Angalan Br. III	H	48.88	1,200,000	58,656,000	2.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	2	2	2.00
Angalan Br. IV	H	15.90	1,200,000	19,080,000	2.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	2	2	1.67
Angalan Br. V	H	18.00	1,200,000	21,600,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	1	1	1.00

Table LU-111. Lifeline Utilities, Bridges, Adaptive Capacity Table for Flood, Davao City

NAME	HAZARD SUSCEPTIBILITY	EXPOSURE			IMPACT DEGREE OF IMPACT	INSURANCE COVERAGE	ADAPTIVE CAPACITY AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
		EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE				GROUP 1	GROUP 2	GROUP 3	AVE.
Angalan Br. VI	H	45.00	1,200,000	54,000,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	2	2	2.00
Bago Br.	H	31.21	1,200,000	37,452,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	1	1	1.00
Bato Br.	H	20.70	1,200,000	24,840,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	2	2	2.00
Bolton Br. 1	H	185.30	1,200,000	222,360,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	1	1	1.00

Table LU-111. Lifeline Utilities, Bridges, Adaptive Capacity Table for Flood, Davao City

NAME	HAZARD SUSCEPTIBILITY	EXPOSURE			IMPACT DEGREE OF IMPACT	INSURANCE COVERAGE	ADAPTIVE CAPACITY AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
		EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE				GROUP 1	GROUP 2	GROUP 3	AVE.
Bolton Br. 2	H	196.88	1,200,000	236,256,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	2	2	2.00
Buhangin Flyover	L	488.07	1,200,000	585,684,000		All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes				
Bunawan Br. 1	H	49.76	1,200,000	59,712,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	1	1	1.00
Bunawan Br. 2	H	47.79	1,200,000	57,348,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	1	1	1.00

Table LU-111. Lifeline Utilities, Bridges, Adaptive Capacity Table for Flood, Davao City

NAME	HAZARD SUSCEPTIBILITY	EXPOSURE			IMPACT DEGREE OF IMPACT	INSURANCE COVERAGE	ADAPTIVE CAPACITY AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
		EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE				GROUP 1	GROUP 2	GROUP 3	AVE.
Davao River Br.	H	141.11	1,200,000	169,332,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	3	2	2.33
Generoso Br. 1	H	89.94	1,200,000	107,928,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	2	2	1.67
Generoso Br. 2	H	87.60	1,200,000	105,120,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	1	1	1.33
Libby Br.	M	24.69	1,200,000	29,628,000	2.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	2	2	1.67

Table LU-111. Lifeline Utilities, Bridges, Adaptive Capacity Table for Flood, Davao City

NAME	HAZARD SUSCEPTIBILITY	EXPOSURE			IMPACT DEGREE OF IMPACT	INSURANCE COVERAGE	ADAPTIVE CAPACITY AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
		EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE				GROUP 1	GROUP 2	GROUP 3	AVE.
Lipadas Br. I	M	37.80	1,200,000	45,360,000	2.0	All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	2	2	2.00
Lipadas Br. II	M	40.00	1,200,000	48,000,000	2.0	All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	2	2	2.00
Matina Br.	H	38.66	1,200,000	46,392,000	3.0	All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	1	1	1.00
Pagan Grande	H	45.48	1,200,000	54,576,000	3.0	All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	2	2	2.00

Table LU-111. Lifeline Utilities, Bridges, Adaptive Capacity Table for Flood, Davao City

NAME	HAZARD SUSCEPTIBILITY	EXPOSURE			IMPACT DEGREE OF IMPACT	INSURANCE COVERAGE	ADAPTIVE CAPACITY AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
		EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE				GROUP 1	GROUP 2	GROUP 3	AVE.
Pagan Pequeño	H	89.93	1,200,000	107,916,000	3.0	All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	2	2	1.67
Panacan Br.	H	23.53	1,200,000	28,236,000	3.0	All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	1	1	1.00
Pangi Br.	H	121.69	1,200,000	146,028,000	3.0	All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	3	2	2.33
Piedad Br.	M	47.82	1,200,000	57,384,000	2.0	All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	2	2	2.00

Table LU-111. Lifeline Utilities, Bridges, Adaptive Capacity Table for Flood, Davao City

NAME	HAZARD SUSCEPTIBILITY	EXPOSURE			IMPACT DEGREE OF IMPACT	INSURANCE COVERAGE	ADAPTIVE CAPACITY AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
		EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE				GROUP 1	GROUP 2	GROUP 3	AVE.
Sasa Br.	H	18.43	1,200,000	22,116,000	3.0	All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	1	1	1.00
Suawan Br.	H	45.00	1,200,000	54,000,000	3.0	All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	3	3	2.33
Tagurano Br.	H	12.46	1,200,000	14,952,000	3.0	All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	1	1	1	1.00
Talomo Br. 2	H	48.11	1,200,000	57,732,000	3.0	All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	2	1	1.67

Table LU-111. Lifeline Utilities, Bridges, Adaptive Capacity Table for Flood, Davao City

NAME	HAZARD SUSCEPTIBILITY	EXPOSURE			IMPACT	ADAPTIVE CAPACITY					
		EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFE-LINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
								GROUP 1	GROUP 2	GROUP 3	AVE.
Tamugan Br.	H	104.96	1,200,000	125,952,000	3.0	All existing bridges do not have damage insurance coverage addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	3	2	2.33

Adaptive Capacity of Power Substations

Based on the assessment all power substations have high adaptive capacity, meaning the system is able to accommodate changes in climate, there are adaptation measures to address the impacts.

Table LU-112. Lifeline Utilities, Power Substations, Adaptive Capacity Table for Flood, Davao City

NAME OF POWER PLANT	EXPOSURE			IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY SCORE
	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
Calinan Substation	1,000.00	140 Million	140 Million	2	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1
Tugbok Substation	1,809.00	130 Million	130 Million	2	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1
Matina Substation	1,000.00	120 Million	120 Million	2	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1
Pampanga Substation	1,031.00	118 Million	118 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1

Adaptive Capacity for Level I Water System

Deep wells located in Talomo River, Ula, Riverside have high adaptive capacity, while spring sources found in Bunawan, Tibungco, Panacan, Daliao, Lizada, Sirawan and Binugao have moderate adaptive capacity. The low adaptive capacity of spring sources could be attributed to the lack of insurance coverage, and optional available government resources. Also, spring sources found in slope areas could also be easily washed away by strong flood.

Table LU-112. Lifeline Utilities, Level 1 Water System, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				DEGREE OF IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
BUNAWAN	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
BUNAWAN	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
TIBUNGCO	SPRING	41,586.32	41,586.32	3	NONE	YES. For funding proposal	2
TIBUNGCO	SPRING	41,586.32	41,586.32	3	NONE	YES. For funding proposal	2
TIBUNGCO	SPRING	41,586.32	41,586.32	3	NONE	YES. For funding proposal	2
PANACAN	SPRING	41,586.32	41,586.32	3	NONE	YES. For funding proposal	2
PANACAN	SPRING	41,586.32	41,586.32	3	NONE	YES. For funding proposal	2
TALOMO RIVER	DEEPWELL	5,500,000	5,500,000	2	NONE	YES. For funding proposal	1
ULA	DEEPWELL	5,500,000	5,500,000	2	NONE	YES. For funding proposal	1
RIVERSIDE	DEEPWELL	5,500,000	5,500,000	2	NONE	YES. For funding proposal	1
DALIAO	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
LIZADA	SPRING	41,586.32	41,586.32	3	NONE	YES. For funding proposal	2
LIZADA	SPRING	41,586.32	41,586.32	3	NONE	YES. For funding proposal	2
LIZADA	SPRING	41,586.32	41,586.32	3	NONE	YES. For funding proposal	2
LIZADA	SPRING	41,586.32	41,586.32	3	NONE	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	NONE	YES. For funding proposal	2
BINUGAO	SPRING	41,586.32	41,586.32	3	NONE	YES. For funding proposal	2
BINUGAO	SPRING	41,586.32	41,586.32	3	NONE	YES. For funding proposal	2

Adaptive Capacity for Level II Water System

Deep wells found in Sirawan, Marapangi, Daliaon Plantation, Waan and Tigatto have moderate adaptive capacity.

Table LU-113. Lifeline Utilities, Power Substations, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
BINUGAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	1
SIRAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
BINUGAO	SPRING	41,586.32	41,586.32	1	None	YES. For funding proposal	1
SIRAWAN	2HP	46,200.00	46,200.00	2	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	2
SIRAWAN	2HP	46,200.00	46,200.00	2	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	2
MARAPANGI	2HP	46,200.00	46,200.00	2	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	2
SIBULAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	1
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	1
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	1
TUNGKALAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	1
TUNGKALAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	1
DALIAON PLANTATION	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
MANUEL GUIANGA	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
SIRIB	5HP	82,500.00	82,500.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1

Table LU-113. Lifeline Utilities, Power Substations, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
ANGALAN	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	1
TAGAKPAN	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
BALENGAENG	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
ANGALAN	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
SIRIB	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
SIRIB	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
SIRIB	3HP	60,500.00	60,500.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
TAGAKPAN	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
SUBASTA	2HP	46,200.00	46,200.00	2	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
WAAN	18GS20	46,200.00	46,200.00	2	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	2

Table LU-113. Lifeline Utilities, Power Substations, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
WAAN	2HP	46,200.00	46,200.00	2	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	2
TAGAKPAN	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
TIGATTO	2HP	46,200.00	46,200.00	2	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	2
MATINA BIAO	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
LOS AMIGOS	3HP	60,500.00	60,500.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
SUBASTA	3HP	60,500.00	60,500.00	2	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
CAWAYAN	3HP	60,500.00	60,500.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
SUBASTA	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
BIAO ESCUELA	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
LOS AMIGOS	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
LOS AMIGOS	1HP	31,000.00	31,000.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1

Table LU-113. Lifeline Utilities, Power Substations, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
CAWAYAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	1
MATINA BIAO	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
BIAO GUIANGA	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
BIAO GUIANGA	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
BIAO ESCUELA	3HP	60,500.00	60,500.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
SUBASTA	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
CAWAYAN	3HP	60,500.00	60,500.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
BIAO ESCUELA	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
BIAO GUIANGA	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
BIAO ESCUELA	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
BIAO GUIANGA	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1

Table LU-113. Lifeline Utilities, Power Substations, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
BAGUIO	3HP	60,500.00	60,500.00	2	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
BIAO JOAQUIN	1.5HP	38,500.00	38,500.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
TALOMO RIVER	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
TALOMO RIVER	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
BIAO JOAQUIN	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
TALANDANG	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
BIAO JOAQUIN	1.5HP	38,500.00	38,500.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
TALOMO RIVER	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
TALOMO RIVER	1.5HP	38,500.00	38,500.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
TALOMO RIVER	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
TALOMO RIVER	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1

Table LU-113. Lifeline Utilities, Power Substations, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
TALOMO RIVER	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
BIAO JOAQUIN	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
MALAGOS	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	1
TALOMO RIVER	2HP	46,200.00	46,200.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
GUMALANG	3HP	60,500.00	60,500.00	1	There is no insurance coverage but there is one month warranty if the water pump is installed by the supplier	YES. For funding proposal	1
SALAYSAY	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	1

Lifeline Utilities Adaptive Capacity for Level III Water System

All mainline pipes have high adaptive capacity. According to DCWD, a team was mobilized to check and monitor the pipes.

Table LU-114. Lifeline Utilities , Level III Water System, Adaptive Capacity Table for Flood, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
AGDAO PROPER	MLCSP	400	₱23,600.00	175.51	₱4,142,036.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	150	₱11,200.00	28.8	₱322,560.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	22.26	₱425,166.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	17.76	₱419,136.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	63.34	₱1,494,824.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	250	₱17,700.00	158.17	₱2,799,609.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	250	₱17,700.00	604.49	₱10,699,473.00	1	None	DCWD reserve fund	1
DUMOY	MLCSP	400	₱23,600.00	51.53	₱1,216,108.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	300	₱19,100.00	106.54	₱2,034,914.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	300	₱19,100.00	90.25	₱1,723,775.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	250	₱17,700.00	229.3	₱4,058,610.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	250	₱17,700.00	3.93	₱69,561.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	800	₱52,800.00	44.64	₱2,356,992.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	61.88	₱693,056.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	18.19	₱882,215.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	126.37	₱6,128,945.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	146.85	₱7,122,225.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	96.58	₱1,081,696.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	38.24	₱428,288.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	154.2	₱1,727,040.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	149.77	₱1,677,424.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	700	₱44,200.00	49.78	₱2,200,276.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	750	₱48,500.00	109.99	₱5,334,515.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	74.05	₱829,360.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	7.28	₱81,536.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	220.22	₱2,466,464.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	174.49	₱1,954,288.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	106.03	₱1,187,536.00	1	None	DCWD reserve fund	1

Table LU-114. Lifeline Utilities , Level III Water System, Adaptive Capacity Table for Flood, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
MATINA CROSSING	MLCSP	150	₱11,200.00	2.66	₱29,792.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	112.32	₱5,447,520.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	153.34	₱7,436,990.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	326.59	₱3,657,808.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	8.67	₱420,495.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	1	₱48,500.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	600	₱40,100.00	571.17	₱22,903,917.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	900	₱56,500.00	46.82	₱2,645,330.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	90.43	₱2,134,148.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	250	₱17,700.00	74.23	₱1,313,871.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	223.09	₱5,264,924.00	2	None	DCWD reserve fund	2
BAGO APLAYA	MLCSP	400	₱23,600.00	99.67	₱2,352,212.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	700	₱44,200.00	231.11	₱10,215,062.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	700	₱44,200.00	4.72	₱208,624.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	301.54	₱14,624,690.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	413.54	₱4,631,648.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	117.78	₱1,319,136.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	700	₱44,200.00	21.82	₱964,444.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	750	₱48,500.00	18.45	₱894,825.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	95.18	₱1,066,016.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	9.02	₱212,872.00	1	None	DCWD reserve fund	1
15-B	MLCSP	400	₱23,600.00	28.77	₱678,972.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	750	₱48,500.00	68.62	₱3,328,070.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	350	₱20,800.00	13.06	₱271,648.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	300	₱19,100.00	194.93	₱3,723,163.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	300	₱19,100.00	188.62	₱3,602,642.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	32.52	₱364,224.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	72.6	₱3,521,100.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	750	₱48,500.00	4.59	₱222,615.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	201.95	₱9,794,575.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	19.29	₱935,565.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	18.95	₱212,240.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	0.87	₱9,744.00	1	None	DCWD reserve fund	1

Table LU-114. Lifeline Utilities , Level III Water System, Adaptive Capacity Table for Flood, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
TALOMO	MLCSP	900	₱56,500.00	78.13	₱4,414,345.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	800	₱52,800.00	248.74	₱13,133,472.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	800	₱52,800.00	45.84	₱2,420,352.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	750	₱48,500.00	79.51	₱3,856,235.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	47.99	₱537,488.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	14.63	₱163,856.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	38.75	₱434,000.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	87.81	₱983,472.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	28.56	₱319,872.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	34.89	₱390,768.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	250	₱17,700.00	341.35	₱6,041,895.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	300	₱19,100.00	62.21	₱1,188,211.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	300	₱19,100.00	331.11	₱6,324,201.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	130.39	₱5,228,639.00	1	None	DCWD reserve fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	153.26	₱1,716,512.00	1	None	DCWD reserve fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	169.1	₱1,893,920.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	150	₱11,200.00	6.83	₱76,496.00	1	None	DCWD reserve fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	46.1	₱516,320.00	1	None	DCWD reserve fund	1
2-A	MLCSP	300	₱19,100.00	71.13	₱1,358,583.00	1	None	DCWD reserve fund	1
39-D	MLCSP	300	₱19,100.00	5.37	₱102,567.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	169.94	₱6,814,594.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	250	₱17,700.00	85.41	₱1,511,757.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	300	₱19,100.00	154.59	₱2,952,669.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	48.77	₱1,150,972.00	1	None	DCWD reserve fund	1
DUMOY	MLCSP	250	₱17,700.00	269.22	₱4,765,194.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	900	₱56,500.00	119.84	₱6,770,960.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	900	₱56,500.00	10.74	₱606,810.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	900	₱56,500.00	45.08	₱2,547,020.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	31.66	₱354,592.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	91.74	₱1,027,488.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	450	₱24,300.00	8.64	₱209,952.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	450	₱24,300.00	39.25	₱953,775.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	600	₱40,100.00	4.63	₱185,663.00	1	None	DCWD reserve fund	1

Table LU-114. Lifeline Utilities , Level III Water System, Adaptive Capacity Table for Flood, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
BAGO APLAYA	MLCSP	600	₱40,100.00	41.6	₱1,668,160.00	1	None	DCWD reserve fund	1
DUMOY	MLCSP	400	₱23,600.00	315.81	₱7,453,116.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	350	₱20,800.00	18.62	₱387,296.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	450	₱24,300.00	171.98	₱4,179,114.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	700	₱44,200.00	13.77	₱608,634.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	700	₱44,200.00	219.87	₱9,718,254.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	700	₱44,200.00	7.87	₱347,854.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	250	₱17,700.00	405.51	₱7,177,527.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	450	₱24,300.00	423.27	₱10,285,461.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	300	₱19,100.00	207.43	₱3,961,913.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	300	₱19,100.00	239.57	₱4,575,787.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	53.67	₱1,266,612.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	206.29	₱4,868,444.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	24.97	₱589,292.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	20.82	₱491,352.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	66.75	₱1,575,300.00	1	None	DCWD reserve fund	1
UBALDE	MLCSP	400	₱23,600.00	8.77	₱206,972.00	1	None	DCWD reserve fund	1
LAPU - LAPU	MLCSP	400	₱23,600.00	77.32	₱1,824,752.00	1	None	DCWD reserve fund	1
UBALDE	MLCSP	400	₱23,600.00	56.8	₱1,340,480.00	1	None	DCWD reserve fund	1
LAPU - LAPU	MLCSP	400	₱23,600.00	162.28	₱3,829,808.00	1	None	DCWD reserve fund	1
CENTRO	MLCSP	400	₱23,600.00	93.79	₱2,213,444.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	16.87	₱188,944.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	32.12	₱359,744.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	11.21	₱125,552.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	21.56	₱241,472.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	143.01	₱1,601,712.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	42.88	₱480,256.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	123.86	₱1,387,232.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	100.87	₱1,129,744.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	69.27	₱775,824.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	40.6	₱454,720.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	44.36	₱496,832.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	73.05	₱818,160.00	1	None	DCWD reserve fund	1

Table LU-114. Lifeline Utilities , Level III Water System, Adaptive Capacity Table for Flood, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
MATINA APLAYA	MLCSP	150	₱11,200.00	38.45	₱430,640.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	42.39	₱474,768.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	43.58	₱488,096.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	52.77	₱591,024.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	150	₱11,200.00	72.06	₱807,072.00	1	None	DCWD reserve fund	1
SASA	MLCSP	200	₱12,500.00	95.78	₱1,197,250.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	300	₱19,100.00	5	₱95,500.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	300	₱19,100.00	14.98	₱286,118.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	300	₱19,100.00	45.71	₱873,061.00	1	None	DCWD reserve fund	1
V. HIZON	MLCSP	250	₱17,700.00	2.85	₱50,445.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	250	₱17,700.00	12.43	₱220,011.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	75.16	₱1,330,332.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	250	₱17,700.00	13.9	₱246,030.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	250	₱17,700.00	209.85	₱3,714,345.00	1	None	DCWD reserve fund	1
SASA	MLCSP	200	₱12,500.00	61.06	₱763,250.00	1	None	DCWD reserve fund	1
V. HIZON	MLCSP	250	₱17,700.00	386.94	₱6,848,838.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	250	₱17,700.00	23.61	₱417,897.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	250	₱17,700.00	23.06	₱408,162.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	300	₱19,100.00	336.36	₱6,424,476.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	87.14	₱1,542,378.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	350	₱20,800.00	348.23	₱7,243,184.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	350	₱20,800.00	137.11	₱2,851,888.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	800	₱52,800.00	194.54	₱10,271,712.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	800	₱52,800.00	10.29	₱543,312.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	800	₱52,800.00	12.31	₱649,968.00	1	None	DCWD reserve fund	1
V. HIZON	MLCSP	250	₱17,700.00	5	₱88,500.00	1	None	DCWD reserve fund	1
CABANTIAN	MLCSP	400	₱23,600.00	5.59	₱131,924.00	1	None	DCWD reserve fund	1
CABANTIAN	MLCSP	350	₱20,800.00	5.2	₱108,160.00	1	None	DCWD reserve fund	1
BUHANGIN	MLCSP	600	₱40,100.00	9.88	₱396,188.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	350	₱20,800.00	489.24	₱10,176,192.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	350	₱20,800.00	663.83	₱13,807,664.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	104.91	₱2,182,128.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	350	₱20,800.00	505.33	₱10,510,864.00	1	None	DCWD reserve fund	1

Table LU-114. Lifeline Utilities , Level III Water System, Adaptive Capacity Table for Flood, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
BAGO APLAYA	MLCSP	350	₱20,800.00	280.59	₱5,836,272.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	350	₱20,800.00	186.97	₱3,888,976.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	104.92	₱2,182,336.00	1	None	DCWD reserve fund	1
19-B	MLCSP	600	₱40,100.00	181.38	₱7,273,338.00	1	None	DCWD reserve fund	1
19-B	MLCSP	600	₱40,100.00	229.36	₱9,197,336.00	1	None	DCWD reserve fund	1
19-B	MLCSP	600	₱40,100.00	191.74	₱7,688,774.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	190.87	₱3,645,617.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	25.58	₱286,496.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	38.83	₱434,896.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	171.17	₱1,917,104.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	3.66	₱69,906.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	300	₱19,100.00	111.52	₱2,130,032.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	37.85	₱423,920.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	200	₱12,500.00	20.1	₱251,250.00	1	None	DCWD reserve fund	1
40-D	MLCSP	250	₱17,700.00	283.77	₱5,022,729.00	1	None	DCWD reserve fund	1
2-A	MLCSP	250	₱17,700.00	7.32	₱129,564.00	1	None	DCWD reserve fund	1
39-D	MLCSP	250	₱17,700.00	196.26	₱3,473,802.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	150	₱11,200.00	15.86	₱177,632.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	5.45	₱61,040.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	421.48	₱9,946,928.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	750	₱48,500.00	37.27	₱1,807,595.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	750	₱48,500.00	126.08	₱6,114,880.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	750	₱48,500.00	16.15	₱783,275.00	1	None	DCWD reserve fund	1
2-A	MLCSP	750	₱48,500.00	100.64	₱4,881,040.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	750	₱48,500.00	145.29	₱7,046,565.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	750	₱48,500.00	162.06	₱7,859,910.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	208.98	₱2,340,576.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	350	₱20,800.00	23.71	₱493,168.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	206.38	₱4,292,704.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	339.14	₱7,054,112.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	300	₱19,100.00	4.41	₱84,231.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	300	₱19,100.00	8.71	₱166,361.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	48.42	₱542,304.00	1	None	DCWD reserve fund	1

Table LU-114. Lifeline Utilities , Level III Water System, Adaptive Capacity Table for Flood, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
MATINA CROSSING	MLCSP	150	₱11,200.00	244.32	₱2,736,384.00	1	None	DCWD reserve fund	1
CABANTIAN	MLCSP	350	₱20,800.00	6.12	₱127,296.00	1	None	DCWD reserve fund	1
BUHANGIN	MLCSP	350	₱20,800.00	15.38	₱319,904.00	1	None	DCWD reserve fund	1
A. ANGLIONGTO	MLCSP	350	₱20,800.00	13.91	₱289,328.00	1	None	DCWD reserve fund	1
A. ANGLIONGTO	MLCSP	350	₱20,800.00	7.64	₱158,912.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	350	₱20,800.00	46.31	₱963,248.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	400	₱23,600.00	40.19	₱948,484.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	450	₱24,300.00	35.26	₱856,818.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	500	₱33,200.00	22.76	₱755,632.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	600	₱40,100.00	105.56	₱4,232,956.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	212.79	₱3,766,383.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	61.19	₱1,083,063.00	1	None	DCWD reserve fund	1
BUHANGIN	MLCSP	600	₱40,100.00	21.48	₱861,348.00	1	None	DCWD reserve fund	1
BUHANGIN	MLCSP	600	₱40,100.00	34.67	₱1,390,267.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	800	₱52,800.00	124.31	₱6,563,568.00	1	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	800	₱52,800.00	163.78	₱8,647,584.00	1	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	800	₱52,800.00	644.38	₱34,023,264.00	1	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	800	₱52,800.00	65.99	₱3,484,272.00	1	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	800	₱52,800.00	158.75	₱8,382,000.00	1	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	800	₱52,800.00	9.89	₱522,192.00	1	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	800	₱52,800.00	186.78	₱9,861,984.00	1	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	800	₱52,800.00	72.4	₱3,822,720.00	1	None	DCWD reserve fund	1
SASA	MLCSP	300	₱19,100.00	107.31	₱2,049,621.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	450	₱24,300.00	5.47	₱132,921.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	450	₱24,300.00	88.89	₱2,160,027.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	450	₱24,300.00	2.35	₱57,105.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	350	₱20,800.00	524.62	₱10,912,096.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	350	₱20,800.00	99.6	₱2,071,680.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	350	₱20,800.00	98.18	₱2,042,144.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	300	₱19,100.00	665.27	₱12,706,657.00	2	None	DCWD reserve fund	2
TIGATTO	MLCSP	400	₱23,600.00	64	₱1,510,400.00	1	None	DCWD reserve fund	1
TIGATTO	MLCSP	400	₱23,600.00	458.47	₱10,819,892.00	1	None	DCWD reserve fund	1
BUHANGIN	MLCSP	400	₱23,600.00	0.36	₱8,496.00	1	None	DCWD reserve fund	1

Table LU-114. Lifeline Utilities , Level III Water System, Adaptive Capacity Table for Flood, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
BAGO APLAYA	MLCSP	250	₱17,700.00	28.02	₱495,954.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	250	₱17,700.00	11.23	₱198,771.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	300	₱19,100.00	3.45	₱65,895.00	1	None	DCWD reserve fund	1
LUBOGAN	MLCSP	250	₱17,700.00	168.9	₱2,989,530.00	1	None	DCWD reserve fund	1
LUBOGAN	MLCSP	250	₱17,700.00	47.96	₱848,892.00	1	None	DCWD reserve fund	1
LUBOGAN	MLCSP	250	₱17,700.00	12.19	₱215,763.00	1	None	DCWD reserve fund	1
LUBOGAN	MLCSP	250	₱17,700.00	137.93	₱2,441,361.00	1	None	DCWD reserve fund	1
LUBOGAN	MLCSP	250	₱17,700.00	282.38	₱4,998,126.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	28.84	₱510,468.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	24.48	₱433,296.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	96.01	₱1,699,377.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	3.35	₱59,295.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	1.65	₱29,205.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	33.39	₱591,003.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	85.39	₱1,511,403.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	95.73	₱1,694,421.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	75.91	₱1,343,607.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	59.91	₱1,060,407.00	1	None	DCWD reserve fund	1
LUBOGAN	MLCSP	250	₱17,700.00	179.66	₱3,179,982.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	500	₱33,200.00	184.44	₱6,123,408.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	250	₱17,700.00	79.53	₱1,407,681.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	250	₱17,700.00	207.01	₱3,664,077.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	350	₱20,800.00	88.59	₱1,842,672.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	350	₱20,800.00	24.58	₱511,264.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	350	₱20,800.00	22.63	₱470,704.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	350	₱20,800.00	159.72	₱3,322,176.00	1	None	DCWD reserve fund	1
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	41.16	₱856,128.00	1	None	DCWD reserve fund	1
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	272.28	₱5,663,424.00	1	None	DCWD reserve fund	1
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	100.91	₱2,098,928.00	1	None	DCWD reserve fund	1
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	88.11	₱1,832,688.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	500	₱33,200.00	156.72	₱5,203,104.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	500	₱33,200.00	505.59	₱16,785,588.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	500	₱33,200.00	308.15	₱10,230,580.00	1	None	DCWD reserve fund	1

Table LU-114. Lifeline Utilities , Level III Water System, Adaptive Capacity Table for Flood, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
TUGBOK	MLCSP	500	₱33,200.00	52.67	₱1,748,644.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	500	₱33,200.00	545.75	₱18,118,900.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	500	₱33,200.00	10.49	₱348,268.00	1	None	DCWD reserve fund	1
STO. NIÑO	MLCSP	350	₱20,800.00	163.39	₱3,398,512.00	1	None	DCWD reserve fund	1
STO. NIÑO	MLCSP	350	₱20,800.00	279.44	₱5,812,352.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	350	₱20,800.00	91.03	₱1,893,424.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	350	₱20,800.00	540.72	₱11,246,976.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	500	₱33,200.00	11.85	₱393,420.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	500	₱33,200.00	256.82	₱8,526,424.00	1	None	DCWD reserve fund	1
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	20.49	₱426,192.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	250	₱17,700.00	79.26	₱1,402,902.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	250	₱17,700.00	20.77	₱367,629.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	500	₱33,200.00	304.69	₱10,115,708.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	500	₱33,200.00	77.19	₱2,562,708.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	500	₱33,200.00	214.48	₱7,120,736.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	150	₱11,200.00	36.45	₱408,240.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	200	₱12,500.00	101.31	₱1,266,375.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	200	₱12,500.00	310.22	₱3,877,750.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	200	₱12,500.00	192.23	₱2,402,875.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	200	₱12,500.00	332.13	₱4,151,625.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	150	₱11,200.00	5.07	₱56,784.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	250	₱17,700.00	5.62	₱99,474.00	1	None	DCWD reserve fund	1
TIGATTO	MLCSP	400	₱23,600.00	733.65	₱17,314,140.00	1	None	DCWD reserve fund	1
BUHANGIN	MLCSP	1000	₱62,400.00	33.44	₱2,086,656.00	1	None	DCWD reserve fund	1
BUHANGIN	MLCSP	800	₱52,800.00	0.06	₱3,168.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	44.03	₱779,331.00	1	None	DCWD reserve fund	1
SASA	MLCSP	300	₱19,100.00	79.92	₱1,526,472.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	300	₱19,100.00	18.37	₱350,867.00	1	None	DCWD reserve fund	1
SASA	MLCSP	300	₱19,100.00	73.23	₱1,398,693.00	1	None	DCWD reserve fund	1
SASA	MLCSP	300	₱19,100.00	96.55	₱1,844,105.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	300	₱19,100.00	65.98	₱1,260,218.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	300	₱19,100.00	210.86	₱4,027,426.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	450	₱24,300.00	159.31	₱3,871,233.00	1	None	DCWD reserve fund	1

Table LU-114. Lifeline Utilities , Level III Water System, Adaptive Capacity Table for Flood, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
BAGO GALLERA	MLCSP	450	₱24,300.00	226.66	₱5,507,838.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	450	₱24,300.00	186.83	₱4,539,969.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	450	₱24,300.00	62.16	₱1,510,488.00	1	None	DCWD reserve fund	1
LOS AMIGOS	MLCSP	350	₱20,800.00	51.37	₱1,068,496.00	1	None	DCWD reserve fund	1
LOS AMIGOS	MLCSP	350	₱20,800.00	1,244.28	₱25,881,024.00	1	None	DCWD reserve fund	1
RIVERSIDE	MLCSP	350	₱20,800.00	839.64	₱17,464,512.00	1	None	DCWD reserve fund	1
RIVERSIDE	MLCSP	350	₱20,800.00	836.24	₱17,393,792.00	1	None	DCWD reserve fund	1
ULA	MLCSP	250	₱17,700.00	214.1	₱3,789,570.00	1	None	DCWD reserve fund	1
TACUNAN	MLCSP	250	₱17,700.00	148.72	₱2,632,344.00	1	None	DCWD reserve fund	1
TACUNAN	MLCSP	250	₱17,700.00	324.24	₱5,739,048.00	1	None	DCWD reserve fund	1
BIAO ESCUELA	MLCSP	300	₱19,100.00	3.29	₱62,839.00	1	None	DCWD reserve fund	1
BIAO GUIANGA	MLCSP	300	₱19,100.00	785.43	₱15,001,713.00	1	None	DCWD reserve fund	1
BIAO ESCUELA	MLCSP	300	₱19,100.00	139.87	₱2,671,517.00	1	None	DCWD reserve fund	1
BIAO ESCUELA	MLCSP	300	₱19,100.00	956.66	₱18,272,206.00	1	None	DCWD reserve fund	1
BIAO ESCUELA	MLCSP	300	₱19,100.00	18.93	₱361,563.00	1	None	DCWD reserve fund	1
BIAO ESCUELA	MLCSP	350	₱20,800.00	3.96	₱82,368.00	1	None	DCWD reserve fund	1
BIAO ESCUELA	MLCSP	350	₱20,800.00	19.93	₱414,544.00	1	None	DCWD reserve fund	1
BIAO ESCUELA	MLCSP	350	₱20,800.00	251.49	₱5,230,992.00	1	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	250	₱17,700.00	223.69	₱3,959,313.00	1	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	250	₱17,700.00	231.79	₱4,102,683.00	1	None	DCWD reserve fund	1
CATALUNAN GRANDE	MLCSP	250	₱17,700.00	315.15	₱5,578,155.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	500	₱33,200.00	34.6	₱1,148,720.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	500	₱33,200.00	11.83	₱392,756.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	300	₱19,100.00	67.51	₱1,289,441.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	300	₱19,100.00	279.2	₱5,332,720.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	18.07	₱202,384.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	24.03	₱269,136.00	1	None	DCWD reserve fund	1
TIGATTO	MLCSP	400	₱23,600.00	280.8	₱6,626,880.00	1	None	DCWD reserve fund	1
TIGATTO	MLCSP	400	₱23,600.00	25.15	₱593,540.00	1	None	DCWD reserve fund	1
TIGATTO	MLCSP	400	₱23,600.00	52.58	₱1,240,888.00	1	None	DCWD reserve fund	1
MANDUG	MLCSP	400	₱23,600.00	90.74	₱2,141,464.00	1	None	DCWD reserve fund	1
MANDUG	MLCSP	400	₱23,600.00	309.63	₱7,307,268.00	1	None	DCWD reserve fund	1
MANDUG	MLCSP	400	₱23,600.00	92.98	₱2,194,328.00	1	None	DCWD reserve fund	1

Table LU-114. Lifeline Utilities , Level III Water System, Adaptive Capacity Table for Flood, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
BAGO APLAYA	MLCSP	400	₱23,600.00	45.16	₱1,065,776.00	2	None	DCWD reserve fund	2
BAGO APLAYA	MLCSP	400	₱23,600.00	76.34	₱1,801,624.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	163.75	₱3,864,500.00	2	None	DCWD reserve fund	2
BAGO APLAYA	MLCSP	400	₱23,600.00	79.14	₱1,867,704.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	250	₱17,700.00	39.3	₱695,610.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	64.71	₱2,594,871.00	2	None	DCWD reserve fund	2
BAGO APLAYA	MLCSP	600	₱40,100.00	75.18	₱3,014,718.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	158.54	₱6,357,454.00	2	None	DCWD reserve fund	2
BAGO APLAYA	MLCSP	600	₱40,100.00	76.23	₱3,056,823.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	250	₱17,700.00	576.96	₱10,212,192.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	250	₱17,700.00	875	₱15,487,500.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	250	₱17,700.00	45.78	₱810,306.00	1	None	DCWD reserve fund	1
COMMUNAL	MLCSP	350	₱20,800.00	4.28	₱89,024.00	1	None	DCWD reserve fund	1
COMMUNAL	MLCSP	350	₱20,800.00	13.89	₱288,912.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	500	₱33,200.00	786.72	₱26,119,104.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	500	₱33,200.00	103.31	₱3,429,892.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	500	₱33,200.00	68.54	₱2,275,528.00	1	None	DCWD reserve fund	1
ILANG	MLCSP	400	₱23,600.00	32.4	₱764,640.00	2	None	DCWD reserve fund	2
ILANG	MLCSP	400	₱23,600.00	19.49	₱459,964.00	2	None	DCWD reserve fund	2
TIBUNGCO	MLCSP	400	₱23,600.00	25.62	₱604,632.00	2	None	DCWD reserve fund	2
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	6.88	₱143,104.00	1	None	DCWD reserve fund	1
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	46.53	₱967,824.00	1	None	DCWD reserve fund	1
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	47.91	₱996,528.00	1	None	DCWD reserve fund	1
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	103.67	₱2,156,336.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	250	₱17,700.00	14.61	₱258,597.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	250	₱17,700.00	177.45	₱3,140,865.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	250	₱17,700.00	630.04	₱11,151,708.00	1	None	DCWD reserve fund	1
TUGBOK	MLCSP	250	₱17,700.00	91.68	₱1,622,736.00	1	None	DCWD reserve fund	1
CALINAN	MLCSP	200	₱12,500.00	47.96	₱599,500.00	1	None	DCWD reserve fund	1
CALINAN	MLCSP	200	₱12,500.00	16.51	₱206,375.00	1	None	DCWD reserve fund	1
CALINAN	MLCSP	200	₱12,500.00	79.38	₱992,250.00	1	None	DCWD reserve fund	1
CALINAN	MLCSP	200	₱12,500.00	169.11	₱2,113,875.00	1	None	DCWD reserve fund	1
BANKAS HEIGHTS	MLCSP	250	₱17,700.00	701.77	₱12,421,329.00	1	None	DCWD reserve fund	1

Table LU-114. Lifeline Utilities , Level III Water System, Adaptive Capacity Table for Flood, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
BANKAS HEIGHTS	MLCSP	250	₱17,700.00	4.69	₱83,013.00	1	None	DCWD reserve fund	1
TIGATTO	MLCSP	400	₱23,600.00	368.62	₱8,699,432.00	1	None	DCWD reserve fund	1
TIGATTO	MLCSP	400	₱23,600.00	478.61	₱11,295,196.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	250	₱17,700.00	414.87	₱7,343,199.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	250	₱17,700.00	440.61	₱7,798,797.00	1	None	DCWD reserve fund	1
MINTAL	MLCSP	250	₱17,700.00	100.79	₱1,783,983.00	1	None	DCWD reserve fund	1
BIAO GUIANGA	MLCSP	350	₱20,800.00	367.36	₱7,641,088.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	450	₱24,300.00	6.06	₱147,258.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	750	₱48,500.00	277.64	₱13,465,540.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	750	₱48,500.00	111.56	₱5,410,660.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	750	₱48,500.00	3.04	₱147,440.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	350	₱20,800.00	39.38	₱819,104.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	350	₱20,800.00	569.71	₱11,849,968.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	250	₱17,700.00	16.21	₱286,917.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	350	₱20,800.00	5.75	₱119,600.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	350	₱20,800.00	437.34	₱9,096,672.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	250	₱17,700.00	328	₱5,805,600.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	250	₱17,700.00	0.61	₱10,797.00	1	None	DCWD reserve fund	1
BIAO GUIANGA	MLCSP	350	₱20,800.00	417.93	₱8,692,944.00	1	None	DCWD reserve fund	1
BIAO ESCUELA	MLCSP	350	₱20,800.00	139.93	₱2,910,544.00	1	None	DCWD reserve fund	1
BIAO ESCUELA	MLCSP	350	₱20,800.00	625.51	₱13,010,608.00	1	None	DCWD reserve fund	1
BIAO ESCUELA	MLCSP	350	₱20,800.00	80.82	₱1,681,056.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	300	₱19,100.00	24.42	₱466,422.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	800	₱52,800.00	120.09	₱6,340,752.00	1	None	DCWD reserve fund	1
TIGATTO	MLCSP	800	₱52,800.00	83.03	₱4,383,984.00	1	None	DCWD reserve fund	1
TIGATTO	MLCSP	800	₱52,800.00	97.57	₱5,151,696.00	1	None	DCWD reserve fund	1
BUHANGIN	MLCSP	800	₱52,800.00	34.49	₱1,821,072.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	800	₱52,800.00	87.21	₱4,604,688.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	700	₱44,200.00	353.39	₱15,619,838.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	700	₱44,200.00	224.7	₱9,931,740.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	350	₱20,800.00	280.51	₱5,834,608.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	71.18	₱797,216.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	2.02	₱22,624.00	1	None	DCWD reserve fund	1

Table LU-114. Lifeline Utilities , Level III Water System, Adaptive Capacity Table for Flood, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
AGDAO PROPER	MLCSP	400	₱23,600.00	24.87	₱586,932.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	5.86	₱138,296.00	1	None	DCWD reserve fund	1
BUHANGIN	MLCSP	1000	₱62,400.00	30.9	₱1,928,160.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	250	₱17,700.00	341.23	₱6,039,771.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	250	₱17,700.00	44.03	₱779,331.00	1	None	DCWD reserve fund	1
LOS AMIGOS	MLCSP	250	₱17,700.00	8.8	₱155,760.00	1	None	DCWD reserve fund	1
LOS AMIGOS	MLCSP	250	₱17,700.00	2.67	₱47,259.00	1	None	DCWD reserve fund	1
LOS AMIGOS	MLCSP	250	₱17,700.00	2.22	₱39,294.00	1	None	DCWD reserve fund	1
LOS AMIGOS	MLCSP	250	₱17,700.00	260.44	₱4,609,788.00	1	None	DCWD reserve fund	1
LOS AMIGOS	MLCSP	250	₱17,700.00	2.08	₱36,816.00	1	None	DCWD reserve fund	1
LOS AMIGOS	MLCSP	250	₱17,700.00	553.2	₱9,791,640.00	1	None	DCWD reserve fund	1
LOS AMIGOS	MLCSP	250	₱17,700.00	359.81	₱6,368,637.00	1	None	DCWD reserve fund	1
LOS AMIGOS	MLCSP	250	₱17,700.00	16.73	₱296,121.00	1	None	DCWD reserve fund	1
39-D	MLCSP	300	₱19,100.00	0.51	₱9,741.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	0.37	₱7,067.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	0.41	₱4,592.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	0.41	₱4,592.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	0.31	₱7,316.00	1	None	DCWD reserve fund	1
LAPU - LAPU	MLCSP	400	₱23,600.00	0.29	₱6,844.00	1	None	DCWD reserve fund	1
2-A	MLCSP	750	₱48,500.00	0.06	₱2,910.00	1	None	DCWD reserve fund	1
TACUNAN	MLCSP	250	₱17,700.00	1.87	₱33,099.00	1	None	DCWD reserve fund	1
TACUNAN	MLCSP	250	₱17,700.00	1.87	₱33,099.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	300	₱19,100.00	1.22	₱23,302.00	1	None	DCWD reserve fund	1
MANDUG	MLCSP	400	₱23,600.00	2.89	₱68,204.00	1	None	DCWD reserve fund	1
MANDUG	MLCSP	400	₱23,600.00	2.89	₱68,204.00	1	None	DCWD reserve fund	1
COMMUNAL	MLCSP	350	₱20,800.00	26.77	₱556,816.00	1	None	DCWD reserve fund	1
COMMUNAL	MLCSP	350	₱20,800.00	26.77	₱556,816.00	1	None	DCWD reserve fund	1
COMMUNAL	MLCSP	350	₱20,800.00	33.32	₱693,056.00	1	None	DCWD reserve fund	1
COMMUNAL	MLCSP	350	₱20,800.00	33.32	₱693,056.00	1	None	DCWD reserve fund	1

DCWD Production Wells Adaptive Capacity Table to Flood

DCWD wells have high adaptive capacity. The wells are made with flood resilient materials. Monitoring stations built along with each well are also made of concrete and were built higher to withstand flood.

Table LU-115. Lifeline Utilities, DCWD Production Wells, Adaptive Capacity Table for Flood, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		
LOCATION	PUMP TYPE	REPLACE- MENT COST	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
Km. 7, Talomo Sump Bangkal, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
UUHSA, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
Km. 8 Ulas, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
Puan Junction, Brgy. Talomo	SUBMERSIBLE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
Catotal Subdivision near Block 22, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
Gallera de Oro Subdivision near Block 8, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
Purok 6, Sta Cruz Bago Gallera Road fronting Spring Valley, Brgy. Bago Gallera	VERTICAL TURBINE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
Reido Village, Acacia St., Brgy. Bago Gallera	VERTICAL TURBINE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
Along Apo Golf Road, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
Along Libby Road in front of San Lorenzo Village, Brgy. Bago Gallera	VERTICAL TURBINE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
Farland Extension near Block 2, Brgy. Dumoy	VERTICAL TURBINE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
Purok 6, Brgy. Baliok	SUBMERSIBLE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Mangahan Bridge Alambre, Toril	VERTICAL TURBINE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
Bangcas Heights Lubogan, Toril	SUBMERSIBLE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Sitio Mahayahay, Brgy. Tugbok	SUBMERSIBLE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Sitio Mahayahay, Brgy. Tugbok	SUBMERSIBLE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Tugbok Quarry, Along Davao Bukidnon Road, Brgy. Tugbok	VERTICAL TURBINE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
Davao - Bukidnon Road, Upper Riverside	SUBMERSIBLE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Los Amigos	VERTICAL TURBINE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1

Cell Sites Adaptive Capacity to Flood

Built with steel and concrete materials, all cell sites have high adaptive capacity for flooding. These cell sites are placed on top of hills or buildings which makes it less susceptible to flood occurrence.

Table LU-116. Lifeline Utilities, Cell Sites, Adaptive Capacity for Flood, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
GLOBE TELECOM, INC.	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Centerpoint Mall, Brgy. Matina Crossing,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Peralta Property, Seminary Rd., Brgy Catalan Grande Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Mc Arthur Hiway, Brgy. 74-A, Matina Crossing	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Magno Prop., No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1

Table LU-116. Lifeline Utilities, Cell Sites, Adaptive Capacity for Flood, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
SMART COMMUNICATIONS, INC.	#88 Maya St., Brgy. 76A, Ecoland, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Crossing Puan, McArthur Highway, Brgy. Bago Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	-	-	1
SMART COMMUNICATIONS, INC.	PLDT Village, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	-	-	1
SMART COMMUNICATIONS, INC.	PLDT Village, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	-	-	1
SMART COMMUNICATIONS, INC.	Ortis Road, Ulas, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Ortis Road, Ulas, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Upper Rapnaga, Bago Gallera Talumo Dist.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	-	-	1
SMART COMMUNICATIONS, INC.	Purok 16, Sitio Durian, Brgy. Bago Gallera	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	-	-	1
SMART COMMUNICATIONS, INC.	Upper Rapnaga, Bago Gallera Talumo Dist.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Sandawa, McArthur Hi-Way, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Sandawa, McArthur Hi-Way, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
GLOBE TELECOM, INC.	Km 12.5, Talomo Dist , Brgy. Catalunan Pequeño, Davao City, Davao del Sur	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	-	-	1

Adaptive Capacity of Roads to Landslide

Portions of Inawayan-Baracatan Road, Mabuhay-Pañalum-Paquibato Road, and Eden-Tagurano Road have low adaptive capacity. The length exposed for each road network are 5.2520 meters, 1.894 meters, and 0.3792 meters, respectively. Low adaptive capacity means that the utility is not flexible to accommodate changes in the climate. Addressing the impacts will be costly. The LGU and Government will require external assistance to address the impacts.

Table LU-117. Lifeline Utilities, Roads, Adaptive Capacity Table for Landslide, Davao City

EXPOSURE			IMPACT DEGREE OF IMPACT	SENSITIVITY HAZARD RESISTANT	INSURANCE COVERAGE	ADAPTIVE CAPACITY				
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE				AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
			GROUP 1	GROUP 2	GROUP 3		AVERAGE			
Calinan-Baguio-Cadalian Road	0.8466	29,632,050	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Carlos P. Garcia Highway	4.9353	296,118,000	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	3.0	2.0	2.3
Carlos P. Garcia Highway	0.6098	36,587,100	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	3.0	2.0	2.3
Davao-Bukidnon Road	0.1525	6,100,120	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	3.0	2.0	2.3
Davao-Bukidnon Road	0.0305	1,219,384	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	3.0	2.0	2.3
Davao-Bukidnon Road	0.1078	4,310,200	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	3.0	2.0	2.3
Davao-Bukidnon Road	0.1419	5,676,080	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	3.0	2.0	2.3
Davao-Bukidnon Road	0.0376	1,505,592	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	3.0	2.0	2.3

Table LU-117. Lifeline Utilities, Roads, Adaptive Capacity Table for Landslide, Davao City

EXPOSURE			IMPACT	SENSITIVITY	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
							GROUP 1	GROUP 2	GROUP 3	AVERAGE
Davao-Bukidnon Road	0.1442	5,769,840	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	3.0	2.0	2.3
Davao-Bukidnon Road	0.0636	2,544,348	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	3.0	2.0	2.3
Davao-Bukidnon Road	15.1655	606,620,000	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	3.0	2.0	2.3
Davao-Bukidnon Road	17.5150	700,600,000	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	3.0	2.0	2.3
Eden-Tagurano Road	0.1042	3,646,895	2.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Eden-Tagurano Road	0.3792	13,273,470	2.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Fatima-Malabog Road	8.8631	478,604,700	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	2.0	2.0	2.3
Fatima-Malabog Road	8.7231	471,045,780	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	2.0	2.0	2.3
Inawayan-Baracatan Road	1.8346	64,212,050	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Inawayan-Baracatan Road	5.2520	183,818,600	2.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	4.0	2.7

Table LU-117. Lifeline Utilities, Roads, Adaptive Capacity Table for Landslide, Davao City

EXPOSURE			IMPACT	SENSITIVITY	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
							GROUP 1	GROUP 2	GROUP 3	AVERAGE
Mabuhay-Pañalum-Paquibato Road	0.4214	18,542,700	2.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	4.0	2.7
Mabuhay-Pañalum-Paquibato Road	1.4726	64,793,080	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	2.0	6.0	3.7
Toril-Bayabas-Eden Road	0.8748	26,245,020	2.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Toril-Bayabas-Eden Road	4.3880	131,640,600	3.0	Yes	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	2.0	2.0	2.3

Adaptive Capacity of Bridges

Baracatan Bridge, Crossing Malabog Bridge, and Tagurano Bridge have moderate adaptive capacity. This means that addressing the impacts will require significant cost but it is still within the capacity of the system to adapt to potential impacts. It can accommodate within its resources the cost for adapting and mitigating impacts.

Table LU-118. Lifeline Utilities, Bridges, Adaptive Capacity Table for Landslide, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
							GROUP 1	GROUP 2	GROUP 3	AVERAGE
Baracatan Br.	22.20	1,200,000	26,640,000	2.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	2	1	1.67
Crossing Malabog Br.	41.02	1,200,000	49,224,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	2	2	2.00
Tagurano Br.	12.46	1,200,000	14,952,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	DPWH-XI has available financial resources to fund improvements of national bridges, however fund availability will depend upon their current priorities. Also, the LGU can impose special levy taxes for project benefitting its local constituents but the latter may not be able to pay the additional taxes.	2	2	1	1.67

Adaptive Capacity for Power Substations

Tibungco Substation which occupies 2,326 square meters and costing up to P118 million, has high adaptive capacity as it has all industrial risk insurance and comprehensive general liability.

Table LU-119. Lifeline Utilities, Power Substations, Adaptive Capacity Table for Landslide, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		Adaptive Capacity Score
Name	Area Occupied (sq.m)	Replacement Cost	Value of exposed Lifeline	Degree of Impact	Insurance Coverage	Available Government Resources	
Tibungco Substation	2,626.00	118 Million	118 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1

Level I Water Supply, Adaptive Capacity Table for Landslide, 2018, Davao City

Seven spring sources found in Bunawan, Cabantian and Daliao have low adaptive capacity because spring sources do not have hazard resistance to landslide. This means that it will take a longer time for system to revert back to its daily function once the landslide would occur, consequently, this will incur severe damage to sources that lies in slopy areas.

Table LU-120. Lifeline Utilities, Level I Water Supply, Vulnerability Table for Landslide, Davao City

EXPOSURE			DEGREE OF IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
BARANGAY	TYPE	REPLACEMENT COST	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
BUNAWAN	SPRING	41,586.32	3	None	YES. For funding proposal	3
CABANTIAN	SPRING	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	3	None	YES. For funding proposal	3
ILANG	SPRING	41,586.32	3	None	YES. For funding proposal	3

Adaptive Capacity for Level II Water Supply to Landslide

Spring sources and wells found in Acacia, Bantol, Callawa, Gatungan, Gumalang, Gumitan, Lampianoao, Lumiad, Magsaysay, Magtuod, Manabog, Malamba, Mapula, Marilog, Megkawayan, Mt. Apo National Park, Muding, New Carmen Pañalum, Pandaitan, Paquibato, Paraise Embac, Salapawan, Salysay, Saloy, Sibulan, Sirawan, Suawan, Talandang, Tambobong, Tapak, Tibungco and Tungkalan, have low adaptive capacity for landslide.

Table LU-121. Lifeline Utilities, Level II Water System, Adaptive Capacity Table For Landslide, Davao City

BARANGAY	EXPOSURE			IMPACT	ADAPTIVE CAPACITY		
	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
BINUGAO	2HP	46,600	46,600	2	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
SIBULAN	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
SIBULAN	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
SIBULAN	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
TUNGKALAN	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
TUNGKALAN	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
DALIAON PLANTATION	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
TUNGKALAN	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
TUNGKALAN	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
CAMANSI	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
CAMANSI	3HP	60,500.00	60,500.00	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
DALIAON PLANTATION	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3

Table LU-121. Lifeline Utilities, Level II Water System, Adaptive Capacity Table For Landslide, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
MAGTUOD	2HP	46200	46200	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
NEW CARMEN	3HP	60500	60500	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
MUDIANG	2HP	46200	46200	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
MUDIANG	2HP	46200	46200	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
MUDIANG	2HP	46200	46200	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
MAGTUOD	3HP	60,500.00	60,500.00	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
MAGTUOD	3HP	60,500.00	60,500.00	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
CARMEN	SPRING	41,586.32	41,586.32	3	None	Yes. Subject to fund proposal	3
MAGTUOD	2HP	46200	46200	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
MAGTUOD	2HP	46200	46200	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
NEW CARMEN	2HP	46200	46200	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3

Table LU-121. Lifeline Utilities, Level II Water System, Adaptive Capacity Table For Landslide, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
NEW CARMEN	3HP	60500	60500	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
TALANDANG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
ACACIA	25GS20	46200	46200	3	None, but there is one month warranty if the water pump is installed by the supplier	Yes. Subject to fund proposal	3
TIBUNGCO	2HP	46200	46200	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
GATUNGAN	25GS20	60500	60500	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
TAMBOBONG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
GATUNGAN	3HP	60500	60500	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
CALLAWA	18GS15	46200	46200	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
DALAG LUMOT	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
LAMPIANA O	2HP	46200	46200	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
SUAWAN	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3

Table LU-121. Lifeline Utilities, Level II Water System, Adaptive Capacity Table For Landslide, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
SALAYSAY	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
SUAWAN	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
GUMALANG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
SALAYSAY	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
SUAWAN	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MARILOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MALAMBA	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MALAMBA	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MARILOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MALAMBA	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MEGKAWAYAN	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
BANTOL	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MARILOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MALABOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
BANTOL	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MARILOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MALABOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
SALOY	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MAGSAYSAY	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
PAÑALUM	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MALABOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MALABOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MARILOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
PAÑALUM	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
PAQUIBATO	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MALABOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3

Table LU-121. Lifeline Utilities, Level II Water System, Adaptive Capacity Table For Landslide, Davao City

		EXPOSURE		IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
MALABOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
PAÑALUM	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
PAQUIBATO	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MAGSAYSAY	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MALABOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MALABOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
PAQUIBATO	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
PARADISE EMBAC	3HP	60500	60500	3	None, but there is one month warranty if the water pump is installed by the	Yes. Subject to fund proposal	3
LUMIAD	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
GUMITAN	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
LUMIAD	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
LUMIAD	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
LUMIAD	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
LUMIAD	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
LUMIAD	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
LUMIAD	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
PANDAITAN	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
PANDAITAN	2HP	46200	46200	3	None, but there is one month warranty if the water pump is installed by the supplier.	Yes. Subject to fund proposal	3
PANDAITAN	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MAPULA	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MARILOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
GUMITAN	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MARILOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
SALAPAWAN	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
MARILOG	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3
TAPAK	SPRING	41586.32	41586.32	3	None	Yes. Subject to fund proposal	3

A total of 52 mainline pipes moderately and highly susceptible to landslide are located in barangays 19-B, Buhangin, Cabantian, Catalunan Grande, Langub, Ma-a, Magtuod, Matina Crossing, Matina Pang, Panacan, and Talomo have high adaptive capacity.

Table LU-122. Lifeline Utilities, Level III Water System for Landslide, Davao City

BARANGAY	TYPE	SIZE	EXPOSURE			IMPACT	ADAPTIVE CAPACITY		
			REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT FUND	ADAPTIVE CAPACITY SCORE
19-B	MLCSP	600	₱40,100.00	23.31	₱934,731.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	800	₱52,800.00	0.72	₱38,016.00	2	None	DCWD reserve fund	1
BUHANGIN	MLCSP	600	₱40,100.00	338.29	₱13,565,429.00	1	None	DCWD reserve fund	1
19-B	MLCSP	600	₱40,100.00	15.04	₱603,104.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	150	₱11,200.00	158.36	₱1,773,632.00	2	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	150	₱11,200.00	546.53	₱6,121,136.00	2	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	150	₱11,200.00	378.56	₱4,239,872.00	2	None	DCWD reserve fund	1
BUHANGIN	MLCSP	600	₱40,100.00	41.27	₱1,654,927.00	1	None	DCWD reserve fund	1
BUHANGIN	MLCSP	600	₱40,100.00	60.97	₱2,444,897.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	800	₱52,800.00	1,153.29	₱60,893,712.00	2	None	DCWD reserve fund	1
MA-A	MLCSP	800	₱52,800.00	294.93	₱15,572,304.00	2	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	800	₱52,800.00	62.67	₱3,308,976.00	2	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	800	₱52,800.00	804.92	₱42,499,776.00	2	None	DCWD reserve fund	1
LANGUB	MLCSP	800	₱52,800.00	551.65	₱29,127,120.00	2	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	800	₱52,800.00	144.78	₱7,644,384.00	2	None	DCWD reserve fund	1
MA-A	MLCSP	800	₱52,800.00	33.58	₱1,773,024.00	2	None	DCWD reserve fund	1
MAGTUOD	MLCSP	800	₱52,800.00	97.35	₱5,140,080.00	2	None	DCWD reserve fund	1
MAGTUOD	MLCSP	800	₱52,800.00	22.24	₱1,174,272.00	2	None	DCWD reserve fund	1
TALOMO	MLCSP	800	₱52,800.00	20.23	₱1,068,144.00	2	None	DCWD reserve fund	1
PANACAN	MLCSP	350	₱20,800.00	67.56	₱1,405,248.00	2	None	DCWD reserve fund	1
TIBUNGCO	MLCSP	350	₱20,800.00	268.19	₱5,578,352.00	2	None	DCWD reserve fund	1
CABANTIAN	MLCSP	450	₱24,300.00	354.52	₱8,614,836.00	1	None	DCWD reserve fund	1
CABANTIAN	MLCSP	450	₱24,300.00	10.65	₱258,795.00	1	None	DCWD reserve fund	1
CABANTIAN	MLCSP	450	₱24,300.00	10.88	₱264,384.00	1	None	DCWD reserve fund	1

Table LU-122. Lifeline Utilities, Level III Water System for Landslide, Davao City

BARANGAY	TYPE	SIZE	EXPOSURE			IMPACT	ADAPTIVE CAPACITY		
			REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT FUND	ADAPTIVE CAPACITY SCORE
CABANTIAN	MLCSP	450	₱24,300.00	150.43	₱3,655,449.00	1	None	DCWD reserve fund	1
CABANTIAN	MLCSP	450	₱24,300.00	90.51	₱2,199,393.00	1	None	DCWD reserve fund	1
CABANTIAN	MLCSP	450	₱24,300.00	53.14	₱1,291,302.00	1	None	DCWD reserve fund	1
CABANTIAN	MLCSP	450	₱24,300.00	42.79	₱1,039,797.00	1	None	DCWD reserve fund	1
BUHANGIN	MLCSP	1000	₱62,400.00	113.1	₱7,057,440.00	1	None	DCWD reserve fund	1
BUHANGIN	MLCSP	1000	₱62,400.00	19.25	₱1,201,200.00	1	None	DCWD reserve fund	1
CATALUNAN GRANDE	MLCSP	250	₱17,700.00	474.8	₱8,403,960.00	2	None	DCWD reserve fund	1
CATALUNAN GRANDE	MLCSP	250	₱17,700.00	479.85	₱8,493,345.00	2	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	1.97	₱22,064.00	2	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	282.18	₱3,160,416.00	2	None	DCWD reserve fund	1
CABANTIAN	MLCSP	450	₱24,300.00	0.89	₱21,627.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	250	₱17,700.00	649.36	₱11,493,672.00	2	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	250	₱17,700.00	94.92	₱1,680,084.00	2	None	DCWD reserve fund	1
CATALUNAN GRANDE	MLCSP	250	₱17,700.00	29.34	₱519,318.00	2	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	150	₱11,200.00	174.12	₱1,950,144.00	2	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	150	₱11,200.00	402.42	₱4,507,104.00	2	None	DCWD reserve fund	1
MATINA PANGI	MLCSP	150	₱11,200.00	8.16	₱91,392.00	2	None	DCWD reserve fund	1
MA-A	MLCSP	150	₱11,200.00	644.74	₱7,221,088.00	2	None	DCWD reserve fund	1
MA-A	MLCSP	150	₱11,200.00	333.65	₱3,736,880.00	2	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	346.67	₱3,882,704.00	2	None	DCWD reserve fund	1
TIGATTO	MLCSP	400	₱23,600.00	18.87	₱445,332.00	2	None	DCWD reserve fund	1
PANACAN	MLCSP	300	₱19,100.00	125.15	₱2,390,365.00	2	None	DCWD reserve fund	1
PANACAN	MLCSP	300	₱19,100.00	398.24	₱7,606,384.00	2	None	DCWD reserve fund	1
MA-A	MLCSP	800	₱52,800.00	36.2	₱1,911,360.00	2	None	DCWD reserve fund	1
MA-A	MLCSP	800	₱52,800.00	50.01	₱2,640,528.00	2	None	DCWD reserve fund	1
BUHANGIN	MLCSP	800	₱52,800.00	148.86	₱7,859,808.00	1	None	DCWD reserve fund	1
CABANTIAN	MLCSP	350	₱20,800.00	207.79	₱4,322,032.00	1	None	DCWD reserve fund	1
BUHANGIN	MLCSP	1000	₱62,400.00	300.11	₱18,726,864.00	1	None	DCWD reserve fund	1

Adaptive Capacity of DCWD Productions Wells to Landslide

Four (4) wells found in Barangay Indangan, Panacan and Tibungco have high adaptive capacity.

Table LU-123. Lifeline Utilities, DCWD Production Wells, Adaptive Capacity Table for Landslide, Davao City

EXPOSURE			VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY		
LOCATION	PUMP TYPE	REPLACEMENT COST			INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
Davao Molave Homes, Brgy. Indangan	SUBMERSIBLE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
Purok 27, Malagamot, Brgy. Panacan	SUBMERSIBLE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
Purok 24, Malagamot, Brgy. Panacan	SUBMERSIBLE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1
Tibungco Relocation, Brgy. Tibungco	SUBMERSIBLE	6,500,000.00	6,500,000.00	3	NO	DCWD fund	1

Adaptive Capacity of Cell Sites to Landslide

As for cell site towers, 22 cell site towers found in Talomo, Poblacion, Tibungco have high adaptive capacity.

Table LU-124. Lifeline Utilities, Cell Sites, Adaptive Capacity Table for Landslide, Davao City

EXPOSURE					IMPACT DEGREE OF IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE		INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
GLOBE TELECOM, INC.	Lloueras Bldg., McArthur Highway, Talomo (Pob.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Telstar St., GSIS Subdivision, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Diversion Road, Bangkal,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
GLOBE TELECOM, INC.	Matina Shrine, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Shrine Hill, Matina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Matina RS,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
GLOBE TELECOM, INC.	lot 19 blk 17 Bacaca road El Rio Vista Buhangin (Pob.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1

Table LU-124. Lifeline Utilities, Cell Sites, Adaptive Capacity Table for Landslide, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
SMART COMMUNICATIONS, INC.	796 Tigatto, Buhangin	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Brgy. Panorama,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Diversion Road, Brgy. Catitipan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Communal Road, Buhangin District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Water Tank, Palos Verdes Golf Course & Subd., Mandug,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Brgy. Malabog, Paquibato District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	3	None	No Available Fund	2
SMART COMMUNICATIONS, INC.	Eden Nature Park, Brgy. Eden, Toril District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	None	No Available Fund	2
SMART COMMUNICATIONS, INC.	Shrine Hill Matina RS	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Maa Rd., Sitio Bugac, Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Maa Rd., Sitio Bugac, Brgy. Maa,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Maa Rd., Sitio Bugac, Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Brgy. Sirib, Calinan District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	None	No Available Fund	2
DIGITEL MOBILE PHILIPPINES, INC.	Brgy. Mandug,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Carnoustie St., Palos Verdes Compound Golf Club, Mandug	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	None	No Available Fund	1
GLOBE TELECOM, INC.	Buhisan St., Brgy. Tibungco,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Sitio Lumondao,, Brgy. Marilog Proper, Marilog District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	None	No Available Fund	2

Adaptive Capacity to Liquefaction

Adaptive Capacity of Roads

Agdao Flyover, Bonifacio Rotonda, C. P Garcia Highway, Claro M. Recto, Dacudao Avenue, Davao Bukidnon Road, Davao Agusan Highway, Don Julian Rodriguez Avenue (Ma-a), Jose P. Laurel, Leon Garcia St., McArthur Highway, Quezon Boulevard, Quimpo Boulevard, Quirino Avenue, Rafael Castillo St., Ramon Magsaysay Avenue, Sta. Ana Avenue, and Davao Agusan Highway have moderate adaptive capacity.

Table LU-125. Lifeline Utilities, Roads, Adaptive Capacity Table for Liquefaction, Davao City

ROAD NAME	TOTAL LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	TOTAL COST PER HAZARD LENGTH	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	AVAILABLE GOVERNMENT RESOURCES	HAZARD	DEGREE OF IMPACT	ADAPTIVE CAPACITY
Agdao Flyover	0.473361	56,000,000.00	26,508,216.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Bonifacio Rotonda	0.0838822	56,000,000.00	4,697,403.20	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Carlos P. Garcia Highway	0.984423	60,000,000.00	59,065,380.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Carlos P. Garcia Highway	0.314118	60,000,000.00	18,847,080.00	concrete	good	Yes	Quick Response fund	Moderate	3.0	2.3
Carlos P. Garcia Highway	0.671586	60,000,000.00	40,295,160.00	concrete	good	Yes	Quick Response fund	Moderate	3.0	2.3
Claro M. Recto St.	1.21518	56,000,000.00	68,050,080.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Dacudao Avenue	0.75258	56,000,000.00	42,144,480.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Dacudao Avenue	0.778519	56,000,000.00	43,597,064.00	concrete	good	Yes	Quick Response fund	Moderate	3.0	2.3
Davao-Bukidnon Road	0.00916434	40,000,000.00	366,573.60	concrete	good	Yes	Quick Response fund	Moderate	3.0	2.3
Davao - Agusan Highway	0.0202015	56,000,000.00	1,131,284.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Davao - Agusan Highway	11.3802	56,000,000.00	637,291,200.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3

Table LU-125. Lifeline Utilities, Roads, Adaptive Capacity Table for Liquefaction, Davao City

ROAD NAME	TOTAL LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	TOTAL COST PER HAZARD LENGTH	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	AVAILABLE GOVERNMENT RESOURCES	HAZARD	DEGREE OF IMPACT	ADAPTIVE CAPACITY
Davao - Agusan Highway	0.738986	56,000,000.00	41,383,216.00	concrete	good	Yes	Quick Response fund	Moderate	3.0	2.3
Davao - Agusan Highway	1.06389	56,000,000.00	59,577,840.00	concrete	good	Yes	Quick Response fund	Moderate	3.0	2.3
Davao - Agusan Highway	1.20812	56,000,000.00	67,654,720.00	concrete	good	Yes	Quick Response fund	Moderate	3.0	2.3
Don Julian Rodriguez Ave. (Maa Road)	1.09311	28,000,000.00	30,607,080.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Jose P. Laurel Avenue	2.48961	56,000,000.00	139,418,160.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Jose P. Laurel Avenue	1.04896	56,000,000.00	58,741,760.00	concrete	good	Yes	Quick Response fund	Moderate	3.0	2.3
Leon Garcia St.	0.651117	49,000,000.00	31,904,733.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Mc. Arthur Highway	5.11203	56,000,000.00	286,273,680.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Mc. Arthur Highway	8.17761	56,000,000.00	457,946,160.00	concrete	good	Yes	Quick Response fund	Moderate	3.0	2.3
Quezon Boulevard	4.22149	86,000,000.00	363,048,140.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Quimpo Boulevard	3.91102	50,000,000.00	195,551,000.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Quimpo Boulevard	0.394415	50,000,000.00	19,720,750.00	concrete	good	Yes	Quick Response fund	Moderate	3.0	2.3
Quirino Avenue	2.03248	40,000,000.00	81,299,200.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Rafael Castillo St.	3.17953	86,000,000.00	273,439,580.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Ramon Magsaysay Ave.	1.37411	60,000,000.00	82,446,600.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Sta. Ana Ave.	1.29101	60,000,000.00	77,460,600.00	concrete	good	Yes	Quick Response fund	High	3.0	2.3
Davao - Agusan Highway	0.0351356	56,000,000.00	1,967,593.60	concrete	good	Yes	Quick Response fund	High	3.0	2.3

Adaptive Capacity of Bridges

Agdao Flyover, Panacan Bridge, Pangí Bridge have moderate adaptive capacity

Table LU-126. Lifeline Utilities, Bridges, Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
							GROUP 1	GROUP 2	GROUP 3	AVERAGE
Agdao Flyover	382.98	1,200,000	459,576,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes	2	2	2	2.00
Bago Br.	31.21	1,200,000	37,452,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00

Table LU-126. Lifeline Utilities, Bridges, Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
							GROUP 1	GROUP 2	GROUP 3	AVERAGE
Bunawan Br. 1	49.76	1,200,000	59,712,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00
Bunawan Br. 2	47.79	1,200,000	57,348,000	2.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00
Ilang Br.	25.70	1,200,000	30,840,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes	1	2	2	1.67

Table LU-126. Lifeline Utilities, Bridges, Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
							GROUP 1	GROUP 2	GROUP 3	AVERAGE
Lipadas Br. I	37.80	1,200,000	45,360,000		All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00
Lipadas Br. II	40.00	1,200,000	48,000,000		All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00
Matina Br.	38.66	1,200,000	46,392,000		All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00

Table LU-126. Lifeline Utilities, Bridges, Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
							GROUP 1	GROUP 2	GROUP 3	AVERAGE
Panacan Br.	23.53	1,200,000	28,236,000		All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes	1	3	3	2.33
Pangi Br.	121.69	1,200,000	146,028,000		All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes	2	2	2	2.00
Sasa Br.	18.43	1,200,000	22,116,000		All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefiting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00

Adaptive Capacity of Power Substations

All have high adaptive capacity, while these substations are not covered by any available government resources, internally, Davao Light and Power Co. has ensured that these stations be covered with Industrial All Risk Insurance and comprehensive general liability.

Table LU-127. Lifeline Utilities, Power Substations, Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
Dumoy Substation	1,322	118 Million	118 Million	2	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1
Puan Substation	803	85 Million	85 Million	2	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1
Matina Substation	1,000.00	120 Million	120 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1
Ecoland Substation	1,547.00	120 Million	120 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1
P.Reyes Substation	825.86	85 Million	85 Million	2	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1
Gaisano Substation	454.00	85 Million	85 Million	2	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1
Sta Ana Substation	607.00	135 Million	135 Million	2	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1
Victoria Substation	595.00	120 Million	120 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1
R.Castillo Substation	852.00	125 Million	125 Million	2	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1
Pampanga Substation	1,031.00	118 Million	118 Million	2	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1
Panacan Substation	858.00	85 Million	85 Million	2	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1
Don Ramon Substation	15,540.00	570 Million	570 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1
Bunawan Substation	1,085.00	110 Million	110 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive general Liability	NONE	1

Adaptive Capacity for Water Level I

A total of 90 spring sources moderately and highly susceptible to liquefaction found in Binugao, Bunawan, Cabantian, Daliao, Gatungan, Ilang, Lizada, Lubogan, Mahayag, Mandug, Mudiang, Panacan, Riverside, San Isidro, Sirawan, Talandang, Talomo River, Tibungco, Ula, and Wangan

Table LU-128. Lifeline Utilities, Level I Water Supply, Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE				DEGREE OF IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
BUNAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
MAHAYAG	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
MAHAYAG	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
BUNAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
MANDUG	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
BUNAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
BUNAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2

Table LU-128. Lifeline Utilities, Level I Water Supply, Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE				DEGREE OF IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
LIZADA	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
DALIAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
LIZADA	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
LIZADA	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
LIZADA	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
LIZADA	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
LIZADA	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
LIZADA	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
LIZADA	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
SIRAWAN	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
BINUGAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2
BINUGAO	SPRING	41,586.32	41,586.32	2	None	YES. For funding proposal	2

Adaptive Capacity of Level II Water System to Liquefaction

Wells found in Binugao, Sirawan, and Waan all have high adaptive capacity. There is no insurance coverage for each but there is warranty of 1 month if the water pump is installed by the supplier. Government resources is also available subject to proposal.

Table LU-128. Lifeline Utilities, Level II Water System, Adaptive Capacity Table For Liquefaction, Davao City

OBJECT ID	ADMINISTRATIVE DIVISION	EXPOSURE				DEGREE OF IMPACT	ADAPTIVE CAPACITY		
		BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE		INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
W2-127	Toril	BINUGAO	2HP	46,200	46,200	2	None, but there is warranty 1 month if the waterpump is installed by the supplier.	Yes. Subject to fund proposal	1
W2-85	Toril	SIRAWAN	2HP	46200	46200	2	None, but there is warranty 1 month if the waterpump is installed by the supplier.	Yes. Subject to fund proposal	1
W2-86	Toril	SIRAWAN	2HP	46200	46200	2	None, but there is warranty 1 month if the waterpump is installed by the supplier.	Yes. Subject to fund proposal	1
W2-84	Toril	SIRAWAN	2HP	46200	46200	2	None, but there is warranty 1 month if the waterpump is installed by the supplier.	Yes. Subject to fund proposal	1
W2-19	Buhangin	WAAN	18GS20	46200	46200	2	None, but there is warranty 1 month if the waterpump is installed by the supplier.	Yes. Subject to fund proposal	1
W2-20	Buhangin	WAAN	2HP	46200	46200	2	None, but there is warranty 1 month if the waterpump is installed by the supplier.	Yes. Subject to fund proposal	1

Adaptive Capacity of Level III Water System to Liquefaction

A total of 433 mainlines located in Talomo, Buhangin, Agdao, Poblacion have a moderate adaptive capacity. These DCWD mainlines do not have insurance coverage but the DCWD has a reserve fund for the maintenance and repair.

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
5-A	MLCSP	300	₱19,100.00	42.36	₱809,076.00	2	None	DCWD reserve Fund	2
10-A	MLCSP	150	₱11,200.00	160.52	₱1,797,824.00	1	None	DCWD reserve Fund	1
10-A	MLCSP	150	₱11,200.00	162.51	₱1,820,112.00	1	None	DCWD reserve Fund	1
12-B	MLCSP	150	₱11,200.00	365.93	₱4,098,416.00	1	None	DCWD reserve Fund	1
11-B	MLCSP	150	₱11,200.00	164.29	₱1,840,048.00	1	None	DCWD reserve Fund	1
39-D	MLCSP	300	₱19,100.00	156.23	₱2,983,993.00	2	None	DCWD reserve Fund	2
37-D	MLCSP	300	₱19,100.00	76.08	₱1,453,128.00	2	None	DCWD reserve Fund	2
32-D	MLCSP	300	₱19,100.00	236.99	₱4,526,509.00	2	None	DCWD reserve Fund	2
24-C	MLCSP	300	₱19,100.00	2.96	₱56,536.00	2	None	DCWD reserve Fund	2
24-C	MLCSP	150	₱11,200.00	187.67	₱2,101,904.00	2	None	DCWD reserve Fund	2
32-D	MLCSP	300	₱19,100.00	222.24	₱4,244,784.00	2	None	DCWD reserve Fund	2
30-C	MLCSP	300	₱19,100.00	10.29	₱196,539.00	2	None	DCWD reserve Fund	2
11-B	MLCSP	300	₱19,100.00	117.3	₱2,240,430.00	2	None	DCWD reserve Fund	2
28-C	MLCSP	150	₱11,200.00	165.94	₱1,858,528.00	2	None	DCWD reserve Fund	2
28-C	MLCSP	150	₱11,200.00	164.76	₱1,845,312.00	2	None	DCWD reserve Fund	2
30-C	MLCSP	150	₱11,200.00	117.93	₱1,320,816.00	2	None	DCWD reserve Fund	2
28-C	MLCSP	150	₱11,200.00	6.71	₱75,152.00	2	None	DCWD reserve Fund	2
32-D	MLCSP	300	₱19,100.00	67.83	₱1,295,553.00	2	None	DCWD reserve Fund	2
32-D	MLCSP	400	₱20,600.00	31.07	₱640,042.00	2	None	DCWD reserve Fund	2
30-C	MLCSP	400	₱20,600.00	500.92	₱10,318,952.00	2	None	DCWD reserve Fund	2
12-B	MLCSP	400	₱20,600.00	40.79	₱840,274.00	2	None	DCWD reserve Fund	2
30-C	MLCSP	150	₱11,200.00	34.82	₱389,984.00	2	None	DCWD reserve Fund	2
11-B	MLCSP	300	₱19,100.00	91.64	₱1,750,324.00	2	None	DCWD reserve Fund	2
15-B	MLCSP	400	₱20,600.00	8.27	₱170,362.00	2	None	DCWD reserve Fund	2
14-B	MLCSP	400	₱20,600.00	63.08	₱1,299,448.00	2	None	DCWD reserve Fund	2
18-B	MLCSP	300	₱19,100.00	194.44	₱3,713,804.00	1	None	DCWD reserve Fund	1
19-B	MLCSP	300	₱19,100.00	2.43	₱46,413.00	1	None	DCWD reserve Fund	1
18-B	MLCSP	300	₱19,100.00	3.62	₱69,142.00	1	None	DCWD reserve Fund	1
19-B	MLCSP	300	₱19,100.00	115.53	₱2,206,623.00	1	None	DCWD reserve Fund	1
12-B	MLCSP	150	₱11,200.00	58.01	₱649,712.00	1	None	DCWD reserve Fund	1

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
19-B	MLCSP	150	₱11,200.00	37.77	₱423,024.00	1	None	DCWD reserve Fund	1
18-B	MLCSP	300	₱19,100.00	13.35	₱254,985.00	1	None	DCWD reserve Fund	1
13-B	MLCSP	300	₱19,100.00	42.75	₱816,525.00	1	None	DCWD reserve Fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	18.93	₱212,016.00	1	None	DCWD reserve Fund	1
18-B	MLCSP	150	₱11,200.00	34.32	₱384,384.00	1	None	DCWD reserve Fund	1
18-B	MLCSP	150	₱11,200.00	10.91	₱122,192.00	1	None	DCWD reserve Fund	1
32-D	MLCSP	300	₱19,100.00	26.31	₱502,521.00	2	None	DCWD reserve Fund	2
30-C	MLCSP	300	₱19,100.00	12.67	₱241,997.00	2	None	DCWD reserve Fund	2
28-C	MLCSP	150	₱11,200.00	8.52	₱95,424.00	2	None	DCWD reserve Fund	2
28-C	MLCSP	150	₱11,200.00	110.26	₱1,234,912.00	2	None	DCWD reserve Fund	2
28-C	MLCSP	150	₱11,200.00	59.34	₱664,608.00	2	None	DCWD reserve Fund	2
28-C	MLCSP	150	₱11,200.00	15.83	₱177,296.00	2	None	DCWD reserve Fund	2
28-C	MLCSP	150	₱11,200.00	54.8	₱613,760.00	2	None	DCWD reserve Fund	2
26-C	MLCSP	150	₱11,200.00	6.5	₱72,800.00	2	None	DCWD reserve Fund	2
28-C	MLCSP	150	₱11,200.00	59.36	₱664,832.00	2	None	DCWD reserve Fund	2
30-C	MLCSP	150	₱11,200.00	114.89	₱1,286,768.00	2	None	DCWD reserve Fund	2
14-B	MLCSP	150	₱11,200.00	0.45	₱5,040.00	2	None	DCWD reserve Fund	2
14-B	MLCSP	150	₱11,200.00	100.83	₱1,129,296.00	2	None	DCWD reserve Fund	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	2.87	₱32,144.00	2	None	DCWD reserve Fund	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	123.65	₱1,384,880.00	2	None	DCWD reserve Fund	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	119.84	₱1,342,208.00	2	None	DCWD reserve Fund	2
15-B	MLCSP	400	₱20,600.00	160.75	₱3,311,450.00	2	None	DCWD reserve Fund	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	11.5	₱128,800.00	2	None	DCWD reserve Fund	2
AGDAO PROPER	MLCSP	400	₱20,600.00	175.51	₱3,615,506.00	2	None	DCWD reserve Fund	2
AGDAO PROPER	MLCSP	150	₱11,200.00	57.96	₱649,152.00	2	None	DCWD reserve Fund	2
AGDAO PROPER	MLCSP	150	₱11,200.00	131.04	₱1,467,648.00	2	None	DCWD reserve Fund	2
AGDAO PROPER	MLCSP	150	₱11,200.00	25	₱280,000.00	2	None	DCWD reserve Fund	2
15-B	MLCSP	150	₱11,200.00	39.81	₱445,872.00	2	None	DCWD reserve Fund	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	49.8	₱951,180.00	2	None	DCWD reserve Fund	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	51.94	₱992,054.00	2	None	DCWD reserve Fund	2

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
WILFREDO AQUINO	MLCSP	300	₱19,100.00	111.4	₱2,127,740.00	2	None	DCWD reserve Fund	2
PACIANO BANGOY	MLCSP	150	₱11,200.00	2.57	₱28,784.00	1	None	DCWD reserve Fund	1
18-B	MLCSP	150	₱11,200.00	213.68	₱2,393,216.00	1	None	DCWD reserve Fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	58.49	₱1,117,159.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	255.23	₱2,858,576.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	54.75	₱613,200.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	69.38	₱777,056.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	67.38	₱754,656.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	72.51	₱812,112.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	750	₱48,500.00	8.42	₱408,370.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	150	₱11,200.00	67.51	₱756,112.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	150	₱11,200.00	69.38	₱777,056.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	246.01	₱2,755,312.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	150	₱11,200.00	2.79	₱31,248.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	73.68	₱825,216.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	150	₱11,200.00	8.29	₱92,848.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	300	₱19,100.00	7.81	₱149,171.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	69	₱772,800.00	2	None	DCWD reserve Fund	2
11-B	MLCSP	300	₱19,100.00	65.48	₱1,250,668.00	1	None	DCWD reserve Fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	8.09	₱154,519.00	2	None	DCWD reserve Fund	2
19-B	MLCSP	300	₱19,100.00	38.01	₱725,991.00	1	None	DCWD reserve Fund	1
10-A	MLCSP	300	₱19,100.00	13.62	₱260,142.00	1	None	DCWD reserve Fund	1
19-B	MLCSP	300	₱19,100.00	39.23	₱749,293.00	1	None	DCWD reserve Fund	1
11-B	MLCSP	300	₱19,100.00	50.7	₱968,370.00	1	None	DCWD reserve Fund	1
2-A	MLCSP	300	₱19,100.00	113.84	₱2,174,344.00	2	None	DCWD reserve Fund	2
32-D	MLCSP	300	₱19,100.00	201.85	₱3,855,335.00	2	None	DCWD reserve Fund	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	64.28	₱1,227,748.00	2	None	DCWD reserve Fund	2
5-A	MLCSP	150	₱11,200.00	171.57	₱1,921,584.00	2	None	DCWD reserve Fund	2
19-B	MLCSP	300	₱19,100.00	96.96	₱1,851,936.00	1	None	DCWD reserve Fund	1
AGDAO PROPER	MLCSP	400	₱20,600.00	17.76	₱365,856.00	2	None	DCWD reserve Fund	2

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
AGDAO PROPER	MLCSP	400	₱20,600.00	63.34	₱1,304,804.00	2	None	DCWD reserve Fund	2
5-A	MLCSP	300	₱19,100.00	107.3	₱2,049,430.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	300	₱19,100.00	55.49	₱1,059,859.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	300	₱19,100.00	141.31	₱2,699,021.00	1	None	DCWD reserve Fund	1
DUMOY	MLCSP	300	₱19,100.00	529.87	₱10,120,517.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	300	₱19,100.00	69.16	₱1,320,956.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	87.34	₱978,208.00	1	None	DCWD reserve Fund	1
TALOMO	MLCSP	900	₱56,500.00	36.87	₱2,083,155.00	1	None	DCWD reserve Fund	1
TALOMO	MLCSP	900	₱56,500.00	96.56	₱5,455,640.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	61.88	₱693,056.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	750	₱48,500.00	66.72	₱3,235,920.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	750	₱48,500.00	212.13	₱10,288,305.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	146.85	₱7,122,225.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	750	₱48,500.00	108.73	₱5,273,405.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	96.58	₱1,081,696.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	38.24	₱428,288.00	1	None	DCWD reserve Fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	154.2	₱1,727,040.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	150	₱11,200.00	149.77	₱1,677,424.00	2	None	DCWD reserve Fund	2
TALOMO	MLCSP	750	₱48,500.00	177.49	₱8,608,265.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	227.31	₱2,545,872.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	74.65	₱836,080.00	1	None	DCWD reserve Fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	174.49	₱1,954,288.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	109.92	₱1,231,104.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	750	₱48,500.00	265.8	₱12,891,300.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	326.59	₱3,657,808.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	750	₱48,500.00	9.95	₱482,575.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	250	₱17,000.00	89.61	₱1,523,370.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	132.25	₱6,414,125.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	250	₱17,000.00	62.3	₱1,059,100.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	250	₱17,000.00	61.15	₱1,039,550.00	1	None	DCWD reserve Fund	1

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
TALOMO	MLCSP	600	₱40,100.00	560.6	₱22,480,060.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	500	₱33,200.00	134.63	₱4,469,716.00	2	None	DCWD reserve Fund	2
TALOMO	MLCSP	900	₱56,500.00	44.85	₱2,534,025.00	1	None	DCWD reserve Fund	1
TALOMO	MLCSP	900	₱56,500.00	128.39	₱7,254,035.00	1	None	DCWD reserve Fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	125.17	₱1,401,904.00	2	None	DCWD reserve Fund	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	124.31	₱1,392,272.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	150	₱11,200.00	69.95	₱783,440.00	2	None	DCWD reserve Fund	2
AGDAO PROPER	MLCSP	400	₱20,600.00	90.43	₱1,862,858.00	2	None	DCWD reserve Fund	2
BAGO GALLERA	MLCSP	250	₱17,000.00	86.86	₱1,476,620.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	250	₱17,000.00	11.53	₱196,010.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	250	₱17,000.00	231.91	₱3,942,470.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	400	₱20,600.00	407.29	₱8,390,174.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	750	₱48,500.00	301.54	₱14,624,690.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	500	₱33,200.00	140.03	₱4,648,996.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	474.04	₱5,309,248.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	60.62	₱678,944.00	1	None	DCWD reserve Fund	1
39-D	MLCSP	300	₱19,100.00	23.9	₱456,490.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	150	₱11,200.00	95.18	₱1,066,016.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	111.11	₱1,244,432.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	163.4	₱1,830,080.00	1	None	DCWD reserve Fund	1
BUCANA	MLCSP	150	₱11,200.00	79	₱884,800.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	150	₱11,200.00	12.02	₱134,624.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	150	₱11,200.00	14.21	₱159,152.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	150	₱11,200.00	95.76	₱1,072,512.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	150	₱11,200.00	37.24	₱417,088.00	2	None	DCWD reserve Fund	2
7-A	MLCSP	600	₱40,100.00	59.9	₱2,401,990.00	2	None	DCWD reserve Fund	2
2-A	MLCSP	350	₱20,800.00	214.03	₱4,451,824.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	150	₱11,200.00	80.03	₱896,336.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	1.01	₱11,312.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	150	₱11,200.00	78.94	₱884,128.00	2	None	DCWD reserve Fund	2

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
18-B	MLCSP	150	₱11,200.00	175.92	₱1,970,304.00	1	None	DCWD reserve Fund	1
AGDAO PROPER	MLCSP	400	₱20,600.00	9.02	₱185,812.00	2	None	DCWD reserve Fund	2
15-B	MLCSP	400	₱20,600.00	339.5	₱6,993,700.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	62.93	₱704,816.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	71.1	₱796,320.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	67.73	₱758,576.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	456.04	₱5,107,648.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	750	₱48,500.00	346.36	₱16,798,460.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	750	₱48,500.00	78.22	₱3,793,670.00	1	None	DCWD reserve Fund	1
MA-A	MLCSP	700	₱44,200.00	97.5	₱4,309,500.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	700	₱44,200.00	7.4	₱327,080.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	750	₱48,500.00	249.82	₱12,116,270.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	750	₱48,500.00	424.59	₱20,592,615.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	150	₱11,200.00	229.1	₱2,565,920.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	8.13	₱91,056.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	150	₱11,200.00	137.9	₱1,544,480.00	2	None	DCWD reserve Fund	2
17-B	MLCSP	300	₱19,100.00	13.23	₱252,693.00	1	None	DCWD reserve Fund	1
16-B	MLCSP	300	₱19,100.00	3.58	₱68,378.00	2	None	DCWD reserve Fund	2
16-B	MLCSP	300	₱19,100.00	34.1	₱651,310.00	1	None	DCWD reserve Fund	1
13-B	MLCSP	300	₱19,100.00	2.1	₱40,110.00	1	None	DCWD reserve Fund	1
13-B	MLCSP	300	₱19,100.00	49.44	₱944,304.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	101.35	₱1,135,120.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	71.97	₱806,064.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	70.12	₱785,344.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	123.94	₱1,388,128.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	70.95	₱794,640.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	75.38	₱844,256.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	74.97	₱839,664.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	62.8	₱703,360.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	74.07	₱829,584.00	2	None	DCWD reserve Fund	2

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
MATINA CROSSING	MLCSP	150	₱11,200.00	65.52	₱733,824.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	76.59	₱857,808.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	96.92	₱1,085,504.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	200.67	₱2,247,504.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	62.98	₱705,376.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	169.54	₱1,898,848.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	56.27	₱630,224.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	64.45	₱721,840.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	69.02	₱773,024.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	116.06	₱1,299,872.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	25.53	₱1,238,205.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	750	₱48,500.00	47.07	₱2,282,895.00	1	None	DCWD reserve Fund	1
TALOMO	MLCSP	750	₱48,500.00	4.59	₱222,615.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	221.24	₱10,730,140.00	1	None	DCWD reserve Fund	1
11-B	MLCSP	150	₱11,200.00	13.05	₱146,160.00	1	None	DCWD reserve Fund	1
10-A	MLCSP	150	₱11,200.00	142.32	₱1,593,984.00	1	None	DCWD reserve Fund	1
11-B	MLCSP	300	₱19,100.00	54.95	₱1,049,545.00	1	None	DCWD reserve Fund	1
11-B	MLCSP	300	₱19,100.00	64.27	₱1,227,557.00	1	None	DCWD reserve Fund	1
11-B	MLCSP	300	₱19,100.00	12.45	₱237,795.00	2	None	DCWD reserve Fund	2
11-B	MLCSP	300	₱19,100.00	39.02	₱745,282.00	1	None	DCWD reserve Fund	1
7-A	MLCSP	600	₱40,100.00	57.59	₱2,309,359.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	20.09	₱225,008.00	2	None	DCWD reserve Fund	2
9-A	MLCSP	600	₱40,100.00	11.89	₱476,789.00	1	None	DCWD reserve Fund	1
7-A	MLCSP	600	₱40,100.00	47.21	₱1,893,121.00	1	None	DCWD reserve Fund	1
7-A	MLCSP	600	₱40,100.00	40.64	₱1,629,664.00	2	None	DCWD reserve Fund	2
7-A	MLCSP	600	₱40,100.00	17.51	₱702,151.00	1	None	DCWD reserve Fund	1
10-A	MLCSP	150	₱11,200.00	47.41	₱530,992.00	2	None	DCWD reserve Fund	2
10-A	MLCSP	150	₱11,200.00	13.28	₱148,736.00	2	None	DCWD reserve Fund	2
10-A	MLCSP	150	₱11,200.00	98.24	₱1,100,288.00	1	None	DCWD reserve Fund	1
9-A	MLCSP	150	₱11,200.00	78.36	₱877,632.00	1	None	DCWD reserve Fund	1

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
9-A	MLCSP	150	₱11,200.00	46.61	₱522,032.00	1	None	DCWD reserve Fund	1
10-A	MLCSP	150	₱11,200.00	2.36	₱26,432.00	1	None	DCWD reserve Fund	1
9-A	MLCSP	150	₱11,200.00	190.27	₱2,131,024.00	1	None	DCWD reserve Fund	1
10-A	MLCSP	150	₱11,200.00	9.56	₱107,072.00	1	None	DCWD reserve Fund	1
9-A	MLCSP	150	₱11,200.00	183.82	₱2,058,784.00	1	None	DCWD reserve Fund	1
7-A	MLCSP	600	₱40,100.00	150.53	₱6,036,253.00	2	None	DCWD reserve Fund	2
7-A	MLCSP	500	₱33,200.00	140.13	₱4,652,316.00	2	None	DCWD reserve Fund	2
7-A	MLCSP	600	₱40,100.00	7.69	₱308,369.00	2	None	DCWD reserve Fund	2
6-A	MLCSP	600	₱40,100.00	80.98	₱3,247,298.00	2	None	DCWD reserve Fund	2
7-A	MLCSP	500	₱33,200.00	3.52	₱116,864.00	2	None	DCWD reserve Fund	2
4-A	MLCSP	500	₱33,200.00	182.25	₱6,050,700.00	2	None	DCWD reserve Fund	2
6-A	MLCSP	350	₱20,800.00	1.74	₱36,192.00	2	None	DCWD reserve Fund	2
5-A	MLCSP	350	₱20,800.00	11.53	₱239,824.00	2	None	DCWD reserve Fund	2
2-A	MLCSP	350	₱20,800.00	100.23	₱2,084,784.00	2	None	DCWD reserve Fund	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	169.74	₱3,242,034.00	2	None	DCWD reserve Fund	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	64.29	₱1,227,939.00	1	None	DCWD reserve Fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	47.99	₱537,488.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	150	₱11,200.00	14.63	₱163,856.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	150	₱11,200.00	38.75	₱434,000.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	150	₱11,200.00	87.81	₱983,472.00	2	None	DCWD reserve Fund	2
2-A	MLCSP	300	₱19,100.00	39.19	₱748,529.00	2	None	DCWD reserve Fund	2
2-A	MLCSP	350	₱20,800.00	173.02	₱3,598,816.00	2	None	DCWD reserve Fund	2
TALOMO	MLCSP	900	₱56,500.00	73.84	₱4,171,960.00	1	None	DCWD reserve Fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	28.56	₱319,872.00	2	None	DCWD reserve Fund	2
28-C	MLCSP	150	₱11,200.00	0.83	₱9,296.00	2	None	DCWD reserve Fund	2
24-C	MLCSP	150	₱11,200.00	84.43	₱945,616.00	2	None	DCWD reserve Fund	2
30-C	MLCSP	400	₱20,600.00	65.86	₱1,356,716.00	2	None	DCWD reserve Fund	2
32-D	MLCSP	300	₱19,100.00	47.65	₱910,115.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	150	₱11,200.00	34.89	₱390,768.00	2	None	DCWD reserve Fund	2
11-B	MLCSP	150	₱11,200.00	12.97	₱145,264.00	1	None	DCWD reserve Fund	1

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
10-A	MLCSP	150	₱11,200.00	142.86	₱1,600,032.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	300	₱19,100.00	307.29	₱5,869,239.00	1	None	DCWD reserve Fund	1
26-C	MLCSP	150	₱11,200.00	3.71	₱41,552.00	2	None	DCWD reserve Fund	2
27-C	MLCSP	150	₱11,200.00	155.64	₱1,743,168.00	2	None	DCWD reserve Fund	2
27-C	MLCSP	150	₱11,200.00	150.89	₱1,689,968.00	2	None	DCWD reserve Fund	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	10.44	₱116,928.00	2	None	DCWD reserve Fund	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	56.38	₱631,456.00	2	None	DCWD reserve Fund	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	51.4	₱575,680.00	2	None	DCWD reserve Fund	2
LEON GARCIA SR.	MLCSP	150	₱11,200.00	9.75	₱109,200.00	2	None	DCWD reserve Fund	2
32-D	MLCSP	300	₱19,100.00	118.33	₱2,260,103.00	2	None	DCWD reserve Fund	2
32-D	MLCSP	300	₱19,100.00	86.96	₱1,660,936.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	600	₱40,100.00	148.22	₱5,943,622.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	600	₱40,100.00	198.94	₱7,977,494.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	600	₱40,100.00	411.37	₱16,495,937.00	1	None	DCWD reserve Fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	177.11	₱1,983,632.00	2	None	DCWD reserve Fund	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	169.1	₱1,893,920.00	2	None	DCWD reserve Fund	2
AGDAO PROPER	MLCSP	150	₱11,200.00	6.83	₱76,496.00	2	None	DCWD reserve Fund	2
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	46.1	₱516,320.00	2	None	DCWD reserve Fund	2
20-B	MLCSP	150	₱11,200.00	52.02	₱582,624.00	1	None	DCWD reserve Fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	12.1	₱135,520.00	1	None	DCWD reserve Fund	1
20-B	MLCSP	150	₱11,200.00	41.11	₱460,432.00	1	None	DCWD reserve Fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	1.2	₱13,440.00	1	None	DCWD reserve Fund	1
18-B	MLCSP	150	₱11,200.00	48.43	₱542,416.00	1	None	DCWD reserve Fund	1
20-B	MLCSP	150	₱11,200.00	1.49	₱16,688.00	1	None	DCWD reserve Fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	5.98	₱66,976.00	1	None	DCWD reserve Fund	1
18-B	MLCSP	150	₱11,200.00	170.17	₱1,905,904.00	1	None	DCWD reserve Fund	1
18-B	MLCSP	150	₱11,200.00	278.99	₱3,124,688.00	1	None	DCWD reserve Fund	1
19-B	MLCSP	150	₱11,200.00	2.77	₱31,024.00	1	None	DCWD reserve Fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	37.07	₱708,037.00	2	None	DCWD reserve Fund	2
2-A	MLCSP	300	₱19,100.00	127.25	₱2,430,475.00	2	None	DCWD reserve Fund	2

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
39-D	MLCSP	300	₱19,100.00	5.37	₱102,567.00	2	None	DCWD reserve Fund	2
DUMOY	MLCSP	600	₱40,100.00	461.42	₱18,502,942.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	600	₱40,100.00	513.65	₱20,597,365.00	2	None	DCWD reserve Fund	2
31-D	MLCSP	300	₱19,100.00	9.14	₱174,574.00	2	None	DCWD reserve Fund	2
37-D	MLCSP	300	₱19,100.00	63.83	₱1,219,153.00	2	None	DCWD reserve Fund	2
9-A	MLCSP	150	₱11,200.00	26.58	₱297,696.00	1	None	DCWD reserve Fund	1
7-A	MLCSP	150	₱11,200.00	6.79	₱76,048.00	1	None	DCWD reserve Fund	1
9-A	MLCSP	150	₱11,200.00	156.68	₱1,754,816.00	1	None	DCWD reserve Fund	1
9-A	MLCSP	600	₱40,100.00	59.42	₱2,382,742.00	1	None	DCWD reserve Fund	1
7-A	MLCSP	600	₱40,100.00	32.72	₱1,312,072.00	1	None	DCWD reserve Fund	1
7-A	MLCSP	600	₱40,100.00	131.91	₱5,289,591.00	1	None	DCWD reserve Fund	1
7-A	MLCSP	600	₱40,100.00	78.89	₱3,163,489.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	600	₱40,100.00	570.45	₱22,875,045.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	600	₱40,100.00	436.83	₱17,516,883.00	1	None	DCWD reserve Fund	1
TALOMO	MLCSP	250	₱17,000.00	59.24	₱1,007,080.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	500	₱33,200.00	65.78	₱2,183,896.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	400	₱20,600.00	96.4	₱1,985,840.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	400	₱20,600.00	47.27	₱973,762.00	2	None	DCWD reserve Fund	2
6-A	MLCSP	600	₱40,100.00	101.25	₱4,060,125.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	150	₱11,200.00	124.24	₱1,391,488.00	2	None	DCWD reserve Fund	2
DUMOY	MLCSP	500	₱33,200.00	404.49	₱13,429,068.00	1	None	DCWD reserve Fund	1
DUMOY	MLCSP	500	₱33,200.00	421.94	₱14,008,408.00	2	None	DCWD reserve Fund	2
DUMOY	MLCSP	500	₱33,200.00	94.17	₱3,126,444.00	1	None	DCWD reserve Fund	1
DUMOY	MLCSP	250	₱17,000.00	27.3	₱464,100.00	1	None	DCWD reserve Fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	39.52	₱754,832.00	2	None	DCWD reserve Fund	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	42.46	₱810,986.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	31.66	₱354,592.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	150	₱11,200.00	91.74	₱1,027,488.00	2	None	DCWD reserve Fund	2
TALOMO	MLCSP	450	₱24,300.00	8.64	₱209,952.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	450	₱24,300.00	39.25	₱953,775.00	1	None	DCWD reserve Fund	1

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
TALOMO	MLCSP	600	₱40,100.00	4.63	₱185,663.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	41.6	₱1,668,160.00	1	None	DCWD reserve Fund	1
BUCANA	MLCSP	150	₱11,200.00	360.06	₱4,032,672.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	150	₱11,200.00	61.17	₱685,104.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	13.1	₱146,720.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	150	₱11,200.00	1.49	₱16,688.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	358.81	₱4,018,672.00	2	None	DCWD reserve Fund	2
5-A	MLCSP	150	₱11,200.00	49.36	₱552,832.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	450	₱24,300.00	645.07	₱15,675,201.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	450	₱24,300.00	388.51	₱9,440,793.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	700	₱44,200.00	13.77	₱608,634.00	1	None	DCWD reserve Fund	1
TALOMO	MLCSP	700	₱44,200.00	219.87	₱9,718,254.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	700	₱44,200.00	7.87	₱347,854.00	1	None	DCWD reserve Fund	1
BUCANA	MLCSP	150	₱11,200.00	63.07	₱706,384.00	2	None	DCWD reserve Fund	2
7-A	MLCSP	600	₱40,100.00	74.86	₱3,001,886.00	2	None	DCWD reserve Fund	2
31-D	MLCSP	300	₱19,100.00	33.02	₱630,682.00	2	None	DCWD reserve Fund	2
37-D	MLCSP	300	₱19,100.00	104.48	₱1,995,568.00	2	None	DCWD reserve Fund	2
31-D	MLCSP	300	₱19,100.00	12.87	₱245,817.00	2	None	DCWD reserve Fund	2
37-D	MLCSP	300	₱19,100.00	97.71	₱1,866,261.00	2	None	DCWD reserve Fund	2
38-D	MLCSP	300	₱19,100.00	13.57	₱259,187.00	2	None	DCWD reserve Fund	2
37-D	MLCSP	300	₱19,100.00	227.02	₱4,336,082.00	2	None	DCWD reserve Fund	2
AGDAO PROPER	MLCSP	300	₱19,100.00	239.57	₱4,575,787.00	2	None	DCWD reserve Fund	2
AGDAO PROPER	MLCSP	400	₱20,600.00	53.67	₱1,105,602.00	2	None	DCWD reserve Fund	2
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	206.29	₱4,249,574.00	2	None	DCWD reserve Fund	2
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	116.45	₱2,398,870.00	2	None	DCWD reserve Fund	2
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	20.82	₱428,892.00	2	None	DCWD reserve Fund	2
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	66.75	₱1,375,050.00	2	None	DCWD reserve Fund	2
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	124.74	₱2,569,644.00	2	None	DCWD reserve Fund	2
UBALDE	MLCSP	400	₱20,600.00	173.79	₱3,580,074.00	2	None	DCWD reserve Fund	2
UBALDE	MLCSP	400	₱20,600.00	21.83	₱449,698.00	2	None	DCWD reserve Fund	2

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	368.65	₱7,594,190.00	2	None	DCWD reserve Fund	2
SAN ANTONIO	MLCSP	400	₱20,600.00	196.92	₱4,056,552.00	2	None	DCWD reserve Fund	2
UBALDE	MLCSP	400	₱20,600.00	9.54	₱196,524.00	2	None	DCWD reserve Fund	2
LAPU - LAPU	MLCSP	400	₱20,600.00	180.35	₱3,715,210.00	2	None	DCWD reserve Fund	2
LAPU - LAPU	MLCSP	400	₱20,600.00	490.41	₱10,102,446.00	2	None	DCWD reserve Fund	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	37.02	₱707,082.00	2	None	DCWD reserve Fund	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	39.11	₱747,001.00	2	None	DCWD reserve Fund	2
32-D	MLCSP	500	₱33,200.00	19.37	₱643,084.00	2	None	DCWD reserve Fund	2
10-A	MLCSP	500	₱33,200.00	173.65	₱5,765,180.00	2	None	DCWD reserve Fund	2
4-A	MLCSP	500	₱33,200.00	147.97	₱4,912,604.00	2	None	DCWD reserve Fund	2
10-A	MLCSP	150	₱11,200.00	169.02	₱1,893,024.00	2	None	DCWD reserve Fund	2
4-A	MLCSP	150	₱11,200.00	2.89	₱32,368.00	2	None	DCWD reserve Fund	2
4-A	MLCSP	500	₱33,200.00	263.63	₱8,752,516.00	2	None	DCWD reserve Fund	2
4-A	MLCSP	500	₱33,200.00	36.32	₱1,205,824.00	2	None	DCWD reserve Fund	2
UBALDE	MLCSP	400	₱20,600.00	56.8	₱1,170,080.00	2	None	DCWD reserve Fund	2
LAPU - LAPU	MLCSP	400	₱20,600.00	162.28	₱3,342,968.00	2	None	DCWD reserve Fund	2
CENTRO	MLCSP	400	₱20,600.00	93.79	₱1,932,074.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	100	₱11,000.00	11.77	₱129,470.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	750	₱48,500.00	117.14	₱5,681,290.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	228.64	₱11,089,040.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	750	₱48,500.00	134.23	₱6,510,155.00	1	None	DCWD reserve Fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	16.87	₱188,944.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	150	₱11,200.00	32.12	₱359,744.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	11.21	₱125,552.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	21.56	₱241,472.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	150	₱11,200.00	143.01	₱1,601,712.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	42.88	₱480,256.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	224.73	₱2,516,976.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	69.27	₱775,824.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	40.6	₱454,720.00	2	None	DCWD reserve Fund	2

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
MATINA CROSSING	MLCSP	300	₱19,100.00	72.23	₱1,379,593.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	300	₱19,100.00	76.88	₱1,468,408.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	67.98	₱761,376.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	98.64	₱1,104,768.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	66.4	₱743,680.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	73.05	₱818,160.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	150	₱11,200.00	38.45	₱430,640.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	150	₱11,200.00	42.39	₱474,768.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	150	₱11,200.00	43.58	₱488,096.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	150	₱11,200.00	52.77	₱591,024.00	2	None	DCWD reserve Fund	2
AGDAO PROPER	MLCSP	150	₱11,200.00	72.06	₱807,072.00	2	None	DCWD reserve Fund	2
SASA	MLCSP	200	₱12,500.00	172.47	₱2,155,875.00	2	None	DCWD reserve Fund	2
SASA	MLCSP	200	₱12,500.00	287.63	₱3,595,375.00	1	None	DCWD reserve Fund	1
SASA	MLCSP	200	₱12,500.00	158.22	₱1,977,750.00	2	None	DCWD reserve Fund	2
SASA	MLCSP	200	₱12,500.00	116.91	₱1,461,375.00	1	None	DCWD reserve Fund	1
SASA	MLCSP	200	₱12,500.00	706.36	₱8,829,500.00	2	None	DCWD reserve Fund	2
V. HIZON	MLCSP	250	₱17,000.00	130.5	₱2,218,500.00	2	None	DCWD reserve Fund	2
A. ANGLIONGTO	MLCSP	250	₱17,000.00	45.55	₱774,350.00	2	None	DCWD reserve Fund	2
V. HIZON	MLCSP	300	₱19,100.00	15.35	₱293,185.00	2	None	DCWD reserve Fund	2
PAMPANGA	MLCSP	300	₱19,100.00	118.53	₱2,263,923.00	2	None	DCWD reserve Fund	2
PAMPANGA	MLCSP	300	₱19,100.00	45.71	₱873,061.00	2	None	DCWD reserve Fund	2
V. HIZON	MLCSP	250	₱17,000.00	2.88	₱48,960.00	2	None	DCWD reserve Fund	2
PAMPANGA	MLCSP	250	₱17,000.00	12.43	₱211,310.00	2	None	DCWD reserve Fund	2
SASA	MLCSP	250	₱17,000.00	75.16	₱1,277,720.00	2	None	DCWD reserve Fund	2
PAMPANGA	MLCSP	250	₱17,000.00	223.75	₱3,803,750.00	2	None	DCWD reserve Fund	2
SASA	MLCSP	200	₱12,500.00	96.35	₱1,204,375.00	2	None	DCWD reserve Fund	2
SASA	MLCSP	200	₱12,500.00	14.44	₱180,500.00	1	None	DCWD reserve Fund	1
SASA	MLCSP	250	₱17,000.00	261.04	₱4,437,680.00	2	None	DCWD reserve Fund	2
SASA	MLCSP	250	₱17,000.00	167.7	₱2,850,900.00	1	None	DCWD reserve Fund	1
SASA	MLCSP	200	₱12,500.00	15.76	₱197,000.00	2	None	DCWD reserve Fund	2

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
SASA	MLCSP	200	₱12,500.00	178.68	₱2,233,500.00	2	None	DCWD reserve Fund	2
SASA	MLCSP	200	₱12,500.00	55.47	₱693,375.00	2	None	DCWD reserve Fund	2
SASA	MLCSP	200	₱12,500.00	15.42	₱192,750.00	2	None	DCWD reserve Fund	2
V. HIZON	MLCSP	250	₱17,000.00	386.97	₱6,578,490.00	2	None	DCWD reserve Fund	2
PAMPANGA	MLCSP	250	₱17,000.00	23.61	₱401,370.00	2	None	DCWD reserve Fund	2
PAMPANGA	MLCSP	250	₱17,000.00	23.06	₱392,020.00	2	None	DCWD reserve Fund	2
PAMPANGA	MLCSP	300	₱19,100.00	336.36	₱6,424,476.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	300	₱19,100.00	22.52	₱430,132.00	1	None	DCWD reserve Fund	1
SASA	MLCSP	250	₱17,000.00	178.44	₱3,033,480.00	2	None	DCWD reserve Fund	2
SASA	MLCSP	250	₱17,000.00	328.88	₱5,590,960.00	1	None	DCWD reserve Fund	1
V. HIZON	MLCSP	250	₱17,000.00	664.01	₱11,288,170.00	2	None	DCWD reserve Fund	2
V. HIZON	MLCSP	250	₱17,000.00	107.3	₱1,824,100.00	2	None	DCWD reserve Fund	2
SASA	MLCSP	200	₱12,500.00	149.99	₱1,874,875.00	2	None	DCWD reserve Fund	2
SASA	MLCSP	200	₱12,500.00	155.39	₱1,942,375.00	2	None	DCWD reserve Fund	2
BAGO GALLERA	MLCSP	350	₱20,800.00	447.09	₱9,299,472.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	101.39	₱2,108,912.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	350	₱20,800.00	180.67	₱3,757,936.00	1	None	DCWD reserve Fund	1
BAGO GALLERA	MLCSP	350	₱20,800.00	161.78	₱3,365,024.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	86.72	₱1,803,776.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	350	₱20,800.00	468.81	₱9,751,248.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	444.08	₱9,236,864.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	250	₱17,000.00	14.99	₱254,830.00	2	None	DCWD reserve Fund	2
BAGO GALLERA	MLCSP	350	₱20,800.00	434.15	₱9,030,320.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	88.28	₱1,836,224.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	350	₱20,800.00	193.82	₱4,031,456.00	1	None	DCWD reserve Fund	1
11-B	MLCSP	300	₱19,100.00	60.43	₱1,154,213.00	1	None	DCWD reserve Fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	190.87	₱3,645,617.00	2	None	DCWD reserve Fund	2
V. HIZON	MLCSP	300	₱19,100.00	576.33	₱11,007,903.00	2	None	DCWD reserve Fund	2
PAMPANGA	MLCSP	300	₱19,100.00	73.97	₱1,412,827.00	2	None	DCWD reserve Fund	2
V. HIZON	MLCSP	300	₱19,100.00	10.52	₱200,932.00	2	None	DCWD reserve Fund	2

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
16-B	MLCSP	300	₱19,100.00	13.62	₱260,142.00	2	None	DCWD reserve Fund	2
15-B	MLCSP	300	₱19,100.00	481.76	₱9,201,616.00	2	None	DCWD reserve Fund	2
16-B	MLCSP	300	₱19,100.00	50.22	₱959,202.00	2	None	DCWD reserve Fund	2
16-B	MLCSP	150	₱11,200.00	176.25	₱1,974,000.00	2	None	DCWD reserve Fund	2
16-B	MLCSP	150	₱11,200.00	174.06	₱1,949,472.00	2	None	DCWD reserve Fund	2
16-B	MLCSP	150	₱11,200.00	172.8	₱1,935,360.00	2	None	DCWD reserve Fund	2
PACIANO BANGOY	MLCSP	150	₱11,200.00	25.58	₱286,496.00	2	None	DCWD reserve Fund	2
PACIANO BANGOY	MLCSP	150	₱11,200.00	82.2	₱920,640.00	2	None	DCWD reserve Fund	2
PACIANO BANGOY	MLCSP	150	₱11,200.00	264.25	₱2,959,600.00	2	None	DCWD reserve Fund	2
16-B	MLCSP	150	₱11,200.00	0.97	₱10,864.00	2	None	DCWD reserve Fund	2
PACIANO BANGOY	MLCSP	150	₱11,200.00	171.17	₱1,917,104.00	2	None	DCWD reserve Fund	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	3.66	₱69,906.00	2	None	DCWD reserve Fund	2
AGDAO PROPER	MLCSP	300	₱19,100.00	111.52	₱2,130,032.00	2	None	DCWD reserve Fund	2
A. ANGLIONGTO	MLCSP	250	₱17,000.00	498.54	₱8,475,180.00	2	None	DCWD reserve Fund	2
A. ANGLIONGTO	MLCSP	400	₱20,600.00	16.33	₱336,398.00	2	None	DCWD reserve Fund	2
A. ANGLIONGTO	MLCSP	400	₱20,600.00	7.1	₱146,260.00	2	None	DCWD reserve Fund	2
RAFAEL CASTILLO	MLCSP	400	₱20,600.00	203.98	₱4,201,988.00	2	None	DCWD reserve Fund	2
RAFAEL CASTILLO	MLCSP	400	₱20,600.00	134.22	₱2,764,932.00	2	None	DCWD reserve Fund	2
WILFREDO AQUINO	MLCSP	400	₱20,600.00	84.33	₱1,737,198.00	1	None	DCWD reserve Fund	1
WILFREDO AQUINO	MLCSP	400	₱20,600.00	32.46	₱668,676.00	1	None	DCWD reserve Fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	136.87	₱2,614,217.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	37.85	₱423,920.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	107.71	₱1,206,352.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	140.58	₱1,574,496.00	1	None	DCWD reserve Fund	1
SAN ANTONIO	MLCSP	400	₱20,600.00	227.24	₱4,681,144.00	2	None	DCWD reserve Fund	2
RAFAEL CASTILLO	MLCSP	400	₱20,600.00	157.1	₱3,236,260.00	2	None	DCWD reserve Fund	2
28-C	MLCSP	150	₱11,200.00	41.08	₱460,096.00	2	None	DCWD reserve Fund	2
30-C	MLCSP	400	₱20,600.00	85.55	₱1,762,330.00	2	None	DCWD reserve Fund	2
30-C	MLCSP	150	₱11,200.00	159.98	₱1,791,776.00	2	None	DCWD reserve Fund	2
14-B	MLCSP	400	₱20,600.00	71.45	₱1,471,870.00	2	None	DCWD reserve Fund	2

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
30-C	MLCSP	400	₱20,600.00	7.64	₱157,384.00	2	None	DCWD reserve Fund	2
14-B	MLCSP	400	₱20,600.00	59.98	₱1,235,588.00	2	None	DCWD reserve Fund	2
AGDAO PROPER	MLCSP	200	₱12,500.00	20.1	₱251,250.00	2	None	DCWD reserve Fund	2
40-D	MLCSP	250	₱17,000.00	283.77	₱4,824,090.00	2	None	DCWD reserve Fund	2
2-A	MLCSP	250	₱17,000.00	7.32	₱124,440.00	2	None	DCWD reserve Fund	2
39-D	MLCSP	250	₱17,000.00	196.26	₱3,336,420.00	2	None	DCWD reserve Fund	2
19-B	MLCSP	300	₱19,100.00	254.95	₱4,869,545.00	1	None	DCWD reserve Fund	1
WILFREDO AQUINO	MLCSP	150	₱11,200.00	15.86	₱177,632.00	2	None	DCWD reserve Fund	2
PACIANO BANGOY	MLCSP	150	₱11,200.00	5.45	₱61,040.00	2	None	DCWD reserve Fund	2
AGDAO PROPER	MLCSP	400	₱20,600.00	421.48	₱8,682,488.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	750	₱48,500.00	163.35	₱7,922,475.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	750	₱48,500.00	16.15	₱783,275.00	2	None	DCWD reserve Fund	2
5-A	MLCSP	750	₱48,500.00	196.61	₱9,535,585.00	2	None	DCWD reserve Fund	2
2-A	MLCSP	750	₱48,500.00	103.21	₱5,005,685.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	750	₱48,500.00	224.13	₱10,870,305.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	150	₱11,200.00	208.98	₱2,340,576.00	1	None	DCWD reserve Fund	1
BAGO GALLERA	MLCSP	350	₱20,800.00	23.71	₱493,168.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	493.05	₱10,255,440.00	1	None	DCWD reserve Fund	1
BAGO GALLERA	MLCSP	300	₱19,100.00	4.41	₱84,231.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	300	₱19,100.00	8.71	₱166,361.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	294	₱3,292,800.00	1	None	DCWD reserve Fund	1
WILFREDO AQUINO	MLCSP	400	₱20,600.00	7.72	₱159,032.00	1	None	DCWD reserve Fund	1
MA-A	MLCSP	350	₱20,800.00	224.84	₱4,676,672.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	400	₱20,600.00	40.19	₱827,914.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	450	₱24,300.00	35.26	₱856,818.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	500	₱33,200.00	22.76	₱755,632.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	600	₱40,100.00	319.83	₱12,825,183.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	600	₱40,100.00	137.98	₱5,532,998.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	600	₱40,100.00	132.34	₱5,306,834.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	300	₱19,100.00	2.23	₱42,593.00	1	None	DCWD reserve Fund	1

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
MA-A	MLCSP	300	₱19,100.00	336.29	₱6,423,139.00	1	None	DCWD reserve Fund	1
MA-A	MLCSP	300	₱19,100.00	13.96	₱266,636.00	1	None	DCWD reserve Fund	1
MA-A	MLCSP	300	₱19,100.00	46.39	₱886,049.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	300	₱19,100.00	175.78	₱3,357,398.00	1	None	DCWD reserve Fund	1
MA-A	MLCSP	300	₱19,100.00	118.72	₱2,267,552.00	1	None	DCWD reserve Fund	1
MA-A	MLCSP	300	₱19,100.00	32.27	₱616,357.00	1	None	DCWD reserve Fund	1
MA-A	MLCSP	300	₱19,100.00	63.45	₱1,211,895.00	1	None	DCWD reserve Fund	1
MA-A	MLCSP	150	₱11,200.00	33.21	₱371,952.00	2	None	DCWD reserve Fund	2
2-A	MLCSP	300	₱19,100.00	13.62	₱260,142.00	2	None	DCWD reserve Fund	2
SASA	MLCSP	250	₱17,000.00	317.51	₱5,397,670.00	2	None	DCWD reserve Fund	2
31-D	MLCSP	300	₱19,100.00	105.93	₱2,023,263.00	2	None	DCWD reserve Fund	2
31-D	MLCSP	150	₱11,200.00	16.42	₱183,904.00	2	None	DCWD reserve Fund	2
35-D	MLCSP	200	₱12,500.00	10.88	₱136,000.00	2	None	DCWD reserve Fund	2
MATINA PANGI	MLCSP	800	₱52,800.00	710.84	₱37,532,352.00	1	None	DCWD reserve Fund	1
MATINA PANGI	MLCSP	800	₱52,800.00	168.64	₱8,904,192.00	1	None	DCWD reserve Fund	1
MATINA PANGI	MLCSP	800	₱52,800.00	71.59	₱3,779,952.00	1	None	DCWD reserve Fund	1
18-B	MLCSP	150	₱11,200.00	347.83	₱3,895,696.00	1	None	DCWD reserve Fund	1
39-D	MLCSP	300	₱19,100.00	135.63	₱2,590,533.00	2	None	DCWD reserve Fund	2
38-D	MLCSP	300	₱19,100.00	7.79	₱148,789.00	2	None	DCWD reserve Fund	2
39-D	MLCSP	300	₱19,100.00	18.93	₱361,563.00	2	None	DCWD reserve Fund	2
26-C	MLCSP	150	₱11,200.00	156.73	₱1,755,376.00	2	None	DCWD reserve Fund	2
23-C	MLCSP	150	₱11,200.00	4.57	₱51,184.00	2	None	DCWD reserve Fund	2
26-C	MLCSP	150	₱11,200.00	3.84	₱43,008.00	2	None	DCWD reserve Fund	2
23-C	MLCSP	150	₱11,200.00	3.9	₱43,680.00	2	None	DCWD reserve Fund	2
32-D	MLCSP	300	₱19,100.00	10.2	₱194,820.00	2	None	DCWD reserve Fund	2
31-D	MLCSP	300	₱19,100.00	8.38	₱160,058.00	2	None	DCWD reserve Fund	2
31-D	MLCSP	300	₱19,100.00	150.78	₱2,879,898.00	2	None	DCWD reserve Fund	2
32-D	MLCSP	300	₱19,100.00	85.03	₱1,624,073.00	2	None	DCWD reserve Fund	2
24-C	MLCSP	300	₱19,100.00	18.13	₱346,283.00	2	None	DCWD reserve Fund	2
31-D	MLCSP	300	₱19,100.00	3.56	₱67,996.00	2	None	DCWD reserve Fund	2

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
27-C	MLCSP	200	₱12,500.00	18.97	₱237,125.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	300	₱19,100.00	233.32	₱4,456,412.00	1	None	DCWD reserve Fund	1
SASA	MLCSP	250	₱17,000.00	178.33	₱3,031,610.00	2	None	DCWD reserve Fund	2
12-B	MLCSP	100	₱11,000.00	0.78	₱8,580.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	350	₱20,800.00	625.57	₱13,011,856.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	350	₱20,800.00	98.18	₱2,042,144.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	300	₱19,100.00	665.27	₱12,706,657.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	350	₱20,800.00	7.81	₱162,448.00	2	None	DCWD reserve Fund	2
TIGATTO	MLCSP	400	₱20,600.00	823.75	₱16,969,250.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	250	₱17,000.00	7.69	₱130,730.00	2	None	DCWD reserve Fund	2
DUMOY	MLCSP	250	₱17,000.00	15	₱255,000.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	250	₱17,000.00	5.64	₱95,880.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	250	₱17,000.00	28.02	₱476,340.00	2	None	DCWD reserve Fund	2
BAGO GALLERA	MLCSP	250	₱17,000.00	6.99	₱118,830.00	1	None	DCWD reserve Fund	1
PAMPANGA	MLCSP	300	₱19,100.00	3.45	₱65,895.00	2	None	DCWD reserve Fund	2
V. HIZON	MLCSP	250	₱17,000.00	2.68	₱45,560.00	2	None	DCWD reserve Fund	2
V. HIZON	MLCSP	250	₱17,000.00	8.89	₱151,130.00	2	None	DCWD reserve Fund	2
PANACAN	MLCSP	250	₱17,000.00	43.61	₱741,370.00	2	None	DCWD reserve Fund	2
PANACAN	MLCSP	250	₱17,000.00	182.18	₱3,097,060.00	2	None	DCWD reserve Fund	2
PANACAN	MLCSP	250	₱17,000.00	359.55	₱6,112,350.00	2	None	DCWD reserve Fund	2
PANACAN	MLCSP	250	₱17,000.00	313.82	₱5,334,940.00	1	None	DCWD reserve Fund	1
PANACAN	MLCSP	250	₱17,000.00	505.5	₱8,593,500.00	2	None	DCWD reserve Fund	2
MATINA CROSSING	MLCSP	300	₱19,100.00	182.35	₱3,482,885.00	1	None	DCWD reserve Fund	1
TIGATTO	MLCSP	400	₱20,600.00	796.06	₱16,398,836.00	2	None	DCWD reserve Fund	2
TIGATTO	MLCSP	400	₱20,600.00	280.23	₱5,772,738.00	1	None	DCWD reserve Fund	1
PANACAN	MLCSP	250	₱17,000.00	40.33	₱685,610.00	2	None	DCWD reserve Fund	2
PANACAN	MLCSP	250	₱17,000.00	1,040.48	₱17,688,160.00	1	None	DCWD reserve Fund	1
SASA	MLCSP	300	₱19,100.00	79.92	₱1,526,472.00	2	None	DCWD reserve Fund	2
6-A	MLCSP	600	₱40,100.00	90.17	₱3,615,817.00	2	None	DCWD reserve Fund	2
5-A	MLCSP	600	₱40,100.00	9.16	₱367,316.00	2	None	DCWD reserve Fund	2

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
6-A	MLCSP	600	₱40,100.00	9.89	₱396,589.00	2	None	DCWD reserve Fund	2
PAMPANGA	MLCSP	300	₱19,100.00	18.37	₱350,867.00	2	None	DCWD reserve Fund	2
SASA	MLCSP	300	₱19,100.00	169.79	₱3,242,989.00	2	None	DCWD reserve Fund	2
PAMPANGA	MLCSP	300	₱19,100.00	276.83	₱5,287,453.00	2	None	DCWD reserve Fund	2
TALOMO	MLCSP	450	₱24,300.00	34.79	₱845,397.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	450	₱24,300.00	199.17	₱4,839,831.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	450	₱24,300.00	62.16	₱1,510,488.00	1	None	DCWD reserve Fund	1
PANACAN	MLCSP	250	₱17,000.00	180.38	₱3,066,460.00	2	None	DCWD reserve Fund	2
PANACAN	MLCSP	250	₱17,000.00	0.71	₱12,070.00	2	None	DCWD reserve Fund	2
MATINA PANGI	MLCSP	250	₱17,000.00	455.49	₱7,743,330.00	1	None	DCWD reserve Fund	1
CATALUNAN GRANDE	MLCSP	250	₱17,000.00	243.39	₱4,137,630.00	1	None	DCWD reserve Fund	1
11-B	MLCSP	300	₱19,100.00	11.72	₱223,852.00	1	None	DCWD reserve Fund	1
19-B	MLCSP	300	₱19,100.00	108.19	₱2,066,429.00	1	None	DCWD reserve Fund	1
19-B	MLCSP	300	₱19,100.00	45.56	₱870,196.00	1	None	DCWD reserve Fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	18.07	₱202,384.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	150	₱11,200.00	24.03	₱269,136.00	2	None	DCWD reserve Fund	2
TIGATTO	MLCSP	400	₱20,600.00	979.68	₱20,181,408.00	1	None	DCWD reserve Fund	1
TIGATTO	MLCSP	400	₱20,600.00	465.86	₱9,596,716.00	1	None	DCWD reserve Fund	1
TIGATTO	MLCSP	400	₱20,600.00	495.13	₱10,199,678.00	1	None	DCWD reserve Fund	1
BAGO APLAYA	MLCSP	400	₱20,600.00	215.2	₱4,433,120.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	400	₱20,600.00	458.49	₱9,444,894.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	250	₱17,000.00	39.3	₱668,100.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	600	₱40,100.00	223.51	₱8,962,751.00	2	None	DCWD reserve Fund	2
BAGO APLAYA	MLCSP	600	₱40,100.00	463.42	₱18,583,142.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	250	₱17,000.00	184.63	₱3,138,710.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	250	₱17,000.00	922.6	₱15,684,200.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	250	₱17,000.00	1,041.85	₱17,711,450.00	2	None	DCWD reserve Fund	2
20-B	MLCSP	150	₱11,200.00	82.14	₱919,968.00	1	None	DCWD reserve Fund	1
20-B	MLCSP	150	₱11,200.00	41.02	₱459,424.00	1	None	DCWD reserve Fund	1
10-A	MLCSP	150	₱11,200.00	3.91	₱43,792.00	1	None	DCWD reserve Fund	1

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
10-A	MLCSP	150	₱11,200.00	58.32	₱653,184.00	1	None	DCWD reserve Fund	1
PANACAN	MLCSP	400	₱20,600.00	118.38	₱2,438,628.00	2	None	DCWD reserve Fund	2
PANACAN	MLCSP	400	₱20,600.00	532.14	₱10,962,084.00	1	None	DCWD reserve Fund	1
ILANG	MLCSP	400	₱20,600.00	407.33	₱8,390,998.00	2	None	DCWD reserve Fund	2
ILANG	MLCSP	400	₱20,600.00	31.69	₱652,814.00	1	None	DCWD reserve Fund	1
ILANG	MLCSP	400	₱20,600.00	988.28	₱20,358,568.00	1	None	DCWD reserve Fund	1
ILANG	MLCSP	400	₱20,600.00	268.48	₱5,530,688.00	1	None	DCWD reserve Fund	1
MATINA CROSSING	MLCSP	250	₱17,000.00	92.29	₱1,568,930.00	1	None	DCWD reserve Fund	1
TIGATTO	MLCSP	400	₱20,600.00	333.61	₱6,872,366.00	2	None	DCWD reserve Fund	2
TIGATTO	MLCSP	400	₱20,600.00	654.51	₱13,482,906.00	1	None	DCWD reserve Fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	54.26	₱1,036,366.00	2	None	DCWD reserve Fund	2
WILFREDO AQUINO	MLCSP	300	₱19,100.00	59.75	₱1,141,225.00	2	None	DCWD reserve Fund	2
TALOMO	MLCSP	350	₱20,800.00	70.52	₱1,466,816.00	2	None	DCWD reserve Fund	2
TALOMO	MLCSP	350	₱20,800.00	479.16	₱9,966,528.00	1	None	DCWD reserve Fund	1
TALOMO	MLCSP	250	₱17,000.00	16.21	₱275,570.00	2	None	DCWD reserve Fund	2
TALOMO	MLCSP	350	₱20,800.00	5.75	₱119,600.00	2	None	DCWD reserve Fund	2
TALOMO	MLCSP	350	₱20,800.00	437.34	₱9,096,672.00	2	None	DCWD reserve Fund	2
TALOMO	MLCSP	250	₱17,000.00	328	₱5,576,000.00	2	None	DCWD reserve Fund	2
TALOMO	MLCSP	250	₱17,000.00	0.61	₱10,370.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	800	₱52,800.00	157.45	₱8,313,360.00	2	None	DCWD reserve Fund	2
TIGATTO	MLCSP	800	₱52,800.00	397.12	₱20,967,936.00	2	None	DCWD reserve Fund	2
BUHANGIN	MLCSP	800	₱52,800.00	19.46	₱1,027,488.00	2	None	DCWD reserve Fund	2
MA-A	MLCSP	800	₱52,800.00	55.05	₱2,906,640.00	2	None	DCWD reserve Fund	2
TALOMO	MLCSP	700	₱44,200.00	353.39	₱15,619,838.00	1	None	DCWD reserve Fund	1
TALOMO	MLCSP	700	₱44,200.00	28.93	₱1,278,706.00	1	None	DCWD reserve Fund	1
TALOMO	MLCSP	350	₱20,800.00	5.19	₱107,952.00	1	None	DCWD reserve Fund	1
WILFREDO AQUINO	MLCSP	400	₱20,600.00	12.17	₱250,702.00	1	None	DCWD reserve Fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	71.18	₱797,216.00	2	None	DCWD reserve Fund	2
PACIANO BANGOY	MLCSP	150	₱11,200.00	2.02	₱22,624.00	2	None	DCWD reserve Fund	2
AGDAO PROPER	MLCSP	400	₱20,600.00	24.87	₱512,322.00	2	None	DCWD reserve Fund	2

Table LU-129. Lifeline Utilities, Level III Water System, Adaptive Capacity Table For Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
AGDAO PROPER	MLCSP	400	₱20,600.00	5.86	₱120,716.00	2	None	DCWD reserve Fund	2
SAN ANTONIO	MLCSP	400	₱20,600.00	3.88	₱79,928.00	2	None	DCWD reserve Fund	2
A. ANGLIONGTO	MLCSP	300	₱19,100.00	348.93	₱6,664,563.00	2	None	DCWD reserve Fund	2
LAPU - LAPU	MLCSP	300	₱19,100.00	5.08	₱97,028.00	2	None	DCWD reserve Fund	2
V. HIZON	MLCSP	300	₱19,100.00	162.74	₱3,108,334.00	2	None	DCWD reserve Fund	2
A. ANGLIONGTO	MLCSP	300	₱19,100.00	23.08	₱440,828.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	250	₱17,000.00	341.23	₱5,800,910.00	2	None	DCWD reserve Fund	2
MATINA APLAYA	MLCSP	250	₱17,000.00	266.89	₱4,537,130.00	2	None	DCWD reserve Fund	2
BUCANA	MLCSP	250	₱17,000.00	434.23	₱7,381,910.00	2	None	DCWD reserve Fund	2
AGDAO PROPER	MLCSP	150	₱11,200.00	55.96	₱626,752.00	2	None	DCWD reserve Fund	2
PACIANO BANGOY	MLCSP	150	₱11,200.00	8.86	₱99,232.00	2	None	DCWD reserve Fund	2
AGDAO PROPER	MLCSP	150	₱11,200.00	37.93	₱424,816.00	2	None	DCWD reserve Fund	2
15-B	MLCSP	150	₱11,200.00	19.13	₱214,256.00	2	None	DCWD reserve Fund	2
SAN ANTONIO	MLCSP	400	₱20,600.00	78.61	₱1,619,366.00	2	None	DCWD reserve Fund	2
WILFREDO AQUINO	MLCSP	400	₱20,600.00	58.48	₱1,204,688.00	2	None	DCWD reserve Fund	2
WILFREDO AQUINO	MLCSP	400	₱20,600.00	64.24	₱1,323,344.00	1	None	DCWD reserve Fund	1
SAN ANTONIO	MLCSP	400	₱20,600.00	367.39	₱7,568,234.00	2	None	DCWD reserve Fund	2
ILANG	MLCSP	400	₱20,600.00	21.96	₱452,376.00	2	None	DCWD reserve Fund	2
ILANG	MLCSP	400	₱20,600.00	21.96	₱452,376.00	1	None	DCWD reserve Fund	1

Adaptive Capacity of DCWD Wells to Liquefaction

All 14 wells moderately and highly susceptible to liquefaction have high adaptive capacity. While there wells do not have insurance coverage, the DCWD has a reserve fund for the rehabilitation and maintenance of the wells.

Table LU-130. Lifeline Utilities, DCWD Wells, Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE			VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	SENSITIVITY	ADAPTIVE CAPACITY		
LOCATION	PUMP TYPE	REPLACEMENT COST			EXISTING CON-DITION	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
UUHSA, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	GOOD	NO	DCWD fund	1
Km. 8 Ulas, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	GOOD	NO	DCWD fund	1
Puan Junction, Brgy. Talomo	SUBMERSIBLE	6,500,000.00	6,500,000.00	2	GOOD	NO	DCWD fund	1
Lower Rapnaga, Puan, Brgy. Bago Aplaya	SUBMERSIBLE	6,500,000.00	6,500,000.00	2	GOOD	NO	DCWD fund	1
Lower Rapnaga, Puan, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	GOOD	NO	DCWD fund	1
Lower Rapnaga, Puan, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	GOOD	NO	DCWD fund	1
Crossing Bago Aplaya, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	GOOD	NO	DCWD fund	1
Km. 10 Bago Aplaya fronting Ideal Subdivision, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	GOOD	NO	DCWD fund	1
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	GOOD	NO	DCWD fund	1
Km. 11 Dumoy near the entrance to Dusnai, Brgy. Dumoy	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	GOOD	NO	DCWD fund	1
Bago Gallera Road near Gallera De Oro Subd., Brgy. Bago Gallera	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	GOOD	NO	DCWD fund	1
Km. 9, Puan along Davao Cotabato Road Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	GOOD	NO	DCWD fund	1
Catotal Subdivision near Block 22, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	GOOD	NO	DCWD fund	1
Entrance to Greenland Subdivision, along Davao Cotabato Road, Brgy. Dumoy	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	GOOD	NO	DCWD fund	1

Adaptive Capacity for Cell sites

A total of 26 cellsites have moderate adaptive capacity, while 143 have high adaptive capacity. These cell sites are found in Toril, Talomo, Agdao, Bunawan districts.

Table LU-131. Lifeline Utilities, Cell Sites Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
GLOBE TELECOM, INC.	Brgy. Daliao, Toril,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	2
DIGITEL MOBILE PHILIPPINES, INC.	Lorenzo Manuel St., San Vicente Daliao, Toril, Davao City,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	2
SMART COMMUNICATIONS, INC.	Brgy. Daliao, Toril	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	2
GLOBE TELECOM, INC.	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	2
SMART COMMUNICATIONS, INC.	Mac Arthur Highway, Dumoy,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Barangay Bago Aplaya, Talomo District, Davao City Golf Country Club	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	Doña Luisa Subdivision, Phase 2, Brgy. Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1

Table LU-131. Lifeline Utilities, Cell Sites Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Matina Aplaya (near Lanzano Subd.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	JMS Bldg., #88 Maya Street, Barangay 76A, Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	University Ave., Juna Subd., Martina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Abarquez Prop., University Ave., Juna Subd., Martina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Mc Arthur Hiway, Brgy. 74-A, Matina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	NCC Mall Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Centerpoint Mall, Brgy. Matina Crossing,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1

Table LU-131. Lifeline Utilities, Cell Sites Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
DIGITEL MOBILE PHILIPPINES, INC.	Santiago's Lot, Brgy. Sasa Buhangin,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Erlinda Reyes Bldg., 19-Piapi Quezon Blvd.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	5/F Gaisano Ilustre St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Ilustre St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	J.S. Gaisano Mall, Ilustre St., cor. Gen. Luna St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	General Malvar St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	D. Ponce St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Chippens Bldg., 368 Padre Gomez St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Chippens Bldg., 368 Padre Gomez St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Davao Doctors Hospital, Malvar St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Legaspi St. Cor. Bonifacio St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Baguio (Pob.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Km.12, National Highway, Barangay Catalunan Pequeno,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1

Table LU-131. Lifeline Utilities, Cell Sites Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
DIGITEL MOBILE PHILIPPINES, INC.	Magno Prop., No. 64 V. Mapa St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	No. 64 V. Mapa St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	JVALL Bldg., McArthur Hi-way, (Maa Crossing)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Sandawa, McArthur Hi-Way, Matina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Sandawa, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	Magallanes St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro corner Quimpo Blvd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	NCCC Mall, Maa,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Matina Hi-way cor. MAA Rd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	#88 Maya St., Brgy. 76A, Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro cor. Quimpo Blvd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Ponciano Reyes St. (crooked Rd.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Magno Bldg., Ponciano Reyes St. (crooked rd.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	Bonifacio St., cor M.L. Quezon Blvd	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	109 Piapi, Quezon Blvd,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1

Table LU-131. Lifeline Utilities, Cell Sites Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
SMART COMMUNICATIONS, INC.	PLDT Ponciano, PLDT Bldg., Ponciano St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Regency Inn, Villa Abrille St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Gov. Sales St., Brgy. 27	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Jose Co Bldg., Gov. Sales St., Brgy. 27,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	NCC Mall Uyanguren	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	NCC Mall Unaguren	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	PBCOM Bldg., Monteverde cor. Bangoy St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	PLDT Post fronting Chimes Store, Sales St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Holy Cross College, Sta. Ana Ave. Cor Guerero	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	J.P Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	San Pedro Hospital Guzman St., Brgy. Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Brgy. Gov. Vicente Duterte,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Lapu Lapu corner Bangoy Sts., Agdao,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Lapu-lapu St., cor. Bangoy Agdao,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1

Table LU-131. Lifeline Utilities, Cell Sites Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
SMART COMMUNICATIONS, INC.	Banco Filipino Bldg., Lapu-lapu St., cor. Dacudao Ave.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	Wescon Suites Cmpd., R. Castillo, Agdao	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Peralta Property, Seminary Rd., Brgy Catalunan Grande Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Llanes Prop 1, Cabaguio Ave., Agdao,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Cabaguio Ave., Agdao	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	R. Castillo St., Otero Compound, Lapu-Lapu	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Leonor Property, Camia St., Ubalde Subd., Brgy. Ubalde,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Camia St., Ubalde Subd., Brgy. Ubalde	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	SM Lanang, Km. 6 Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1

Table LU-131. Lifeline Utilities, Cell Sites Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
SMART COMMUNICATIONS, INC.	SM Lanang, Km 6, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	SM Lanang Former Lanang Golf and Country Club, J.P. Laurel Ave., Lanang District, Brgy. San Antonio	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	J.P. Laurel Ave., Monark Compound, Brgy. Rafael Castillo	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	SM Davao Ecoland	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	SM Davao Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Waterfront Hotel, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Doña Asuncion Road, Brgy. Pampanga, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Km. 9, KMA, Brgy. Sasa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Sitio Nahul, Barangay Baliok,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1

Table LU-131. Lifeline Utilities, Cell Sites Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
SMART COMMUNICATIONS, INC.	Sitio Nahul, Brgy. Baliok	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	National Highway Panacan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	Lasang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	2
SMART COMMUNICATIONS, INC.	Barilio Lasang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	2
DIGTEL MOBILE PHILIPPINES, INC.	Hao Property, Bariio Lasang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	-	-	2
SMART COMMUNICATIONS, INC.	Corner National Highway-Lim Street, Brgy. Toril Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	2
SMART COMMUNICATIONS, INC.	Ferriols Compound, Brgy. Toril Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	2
SMART COMMUNICATIONS, INC.	Sto. Cristo St., cor. Rasay St., Brgy. Toril Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	2
SMART COMMUNICATIONS, INC.	Along National Highway, Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Commandante Property, Along National Highway, Brgy. Bago Aplaya, Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Telstar St., GSIS Subdivision, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Crossing Puan, McArthur Highway	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Bago Aplaya, Talomo	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGTEL MOBILE PHILIPPINES, INC.	Vega Property, Cariñosa St. cor Balitaw St., Lanzona Subd., Matina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Carinosa St., cor. Balitaw St., Lanzona Subd., Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1

Table LU-131. Lifeline Utilities, Cell Sites Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
SMART COMMUNICATIONS, INC.	Ortis Road, Brgy. Ulas	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Ortis Road, Brgy. Ulas,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Golden Hardware Bldg.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Golden Hardware Bldg., Km. 5 McArthur Highway, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Guardsman, AGT Bldg., Nacilla Street, Brgy. Ma-a	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Guardsman AGT Bldg., Nacilla Street, Brgy. Ma-a,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	PLDT Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
GLOBE TELECOM, INC.	Torres St., Brgy. 9-A (Pob.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	PLDT Maa,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Infront of Luisa Avenue Square Bldg., B. Jacinto Ext. St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Landco Bldg., JP Laurel St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
GLOBE TELECOM, INC.	Corner Palma Gil & Cervantes St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Billboard on Synchar Hotel, J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	J.P. Laurel Avenue, Bajada,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	University of Southern Philippines, Trade School Drive	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Opal St., Obrero,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1

Table LU-131. Lifeline Utilities, Cell Sites Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
SMART COMMUNICATIONS, INC.	Opal St., Obrero	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St., Barangay 20-B (Pob.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St. Acacia,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
GLOBE TELECOM, INC.	JP Laurel St., Barangay 20-B (Pob.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Km10 Doña Salud Subd., Sasa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Km10 Doña Salud Subd., Sasa,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Pres. Carlos P. Garcia Highway, Brgy. Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	President Carlos P. Garcia Highway (Diversion Road), Brgy. Panacan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Cruz Property, President. Carlos P. Garcia Highway (Diversion Road), Brgy. Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Malagamot Road, Bayani Diaz Compound, Panacan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Malagamot Road, Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway, Panacan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Tefasco Lot, Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	1

Table LU-131. Lifeline Utilities, Cell Sites Adaptive Capacity Table for Liquefaction, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
DIGITEL MOBILE PHILIPPINES, INC.	Brgy. Bunawan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	2
SMART COMMUNICATIONS, INC.	Purok 3, (near Market site), Brgy. Bunawan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	2
GLOBE TELECOM, INC.	Crossing Licanan, Brgy. Alejandra Navarro (Lasang)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	-	-	2

Adaptive Capacity of Roads to Storm Surge

C.P Garcia Highway, Dacudao Avenue, Davao-Agusan Highway, Florentino Torres St., J.P. Cabaguio, J.P Laurel, Libby Road, McArthur Highway, Old Airport, Pichon St., Quimpo Boulevard, Quimpo Avenue, and McArthur Highway have low adaptive capacity. These road networks have no insurance coverage and depends on Quick Response Fund.

Table LU-132. Lifeline Utilities, Roads, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE			IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
2nd Avenue	0.2056	12,337,800	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
5th Ave.	0.1964	11,781,900	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
5th Ave.	0.0080	478,753	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	1.0	1.0	1.0	1.0
Agdao Flyover	0.3327	18,632,152	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Agdao Flyover	0.1406	7,876,064	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0

Table LU-132. Lifeline Utilities, Roads, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE			IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Bonifacio Rotonda	0.0839	4,697,403	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Carlos P. Garcia Highway	0.0067	401,819	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Carlos P. Garcia Highway	0.0289	1,731,774	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Carlos P. Garcia Highway	0.0015	91,175	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	1.0	1.0	1.0	1.0
Carlos P. Garcia Highway	0.3565	21,391,800	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Carlos P. Garcia Highway	0.0289	1,731,720	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Claro M. Recto St.	0.2221	12,436,984	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Claro M. Recto St.	0.2052	11,491,424	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Claro M. Recto St.	0.5195	29,089,592	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Claro M. Recto St.	0.0260	1,457,512	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Claro M. Recto St.	0.1375	7,700,728	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Claro M. Recto St.	0.0158	887,303	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Claro M. Recto St.	0.0891	4,986,834	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Dacudao Avenue	0.2357	13,197,408	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Dacudao Avenue	0.4343	24,319,792	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	2.0	2.0	2.3
Dacudao Avenue	0.1959	10,967,936	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Dacudao Avenue	0.3666	20,530,160	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0

Table LU-132. Lifeline Utilities, Roads, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE			IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Davao - Agusan Highway	1.0823	60,606,560	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Davao - Agusan Highway	0.0561	3,140,094	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.1872	10,481,408	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.4608	25,806,872	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Davao - Agusan Highway	0.2881	16,130,912	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.8330	46,649,176	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.4090	22,906,128	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Davao - Agusan Highway	0.9115	51,041,704	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.1423	7,967,736	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.2755	15,430,296	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Davao - Agusan Highway	1.9411	108,703,840	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.4573	25,608,072	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.5854	32,781,840	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	1.2341	69,110,720	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	1.5330	85,848,560	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.2874	16,095,184	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.5681	31,814,048	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0

Table LU-132. Lifeline Utilities, Roads, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE			IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RE-SOURCES	ADAPTIVE CAPACITY SCORE			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Davao - Agusan Highway	0.5142	28,797,104	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Davao - Agusan Highway	0.4213	23,592,856	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	1.8633	104,342,000	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.7272	40,724,712	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.2430	13,608,168	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Davao - Agusan Highway	0.4561	25,540,704	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Florentino Torres St	0.0015	98,565	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Florentino Torres St	0.0521	3,388,223	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Florentino Torres St	0.0223	1,446,556	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Florentino Torres St	0.3497	22,733,490	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Florentino Torres St	0.0095	618,499	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Florentino Torres St	0.1677	10,901,410	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Florentino Torres St	0.1291	8,391,110	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Florentino Torres St	0.1745	11,342,630	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Florentino Torres St	0.0396	2,573,922	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
J.P. Cabaguio Avenue	0.0846	4,739,330	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
J.P. Cabaguio Avenue	0.4031	22,571,248	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0

Table LU-132. Lifeline Utilities, Roads, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE			IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RE-SOURCES	ADAPTIVE CAPACITY SCORE			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
J.P. Cabaguio Avenue	0.1827	10,230,752	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
J.P. Cabaguio Avenue	0.0910	5,096,890	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
J.P. Cabaguio Avenue	0.1908	10,682,000	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.2920	16,353,736	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.2001	11,203,528	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.1927	10,790,304	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Jose P. Laurel Avenue	0.1487	8,328,040	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Jose P. Laurel Avenue	0.1453	8,135,120	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Jose P. Laurel Avenue	0.1008	5,644,800	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.0300	1,682,223	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.3206	17,955,000	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.1157	6,476,624	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.1912	10,704,624	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Jose P. Laurel Avenue	0.1200	6,717,424	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.2159	12,091,016	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Jose P. Laurel Avenue	0.0008	47,255	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.2964	16,598,456	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0

Table LU-132. Lifeline Utilities, Roads, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE			IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Jose P. Laurel Avenue	0.2024	11,335,520	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.0609	3,411,822	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Jose P. Laurel Avenue	0.2931	16,416,232	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.2108	11,805,920	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.3861	21,621,376	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Jose P. Laurel Avenue	0.2669	14,945,728	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Jose P. Laurel Avenue	0.0942	5,274,114	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Leon Garcia St.	0.2148	10,523,681	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Leon Garcia St.	0.4363	21,381,052	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Libby Road	0.0062	154,660	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Libby Road	0.0605	1,512,675	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Libby Road	0.2532	6,330,975	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.1441	8,071,896	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.0807	4,519,889	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Mc. Arthur Highway	0.1227	6,871,760	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.0201	1,124,990	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.0113	630,767	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.0200	1,122,274	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0

Table LU-132. Lifeline Utilities, Roads, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE			IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Mc. Arthur Highway	0.0123	691,146	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Mc. Arthur Highway	0.0412	2,309,126	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.4789	26,815,712	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.0563	3,152,010	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Mc. Arthur Highway	0.8616	48,251,056	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.9282	51,977,576	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.0869	4,868,427	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Mc. Arthur Highway	0.2745	15,370,488	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Mc. Arthur Highway	0.4608	25,807,096	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Mc. Arthur Highway	0.4339	24,296,720	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Mc. Arthur Highway	1.0214	57,199,520	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Old Airport Road	0.0204	1,223,874	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Old Airport Road	0.0616	3,697,902	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Old Airport Road	0.1224	7,343,220	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Old Airport Road	0.0408	2,447,808	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Pakiputan Wharf Road	0.5062	28,345,632	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Pichon St.	0.0019	106,785	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Pichon St.	0.0102	569,285	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0

Table LU-132. Lifeline Utilities, Roads, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE			IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Pichon St.	0.0467	2,613,458	3.0	No insurance but has local fund for rehabilita-	Quick Response fund	3.0	3.0	3.0	3.0
Pichon St.	0.4288	24,013,696	3.0	No insurance but has local fund for rehabilita-	Quick Response fund	2.0	2.0	2.0	2.0
Pichon St.	0.3063	17,152,744	3.0	No insurance but has local fund for rehabilita-	Quick Response fund	3.0	3.0	3.0	3.0
Pichon St.	0.1521	8,516,032	3.0	No insurance but has local fund for rehabilita-	Quick Response fund	2.0	2.0	2.0	2.0
Quezon Boulevard	0.2429	20,892,582	2.0	No insurance but has local fund for rehabilita-	Quick Response fund	2.0	2.0	2.0	2.0
Quezon Boulevard	0.6597	56,732,222	2.0	No insurance but has local fund for rehabilita-	Quick Response fund	2.0	2.0	2.0	2.0
Quezon Boulevard	1.1526	99,119,300	3.0	No insurance but has local fund for rehabilita-	Quick Response fund	3.0	3.0	3.0	3.0
Quezon Boulevard	0.4056	34,877,988	5.0	No insurance but has local fund for rehabilita-	Quick Response fund	3.0	3.0	3.0	3.0
Quezon Boulevard	0.6372	54,801,006	5.0	No insurance but has local fund for rehabilita-	Quick Response fund	3.0	3.0	3.0	3.0
Quezon Boulevard	1.1235	96,622,720	5.0	No insurance but has local fund for rehabilita-	Quick Response fund	3.0	3.0	3.0	3.0
Quimpo Boulevard	0.4617	23,083,850	5.0	No insurance but has local fund for rehabilita-	Quick Response fund	2.0	2.0	2.0	2.0
Quimpo Boulevard	0.0002	11,396	2.0	No insurance but has local fund for rehabilita-	Quick Response fund	1.0	1.0	1.0	1.0
Quimpo Boulevard	0.1625	8,122,550	3.0	No insurance but has local fund for rehabilita-	Quick Response fund	3.0	3.0	3.0	3.0
Quimpo Boulevard	0.1923	9,617,350	3.0	No insurance but has local fund for rehabilita-	Quick Response fund	3.0	3.0	3.0	3.0
Quimpo Boulevard	0.3518	17,590,250	3.0	No insurance but has local fund for rehabilita-	Quick Response fund	3.0	3.0	3.0	3.0
Quimpo Boulevard	1.2646	63,231,500	3.0	No insurance but has local fund for rehabilita-	Quick Response fund	3.0	3.0	3.0	3.0
Quimpo Boulevard	0.2471	12,352,500	3.0	No insurance but has local fund for rehabilita-	Quick Response fund	2.0	2.0	2.0	2.0
Quimpo Boulevard	0.6000	29,999,050	3.0	No insurance but has local fund for rehabilita-	Quick Response fund	3.0	3.0	3.0	3.0

Table LU-132. Lifeline Utilities, Roads, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE			IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Quimpo Boulevard	0.1951	9,755,650	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Quimpo Boulevard	0.0372	1,859,645	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Quirino Avenue	0.0546	2,183,380	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Quirino Avenue	0.2223	8,891,360	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Quirino Avenue	0.0084	334,358	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Quirino Avenue	0.2220	8,879,080	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Quirino Avenue	0.1508	6,031,840	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Quirino Avenue	0.0763	3,053,348	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Quirino Avenue	0.2063	8,253,280	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Quirino Avenue	0.1959	7,835,560	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Quirino Avenue	0.0633	2,531,616	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Quirino Avenue	0.1080	4,318,640	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Quirino Avenue	0.3941	15,762,600	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Quirino Avenue	0.1893	7,570,120	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Quirino Avenue	0.0145	579,612	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Quirino Avenue	0.0555	2,221,916	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Rafael Castillo St.	0.4876	41,932,912	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Rafael Castillo St.	0.2671	22,968,966	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0

Table LU-132. Lifeline Utilities, Roads, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE			IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Rafael Castillo St.	0.0173	1,490,131	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Rafael Castillo St.	0.0009	74,717	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Rafael Castillo St.	0.3657	31,452,006	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Rafael Castillo St.	0.0016	136,849	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Rafael Castillo St.	0.8343	71,749,800	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Rafael Castillo St.	0.9058	77,899,746	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Rafael Castillo St.	0.2916	25,076,052	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Ramon Magsaysay Ave.	0.4384	26,304,960	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Ramon Magsaysay Ave.	0.0217	1,301,472	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Ramon Magsaysay Ave.	0.0195	1,170,942	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Ramon Magsaysay Ave.	0.0129	775,980	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Ramon Magsaysay Ave.	0.4035	24,208,140	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Ramon Magsaysay Ave.	0.4781	28,685,100	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Sta. Ana Ave.	0.3457	20,740,680	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Sta. Ana Ave.	0.2241	13,444,140	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Sta. Ana Ave.	0.0213	1,275,942	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Sta. Ana Ave.	0.6951	41,707,080	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	3.0	3.0	3.0	3.0
Sta. Ana Ave.	0.0049	292,634	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	1.0	1.0	1.0	1.0

Table LU-132. Lifeline Utilities, Roads, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE			IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Mc. Arthur Highway	0.0000	1,861	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Mc. Arthur Highway	0.0000	1,861	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Rafael Castillo St.	0.0026	222,664	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	1.0	1.0	1.0	1.0
Rafael Castillo St.	0.0026	222,664	2.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	1.0	1.0	1.0	1.0

Adaptive Capacity for Bridge—All bridges susceptible to storm surge have high adaptive capacity.

Table LU-133. Lifeline Utilities, Bridges, Adaptive Capacity Table for Storm Surge with 2-meter wave, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSE LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
							GROUP 1	GROUP 2	GROUP 3	AVERAGE
Agdao Flyover	382.98	1,200,000.00	459,576,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00
Bago Br.	31.21	1,200,000.00	37,452,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00

Table LU-133. Lifeline Utilities, Bridges, Adaptive Capacity Table for Storm Surge with 2-meter wave, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSE LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
							GROUP 1	GROUP 2	GROUP 3	AVERAGE
Bunawan Br. 1	49.76	1,200,000.00	59,712,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00
Bunawan Br. 2	47.79	1,200,000.00	57,348,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00
Ilang Br.	25.70	1,200,000.00	30,840,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00
Panacan Br.	23.53	1,200,000.00	28,236,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00
Sasa Br.	18.43	1,200,000.00	22,116,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00

Table LU-133. Lifeline Utilities, Bridges, Adaptive Capacity Table for Storm Surge with 2-meter wave, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSE LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
							GROUP 1	GROUP 2	GROUP 3	AVERAGE
Talomo Br. 1	48.10	2,053,000.00	98,749,300	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00
Talomo Br. 2	48.11	2,053,000.00	98,769,830	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00

Table LU-133. Lifeline Utilities, Bridges, Adaptive Capacity Table for Storm Surge with 3-meter wave, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
ROAD NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
							GROUP 1	GROUP 2	GROUP 3	AVERAGE
Bago Br.	31.21	1,200,000	37,452,000	2.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00

Table LU-133. Lifeline Utilities, Bridges, Adaptive Capacity Table for Storm Surge with 3-meter wave, Davao City

ROAD NAME	EXPOSURE			IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT			GROUP 1	GROUP 2	GROUP 3	AVERAGE
	Ilang Br.	25.70	1,200,000	30,840,000			3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1
Talomo Br. 1	48.10	2,053,000	98,749,300	2.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00
Talomo Br. 2	48.11	2,053,000	98,769,830	2.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1	1	1	1.00

Adaptive Capacity of Power Substations to Storm Surge

All substations have high adaptive capacity, with corresponding industrial all risk insurance and comprehensive General liability.

Table LU-134. Lifeline Utilities, Power Substations, Adaptive Capacity Table for Storm Surge 2-meter wave

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CA-PACITY
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFE-LINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
Sta Ana Substation	607.00	135 Million	135 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1
R.Castillo Substation	852.00	125 Million	125 Million	1	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1
Pampanga Substation	1031.00	118 Million	118 Million	2	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1
Don Ramon Substation	15540.00	570 Million	570 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1

Table LU-134. Lifeline Utilities, Power Substations, Adaptive Capacity Table for Storm Surge 3-meter wave

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CA-PACITY
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFE-LINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
P.Reyes Substation	825.86	85 Million	85 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1
Gaisano Substation	454.00	85 Million	85 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1
Victoria Substation	595.00	120 Million	120 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1
Panacan Substation	858.00	85 Million	85 Million	2	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1
Don Ramon Substation	15,540.00	570 Million	570 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1
Bunawan Substation	1,085.00	110 Million	110 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1

Table LU-134. Lifeline Utilities, Power Substations, Adaptive Capacity Table for Storm Surge 4-meter wave

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CA-PACITY
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFE-LINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
Don Ramon Substation	15,540	570 Million	570 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1
Bunawan Substation	1085	110 Million	110 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1

Table LU-134. Lifeline Utilities, Power Substations, Adaptive Capacity Table for Storm Surge 5-meter wave

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
Dumoy Substation	1,322	118 Million	118 Million	2	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1
Bajada Substation		200 Million	200 Million	1	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1
ERA Substation	11926	200 Million	200 Million	1	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1
Don Ramon Substation	15,540	570 Million	570 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1

Adaptive Capacity of Level I Water System to Storm Surge

All spring sources susceptible to storm surge have a low adaptive capacity.

Table LU-135. Lifeline Utilities, Level I Water Supply, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE				DEGREE OF IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF THE EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
BUNAWAN	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
MAHAYAG	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
BUNAWAN	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
TIBUNGCO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
TIBUNGCO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3

Table LU-135. Lifeline Utilities, Level I Water Supply, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE				DEGREE OF IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF THE EX-ISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
LIZADA	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
LIZADA	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
LIZADA	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
LIZADA	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
LIZADA	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
LIZADA	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
SIRAWAN	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
SIRAWAN	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
SIRAWAN	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
SIRAWAN	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
SIRAWAN	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
SIRAWAN	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
SIRAWAN	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
SIRAWAN	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
SIRAWAN	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
SIRAWAN	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
BINUGAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
BINUGAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
MAHAYAG	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
TIBUNGCO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
BUNAWAN	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
BUNAWAN	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
LIZADA	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
LIZADA	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
LIZADA	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3

Table LU-135. Lifeline Utilities, Level I Water Supply, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE				DEGREE OF IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF THE EX-ISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
DALIAO	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3
SIRAWAN	SPRING	41,586.32	41,586.32	3	None	YES. For funding proposal	3

Adaptive Capacity of Level II Water System to Storm Surge

All wells which are susceptible to storm surge have moderate adaptive capacity.

Table LU-136. Lifeline Utilities, Level II Water System, Adaptive Capacity Table For Storm Surge

EXPOSURE				IMPACT	ADAPTIVE CAPACITY			
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EX-POSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES		ADAPTIVE CAPACITY
SIRAWAN	2HP	46200	46200	2	None, but there is warranty 1 month if the waterpump is installed by the supplier.	Yes. Subject to proposal	2m	2
SIRAWAN	2HP	46200	46200	2	None, but there is warranty 1 month if the waterpump is installed by the supplier.	Yes. Subject to proposal	2m	2

Adaptive Capacity of Level III Water System to Storm Surge

For main line pipes exposed to storm surge, 529.87 meters of pipeline found in Dumoy, 815.86 meters of pipes found in Bago Aplaya, 180.4 meters of pipes found in Ilang, and 292.51 mainline pipes found Talomo have moderate adaptive capacity.

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
10-A	MLCSP	150	₱11,200.00	126.87	₱1,420,944.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	33.65	₱376,880.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	162.51	₱1,820,112.00	1	None	DCWD reserve fund	1
12-B	MLCSP	150	₱11,200.00	49.64	₱555,968.00	1	None	DCWD reserve fund	1
12-B	MLCSP	150	₱11,200.00	316.29	₱3,542,448.00	1	None	DCWD reserve fund	1
11-B	MLCSP	150	₱11,200.00	6.39	₱71,568.00	1	None	DCWD reserve fund	1
11-B	MLCSP	150	₱11,200.00	157.9	₱1,768,480.00	1	None	DCWD reserve fund	1
39-D	MLCSP	300	₱19,100.00	156.23	₱2,983,993.00	1	None	DCWD reserve fund	1
37-D	MLCSP	300	₱19,100.00	76.08	₱1,453,128.00	1	None	DCWD reserve fund	1
32-D	MLCSP	300	₱19,100.00	236.99	₱4,526,509.00	1	None	DCWD reserve fund	1
24-C	MLCSP	300	₱19,100.00	2.96	₱56,536.00	1	None	DCWD reserve fund	1
24-C	MLCSP	150	₱11,200.00	187.67	₱2,101,904.00	1	None	DCWD reserve fund	1
32-D	MLCSP	300	₱19,100.00	222.24	₱4,244,784.00	1	None	DCWD reserve fund	1
30-C	MLCSP	300	₱19,100.00	10.29	₱196,539.00	1	None	DCWD reserve fund	1
11-B	MLCSP	300	₱19,100.00	117.3	₱2,240,430.00	1	None	DCWD reserve fund	1
28-C	MLCSP	150	₱11,200.00	165.94	₱1,858,528.00	1	None	DCWD reserve fund	1
28-C	MLCSP	150	₱11,200.00	164.76	₱1,845,312.00	1	None	DCWD reserve fund	1
30-C	MLCSP	150	₱11,200.00	117.93	₱1,320,816.00	1	None	DCWD reserve fund	1
28-C	MLCSP	150	₱11,200.00	6.71	₱75,152.00	1	None	DCWD reserve fund	1
32-D	MLCSP	300	₱19,100.00	67.83	₱1,295,553.00	1	None	DCWD reserve fund	1
32-D	MLCSP	400	₱23,600.00	31.07	₱733,252.00	1	None	DCWD reserve fund	1
30-C	MLCSP	400	₱23,600.00	81.18	₱1,915,848.00	1	None	DCWD reserve fund	1
30-C	MLCSP	400	₱23,600.00	419.75	₱9,906,100.00	1	None	DCWD reserve fund	1
12-B	MLCSP	400	₱23,600.00	40.79	₱962,644.00	1	None	DCWD reserve fund	1
30-C	MLCSP	150	₱11,200.00	34.82	₱389,984.00	1	None	DCWD reserve fund	1
11-B	MLCSP	300	₱19,100.00	91.64	₱1,750,324.00	1	None	DCWD reserve fund	1
15-B	MLCSP	400	₱23,600.00	8.27	₱195,172.00	1	None	DCWD reserve fund	1
14-B	MLCSP	400	₱23,600.00	63.08	₱1,488,688.00	1	None	DCWD reserve fund	1
18-B	MLCSP	300	₱19,100.00	194.44	₱3,713,804.00	1	None	DCWD reserve fund	1
19-B	MLCSP	300	₱19,100.00	2.43	₱46,413.00	1	None	DCWD reserve fund	1
18-B	MLCSP	300	₱19,100.00	3.62	₱69,142.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
19-B	MLCSP	300	₱19,100.00	115.4	₱2,204,140.00	1	None	DCWD reserve fund	1
12-B	MLCSP	150	₱11,200.00	23.32	₱261,184.00	1	None	DCWD reserve fund	1
12-B	MLCSP	150	₱11,200.00	34.69	₱388,528.00	1	None	DCWD reserve fund	1
19-B	MLCSP	150	₱11,200.00	37.77	₱423,024.00	1	None	DCWD reserve fund	1
18-B	MLCSP	300	₱19,100.00	13.35	₱254,985.00	1	None	DCWD reserve fund	1
13-B	MLCSP	300	₱19,100.00	42.75	₱816,525.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	18.93	₱212,016.00	1	None	DCWD reserve fund	1
18-B	MLCSP	150	₱11,200.00	34.32	₱384,384.00	1	None	DCWD reserve fund	1
18-B	MLCSP	150	₱11,200.00	10.91	₱122,192.00	1	None	DCWD reserve fund	1
32-D	MLCSP	300	₱19,100.00	25.83	₱493,353.00	1	None	DCWD reserve fund	1
32-D	MLCSP	300	₱19,100.00	0.48	₱9,168.00	1	None	DCWD reserve fund	1
30-C	MLCSP	300	₱19,100.00	12.67	₱241,997.00	1	None	DCWD reserve fund	1
28-C	MLCSP	150	₱11,200.00	8.52	₱95,424.00	1	None	DCWD reserve fund	1
28-C	MLCSP	150	₱11,200.00	110.26	₱1,234,912.00	1	None	DCWD reserve fund	1
28-C	MLCSP	150	₱11,200.00	59.34	₱664,608.00	1	None	DCWD reserve fund	1
28-C	MLCSP	150	₱11,200.00	15.83	₱177,296.00	1	None	DCWD reserve fund	1
28-C	MLCSP	150	₱11,200.00	54.8	₱613,760.00	1	None	DCWD reserve fund	1
26-C	MLCSP	150	₱11,200.00	6.5	₱72,800.00	1	None	DCWD reserve fund	1
28-C	MLCSP	150	₱11,200.00	59.36	₱664,832.00	1	None	DCWD reserve fund	1
30-C	MLCSP	150	₱11,200.00	114.89	₱1,286,768.00	1	None	DCWD reserve fund	1
14-B	MLCSP	150	₱11,200.00	0.45	₱5,040.00	1	None	DCWD reserve fund	1
14-B	MLCSP	150	₱11,200.00	100.83	₱1,129,296.00	1	None	DCWD reserve fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	2.87	₱32,144.00	1	None	DCWD reserve fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	123.65	₱1,384,880.00	1	None	DCWD reserve fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	119.84	₱1,342,208.00	1	None	DCWD reserve fund	1
15-B	MLCSP	400	₱23,600.00	160.75	₱3,793,700.00	1	None	DCWD reserve fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	11.5	₱128,800.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	175.51	₱4,142,036.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	150	₱11,200.00	57.96	₱649,152.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	150	₱11,200.00	131.04	₱1,467,648.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	150	₱11,200.00	25	₱280,000.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
15-B	MLCSP	150	₱11,200.00	39.81	₱445,872.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	49.8	₱951,180.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	51.94	₱992,054.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	111.4	₱2,127,740.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	2.57	₱28,784.00	1	None	DCWD reserve fund	1
18-B	MLCSP	150	₱11,200.00	213.68	₱2,393,216.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	58.49	₱1,117,159.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	69.38	₱777,056.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	39.95	₱447,440.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	67.51	₱756,112.00	2	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	26.46	₱296,352.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	42.92	₱480,704.00	2	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	178.52	₱1,999,424.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	2.79	₱31,248.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	8.29	₱92,848.00	1	None	DCWD reserve fund	1
11-B	MLCSP	300	₱19,100.00	65.48	₱1,250,668.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	8.09	₱154,519.00	1	None	DCWD reserve fund	1
19-B	MLCSP	300	₱19,100.00	37.75	₱721,025.00	1	None	DCWD reserve fund	1
19-B	MLCSP	300	₱19,100.00	34.61	₱661,051.00	1	None	DCWD reserve fund	1
11-B	MLCSP	300	₱19,100.00	50.7	₱968,370.00	1	None	DCWD reserve fund	1
2-A	MLCSP	300	₱19,100.00	113.84	₱2,174,344.00	1	None	DCWD reserve fund	1
32-D	MLCSP	300	₱19,100.00	201.85	₱3,855,335.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	64.28	₱1,227,748.00	1	None	DCWD reserve fund	1
5-A	MLCSP	150	₱11,200.00	128.45	₱1,438,640.00	1	None	DCWD reserve fund	1
19-B	MLCSP	300	₱19,100.00	96.96	₱1,851,936.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	17.76	₱419,136.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	63.34	₱1,494,824.00	1	None	DCWD reserve fund	1
5-A	MLCSP	300	₱19,100.00	100.92	₱1,927,572.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	300	₱19,100.00	104.63	₱1,998,433.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	300	₱19,100.00	92.16	₱1,760,256.00	2	None	DCWD reserve fund	1
DUMOY	MLCSP	300	₱19,100.00	529.87	₱10,120,517.00	2	None	DCWD reserve fund	2

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
BAGO APLAYA	MLCSP	300	₱19,100.00	69.16	₱1,320,956.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	61.88	₱693,056.00	2	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	154.2	₱1,727,040.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	149.77	₱1,677,424.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	700	₱44,200.00	101.51	₱4,486,742.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	174.49	₱1,954,288.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	109.92	₱1,231,104.00	2	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	110.39	₱1,236,368.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	600	₱40,100.00	258.8	₱10,377,880.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	600	₱40,100.00	312.37	₱12,526,037.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	500	₱33,200.00	134.63	₱4,469,716.00	1	None	DCWD reserve fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	125.17	₱1,401,904.00	1	None	DCWD reserve fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	124.31	₱1,392,272.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	69.95	₱783,440.00	2	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	90.43	₱2,134,148.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	250	₱17,700.00	7.24	₱128,148.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	250	₱17,700.00	232.38	₱4,113,126.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	250	₱17,700.00	243.45	₱4,309,065.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	318.33	₱7,512,588.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	88.95	₱2,099,220.00	2	None	DCWD reserve fund	2
TALOMO	MLCSP	700	₱44,200.00	150.9	₱6,669,780.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	700	₱44,200.00	84.93	₱3,753,906.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	500	₱33,200.00	18.39	₱610,548.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	500	₱33,200.00	121.64	₱4,038,448.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	700	₱44,200.00	21.82	₱964,444.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	750	₱48,500.00	18.45	₱894,825.00	1	None	DCWD reserve fund	1
39-D	MLCSP	300	₱19,100.00	23.9	₱456,490.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	95.18	₱1,066,016.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	79	₱884,800.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	12.02	₱134,624.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	14.21	₱159,152.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

BARANGAY	TYPE	EXPOSURE				IMPACT	ADAPTIVE CAPACITY		
		SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE		DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES
BUCANA	MLCSP	150	₱11,200.00	95.76	₱1,072,512.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	23.38	₱261,856.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	13.86	₱155,232.00	1	None	DCWD reserve fund	1
7-A	MLCSP	600	₱40,100.00	59.9	₱2,401,990.00	1	None	DCWD reserve fund	1
2-A	MLCSP	350	₱20,800.00	214.03	₱4,451,824.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	80.03	₱896,336.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	1.01	₱11,312.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	78.94	₱884,128.00	1	None	DCWD reserve fund	1
18-B	MLCSP	150	₱11,200.00	175.92	₱1,970,304.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	9.02	₱212,872.00	1	None	DCWD reserve fund	1
15-B	MLCSP	400	₱23,600.00	339.5	₱8,012,200.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	59.92	₱671,104.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	750	₱48,500.00	143.95	₱6,981,575.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	750	₱48,500.00	28.11	₱1,363,335.00	1	None	DCWD reserve fund	1
17-B	MLCSP	300	₱19,100.00	13.23	₱252,693.00	1	None	DCWD reserve fund	1
16-B	MLCSP	300	₱19,100.00	37.68	₱719,688.00	1	None	DCWD reserve fund	1
13-B	MLCSP	300	₱19,100.00	2.1	₱40,110.00	1	None	DCWD reserve fund	1
13-B	MLCSP	300	₱19,100.00	49.44	₱944,304.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	75.75	₱848,400.00	2	None	DCWD reserve fund	1
11-B	MLCSP	150	₱11,200.00	13.05	₱146,160.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	142.32	₱1,593,984.00	1	None	DCWD reserve fund	1
11-B	MLCSP	300	₱19,100.00	54.95	₱1,049,545.00	1	None	DCWD reserve fund	1
11-B	MLCSP	300	₱19,100.00	64.27	₱1,227,557.00	1	None	DCWD reserve fund	1
11-B	MLCSP	300	₱19,100.00	29.76	₱568,416.00	1	None	DCWD reserve fund	1
11-B	MLCSP	300	₱19,100.00	21.72	₱414,852.00	1	None	DCWD reserve fund	1
7-A	MLCSP	600	₱40,100.00	40.84	₱1,637,684.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	47.41	₱530,992.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	111.52	₱1,249,024.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	2.36	₱26,432.00	1	None	DCWD reserve fund	1
9-A	MLCSP	150	₱11,200.00	145.74	₱1,632,288.00	1	None	DCWD reserve fund	1
9-A	MLCSP	150	₱11,200.00	11.94	₱133,728.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
10-A	MLCSP	150	₱11,200.00	1.89	₱21,168.00	1	None	DCWD reserve fund	1
7-A	MLCSP	600	₱40,100.00	150.53	₱6,036,253.00	1	None	DCWD reserve fund	1
7-A	MLCSP	500	₱33,200.00	140.13	₱4,652,316.00	1	None	DCWD reserve fund	1
7-A	MLCSP	600	₱40,100.00	7.69	₱308,369.00	1	None	DCWD reserve fund	1
6-A	MLCSP	600	₱40,100.00	80.98	₱3,247,298.00	1	None	DCWD reserve fund	1
7-A	MLCSP	500	₱33,200.00	3.49	₱115,868.00	1	None	DCWD reserve fund	1
4-A	MLCSP	500	₱33,200.00	182.25	₱6,050,700.00	1	None	DCWD reserve fund	1
6-A	MLCSP	350	₱20,800.00	1.7	₱35,360.00	1	None	DCWD reserve fund	1
5-A	MLCSP	350	₱20,800.00	11.53	₱239,824.00	1	None	DCWD reserve fund	1
2-A	MLCSP	350	₱20,800.00	47.49	₱987,792.00	1	None	DCWD reserve fund	1
2-A	MLCSP	350	₱20,800.00	52.74	₱1,096,992.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	900	₱56,500.00	78.13	₱4,414,345.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	800	₱52,800.00	150.02	₱7,921,056.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	800	₱52,800.00	130.78	₱6,905,184.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	750	₱48,500.00	62.94	₱3,052,590.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	750	₱48,500.00	16.57	₱803,645.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	26	₱496,600.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	93.07	₱1,777,637.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	57.35	₱1,095,385.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	47.99	₱537,488.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	14.63	₱163,856.00	2	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	38.75	₱434,000.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	87.81	₱983,472.00	1	None	DCWD reserve fund	1
2-A	MLCSP	300	₱19,100.00	39.19	₱748,529.00	1	None	DCWD reserve fund	1
2-A	MLCSP	350	₱20,800.00	134.66	₱2,800,928.00	1	None	DCWD reserve fund	1
2-A	MLCSP	350	₱20,800.00	38.36	₱797,888.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	28.56	₱319,872.00	1	None	DCWD reserve fund	1
28-C	MLCSP	150	₱11,200.00	0.83	₱9,296.00	1	None	DCWD reserve fund	1
24-C	MLCSP	150	₱11,200.00	84.43	₱945,616.00	1	None	DCWD reserve fund	1
30-C	MLCSP	400	₱23,600.00	65.86	₱1,554,296.00	1	None	DCWD reserve fund	1
32-D	MLCSP	300	₱19,100.00	47.65	₱910,115.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
MATINA APLAYA	MLCSP	150	₱11,200.00	34.89	₱390,768.00	1	None	DCWD reserve fund	1
11-B	MLCSP	150	₱11,200.00	12.97	₱145,264.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	142.86	₱1,600,032.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	300	₱19,100.00	40.05	₱764,955.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	300	₱19,100.00	219.77	₱4,197,607.00	1	None	DCWD reserve fund	1
26-C	MLCSP	150	₱11,200.00	3.71	₱41,552.00	1	None	DCWD reserve fund	1
27-C	MLCSP	150	₱11,200.00	155.64	₱1,743,168.00	1	None	DCWD reserve fund	1
27-C	MLCSP	150	₱11,200.00	150.89	₱1,689,968.00	1	None	DCWD reserve fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	10.44	₱116,928.00	1	None	DCWD reserve fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	56.38	₱631,456.00	1	None	DCWD reserve fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	51.4	₱575,680.00	1	None	DCWD reserve fund	1
LEON GARCIA SR.	MLCSP	150	₱11,200.00	9.75	₱109,200.00	1	None	DCWD reserve fund	1
32-D	MLCSP	300	₱19,100.00	118.33	₱2,260,103.00	1	None	DCWD reserve fund	1
32-D	MLCSP	300	₱19,100.00	86.96	₱1,660,936.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	69.46	₱2,785,346.00	2	None	DCWD reserve fund	2
BAGO APLAYA	MLCSP	600	₱40,100.00	230.12	₱9,227,812.00	2	None	DCWD reserve fund	2
BAGO APLAYA	MLCSP	600	₱40,100.00	196.64	₱7,885,264.00	1	None	DCWD reserve fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	177.11	₱1,983,632.00	1	None	DCWD reserve fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	169.1	₱1,893,920.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	150	₱11,200.00	6.83	₱76,496.00	1	None	DCWD reserve fund	1
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	46.1	₱516,320.00	1	None	DCWD reserve fund	1
20-B	MLCSP	150	₱11,200.00	52.02	₱582,624.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	12.1	₱135,520.00	1	None	DCWD reserve fund	1
20-B	MLCSP	150	₱11,200.00	41.11	₱460,432.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	1.2	₱13,440.00	1	None	DCWD reserve fund	1
18-B	MLCSP	150	₱11,200.00	48.43	₱542,416.00	1	None	DCWD reserve fund	1
20-B	MLCSP	150	₱11,200.00	0	₱0.00	1	None	DCWD reserve fund	1
20-B	MLCSP	150	₱11,200.00	0	₱0.00	1	None	DCWD reserve fund	1
20-B	MLCSP	150	₱11,200.00	1.49	₱16,688.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	5.98	₱66,976.00	1	None	DCWD reserve fund	1
18-B	MLCSP	150	₱11,200.00	170.17	₱1,905,904.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
18-B	MLCSP	150	₱11,200.00	278.99	₱3,124,688.00	1	None	DCWD reserve fund	1
19-B	MLCSP	150	₱11,200.00	2.77	₱31,024.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	37.07	₱708,037.00	1	None	DCWD reserve fund	1
2-A	MLCSP	300	₱19,100.00	127.25	₱2,430,475.00	1	None	DCWD reserve fund	1
39-D	MLCSP	300	₱19,100.00	5.37	₱102,567.00	1	None	DCWD reserve fund	1
DUMOY	MLCSP	600	₱40,100.00	461.42	₱18,502,942.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	168.6	₱6,760,860.00	2	None	DCWD reserve fund	2
BAGO APLAYA	MLCSP	600	₱40,100.00	345.04	₱13,836,104.00	1	None	DCWD reserve fund	1
31-D	MLCSP	300	₱19,100.00	9.14	₱174,574.00	1	None	DCWD reserve fund	1
37-D	MLCSP	300	₱19,100.00	63.83	₱1,219,153.00	1	None	DCWD reserve fund	1
7-A	MLCSP	600	₱40,100.00	78.89	₱3,163,489.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	347.68	₱13,941,968.00	2	None	DCWD reserve fund	2
BAGO APLAYA	MLCSP	600	₱40,100.00	424.6	₱17,026,460.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	250	₱17,700.00	85.41	₱1,511,757.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	300	₱19,100.00	1.65	₱31,515.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	300	₱19,100.00	152.94	₱2,921,154.00	2	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	500	₱33,200.00	65.78	₱2,183,896.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	96.4	₱2,275,040.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	29.3	₱691,480.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	17.98	₱424,328.00	2	None	DCWD reserve fund	2
6-A	MLCSP	600	₱40,100.00	101.25	₱4,060,125.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	900	₱56,500.00	99.08	₱5,598,020.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	900	₱56,500.00	20.76	₱1,172,940.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	900	₱56,500.00	32.44	₱1,832,860.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	58.36	₱653,632.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	65.89	₱737,968.00	2	None	DCWD reserve fund	1
DUMOY	MLCSP	500	₱33,200.00	347.62	₱11,540,984.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	39.52	₱754,832.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	42.46	₱810,986.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	13.94	₱156,128.00	2	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	17.73	₱198,576.00	2	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
MATINA APLAYA	MLCSP	150	₱11,200.00	91.74	₱1,027,488.00	2	None	DCWD reserve fund	1
TALOMO	MLCSP	450	₱24,300.00	8.64	₱209,952.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	450	₱24,300.00	8.51	₱206,793.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	450	₱24,300.00	30.74	₱746,982.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	600	₱40,100.00	4.63	₱185,663.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	41.6	₱1,668,160.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	15.67	₱175,504.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	344.39	₱3,857,168.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	5.7	₱63,840.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	55.48	₱621,376.00	2	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	13.1	₱146,720.00	2	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	1.49	₱16,688.00	2	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	123.52	₱1,383,424.00	2	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	150	₱11,200.00	156.25	₱1,750,000.00	2	None	DCWD reserve fund	1
5-A	MLCSP	150	₱11,200.00	56.71	₱635,152.00	1	None	DCWD reserve fund	1
19-B	MLCSP	400	₱23,600.00	13.31	₱314,116.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	450	₱24,300.00	362.12	₱8,799,516.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	450	₱24,300.00	476.45	₱11,577,735.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	700	₱44,200.00	13.77	₱608,634.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	700	₱44,200.00	219.87	₱9,718,254.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	700	₱44,200.00	7.87	₱347,854.00	1	None	DCWD reserve fund	1
19-B	MLCSP	400	₱23,600.00	235.19	₱5,550,484.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	6.06	₱67,872.00	2	None	DCWD reserve fund	1
BUCANA	MLCSP	150	₱11,200.00	57.01	₱638,512.00	2	None	DCWD reserve fund	1
7-A	MLCSP	600	₱40,100.00	20.93	₱839,293.00	1	None	DCWD reserve fund	1
7-A	MLCSP	600	₱40,100.00	53.93	₱2,162,593.00	1	None	DCWD reserve fund	1
31-D	MLCSP	300	₱19,100.00	33.02	₱630,682.00	1	None	DCWD reserve fund	1
37-D	MLCSP	300	₱19,100.00	104.48	₱1,995,568.00	1	None	DCWD reserve fund	1
31-D	MLCSP	300	₱19,100.00	12.87	₱245,817.00	1	None	DCWD reserve fund	1
37-D	MLCSP	300	₱19,100.00	97.71	₱1,866,261.00	1	None	DCWD reserve fund	1
38-D	MLCSP	300	₱19,100.00	13.57	₱259,187.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
37-D	MLCSP	300	₱19,100.00	227.02	₱4,336,082.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	300	₱19,100.00	239.57	₱4,575,787.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	53.67	₱1,266,612.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	206.29	₱4,868,444.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	116.45	₱2,748,220.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	20.82	₱491,352.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	66.75	₱1,575,300.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	124.74	₱2,943,864.00	1	None	DCWD reserve fund	1
UBALDE	MLCSP	400	₱23,600.00	173.79	₱4,101,444.00	1	None	DCWD reserve fund	1
UBALDE	MLCSP	400	₱23,600.00	21.83	₱515,188.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	368.65	₱8,700,140.00	1	None	DCWD reserve fund	1
SAN ANTONIO	MLCSP	400	₱23,600.00	195.03	₱4,602,708.00	1	None	DCWD reserve fund	1
UBALDE	MLCSP	400	₱23,600.00	9.54	₱225,144.00	1	None	DCWD reserve fund	1
LAPU - LAPU	MLCSP	400	₱23,600.00	180.35	₱4,256,260.00	1	None	DCWD reserve fund	1
LAPU - LAPU	MLCSP	400	₱23,600.00	490.41	₱11,573,676.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	22.87	₱436,817.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	14.15	₱270,265.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	39.11	₱747,001.00	1	None	DCWD reserve fund	1
32-D	MLCSP	500	₱33,200.00	19.37	₱643,084.00	1	None	DCWD reserve fund	1
10-A	MLCSP	500	₱33,200.00	173.65	₱5,765,180.00	1	None	DCWD reserve fund	1
4-A	MLCSP	500	₱33,200.00	147.97	₱4,912,604.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	93.24	₱1,044,288.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	75.77	₱848,624.00	1	None	DCWD reserve fund	1
4-A	MLCSP	150	₱11,200.00	2.89	₱32,368.00	1	None	DCWD reserve fund	1
4-A	MLCSP	500	₱33,200.00	257.51	₱8,549,332.00	1	None	DCWD reserve fund	1
4-A	MLCSP	500	₱33,200.00	6.13	₱203,516.00	1	None	DCWD reserve fund	1
4-A	MLCSP	500	₱33,200.00	36.32	₱1,205,824.00	1	None	DCWD reserve fund	1
UBALDE	MLCSP	400	₱23,600.00	56.8	₱1,340,480.00	1	None	DCWD reserve fund	1
LAPU - LAPU	MLCSP	400	₱23,600.00	162.28	₱3,829,808.00	1	None	DCWD reserve fund	1
CENTRO	MLCSP	400	₱23,600.00	93.72	₱2,211,792.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	16.87	₱188,944.00	2	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
37-D	MLCSP	300	₱19,100.00	227.02	₱4,336,082.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	300	₱19,100.00	239.57	₱4,575,787.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	53.67	₱1,266,612.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	206.29	₱4,868,444.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	116.45	₱2,748,220.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	20.82	₱491,352.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	66.75	₱1,575,300.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	124.74	₱2,943,864.00	1	None	DCWD reserve fund	1
UBALDE	MLCSP	400	₱23,600.00	173.79	₱4,101,444.00	1	None	DCWD reserve fund	1
UBALDE	MLCSP	400	₱23,600.00	21.83	₱515,188.00	1	None	DCWD reserve fund	1
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	368.65	₱8,700,140.00	1	None	DCWD reserve fund	1
SAN ANTONIO	MLCSP	400	₱23,600.00	195.03	₱4,602,708.00	1	None	DCWD reserve fund	1
UBALDE	MLCSP	400	₱23,600.00	9.54	₱225,144.00	1	None	DCWD reserve fund	1
LAPU - LAPU	MLCSP	400	₱23,600.00	180.35	₱4,256,260.00	1	None	DCWD reserve fund	1
LAPU - LAPU	MLCSP	400	₱23,600.00	490.41	₱11,573,676.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	22.87	₱436,817.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	14.15	₱270,265.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	39.11	₱747,001.00	1	None	DCWD reserve fund	1
32-D	MLCSP	500	₱33,200.00	19.37	₱643,084.00	1	None	DCWD reserve fund	1
10-A	MLCSP	500	₱33,200.00	173.65	₱5,765,180.00	1	None	DCWD reserve fund	1
4-A	MLCSP	500	₱33,200.00	147.97	₱4,912,604.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	93.24	₱1,044,288.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	75.77	₱848,624.00	1	None	DCWD reserve fund	1
4-A	MLCSP	150	₱11,200.00	2.89	₱32,368.00	1	None	DCWD reserve fund	1
4-A	MLCSP	500	₱33,200.00	257.51	₱8,549,332.00	1	None	DCWD reserve fund	1
4-A	MLCSP	500	₱33,200.00	6.13	₱203,516.00	1	None	DCWD reserve fund	1
4-A	MLCSP	500	₱33,200.00	36.32	₱1,205,824.00	1	None	DCWD reserve fund	1
UBALDE	MLCSP	400	₱23,600.00	56.8	₱1,340,480.00	1	None	DCWD reserve fund	1
LAPU - LAPU	MLCSP	400	₱23,600.00	162.28	₱3,829,808.00	1	None	DCWD reserve fund	1
CENTRO	MLCSP	400	₱23,600.00	93.72	₱2,211,792.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	16.87	₱188,944.00	2	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
V. HIZON	MLCSP	250	₱17,700.00	2.88	₱50,976.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	250	₱17,700.00	12.43	₱220,011.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	75.16	₱1,330,332.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	250	₱17,700.00	223.75	₱3,960,375.00	1	None	DCWD reserve fund	1
SASA	MLCSP	200	₱12,500.00	96.35	₱1,204,375.00	1	None	DCWD reserve fund	1
SASA	MLCSP	200	₱12,500.00	6.01	₱75,125.00	1	None	DCWD reserve fund	1
SASA	MLCSP	200	₱12,500.00	3.12	₱39,000.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	22.6	₱400,020.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	154.43	₱2,733,411.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	167.17	₱2,958,909.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	84.53	₱1,496,181.00	1	None	DCWD reserve fund	1
SASA	MLCSP	200	₱12,500.00	15.76	₱197,000.00	1	None	DCWD reserve fund	1
SASA	MLCSP	200	₱12,500.00	178.68	₱2,233,500.00	1	None	DCWD reserve fund	1
SASA	MLCSP	200	₱12,500.00	55.47	₱693,375.00	1	None	DCWD reserve fund	1
SASA	MLCSP	200	₱12,500.00	15.42	₱192,750.00	1	None	DCWD reserve fund	1
V. HIZON	MLCSP	250	₱17,700.00	386.97	₱6,849,369.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	250	₱17,700.00	23.61	₱417,897.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	250	₱17,700.00	23.06	₱408,162.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	300	₱19,100.00	336.36	₱6,424,476.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	112.27	₱1,987,179.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	152.72	₱2,703,144.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	131.4	₱2,325,780.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	110.93	₱1,963,461.00	1	None	DCWD reserve fund	1
V. HIZON	MLCSP	250	₱17,700.00	279.12	₱4,940,424.00	1	None	DCWD reserve fund	1
V. HIZON	MLCSP	250	₱17,700.00	384.89	₱6,812,553.00	1	None	DCWD reserve fund	1
V. HIZON	MLCSP	250	₱17,700.00	107.3	₱1,899,210.00	1	None	DCWD reserve fund	1
SASA	MLCSP	200	₱12,500.00	149.99	₱1,874,875.00	1	None	DCWD reserve fund	1
SASA	MLCSP	200	₱12,500.00	155.39	₱1,942,375.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	350	₱20,800.00	201.34	₱4,187,872.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	350	₱20,800.00	0	₱0.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	350	₱20,800.00	0	₱0.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
BAGO GALLERA	MLCSP	350	₱20,800.00	217.28	₱4,519,424.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	25.65	₱533,520.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	256.4	₱5,333,120.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	350	₱20,800.00	120.55	₱2,507,440.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	105.58	₱2,196,064.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	449.95	₱9,358,960.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	97.58	₱2,029,664.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	346.5	₱7,207,200.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	250	₱17,700.00	14.99	₱265,323.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	350	₱20,800.00	187.42	₱3,898,336.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	350	₱20,800.00	217.59	₱4,525,872.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	38.7	₱804,960.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	243.39	₱5,062,512.00	1	None	DCWD reserve fund	1
11-B	MLCSP	300	₱19,100.00	60.43	₱1,154,213.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	190.87	₱3,645,617.00	1	None	DCWD reserve fund	1
V. HIZON	MLCSP	300	₱19,100.00	261.76	₱4,999,616.00	1	None	DCWD reserve fund	1
V. HIZON	MLCSP	300	₱19,100.00	314.57	₱6,008,287.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	300	₱19,100.00	73.97	₱1,412,827.00	1	None	DCWD reserve fund	1
V. HIZON	MLCSP	300	₱19,100.00	10.52	₱200,932.00	1	None	DCWD reserve fund	1
16-B	MLCSP	300	₱19,100.00	13.62	₱260,142.00	1	None	DCWD reserve fund	1
15-B	MLCSP	300	₱19,100.00	323.39	₱6,176,749.00	1	None	DCWD reserve fund	1
15-B	MLCSP	300	₱19,100.00	158.37	₱3,024,867.00	1	None	DCWD reserve fund	1
16-B	MLCSP	300	₱19,100.00	50.22	₱959,202.00	1	None	DCWD reserve fund	1
16-B	MLCSP	150	₱11,200.00	176.25	₱1,974,000.00	1	None	DCWD reserve fund	1
16-B	MLCSP	150	₱11,200.00	59.1	₱661,920.00	1	None	DCWD reserve fund	1
16-B	MLCSP	150	₱11,200.00	114.97	₱1,287,664.00	1	None	DCWD reserve fund	1
16-B	MLCSP	150	₱11,200.00	4.43	₱49,616.00	1	None	DCWD reserve fund	1
16-B	MLCSP	150	₱11,200.00	168.37	₱1,885,744.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	25.58	₱286,496.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	82.2	₱920,640.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	215.35	₱2,411,920.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
PACIANO BANGOY	MLCSP	150	₱11,200.00	48.89	₱547,568.00	1	None	DCWD reserve fund	1
16-B	MLCSP	150	₱11,200.00	0.97	₱10,864.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	171.17	₱1,917,104.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	3.66	₱69,906.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	300	₱19,100.00	111.52	₱2,130,032.00	1	None	DCWD reserve fund	1
A. ANGLIONGTO	MLCSP	250	₱17,700.00	252.42	₱4,467,834.00	1	None	DCWD reserve fund	1
A. ANGLIONGTO	MLCSP	250	₱17,700.00	176.14	₱3,117,678.00	1	None	DCWD reserve fund	1
A. ANGLIONGTO	MLCSP	250	₱17,700.00	69.97	₱1,238,469.00	1	None	DCWD reserve fund	1
A. ANGLIONGTO	MLCSP	400	₱23,600.00	16.33	₱385,388.00	1	None	DCWD reserve fund	1
A. ANGLIONGTO	MLCSP	400	₱23,600.00	6.36	₱150,096.00	1	None	DCWD reserve fund	1
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	124.49	₱2,937,964.00	1	None	DCWD reserve fund	1
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	78.76	₱1,858,736.00	1	None	DCWD reserve fund	1
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	53.09	₱1,252,924.00	1	None	DCWD reserve fund	1
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	81.13	₱1,914,668.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	400	₱23,600.00	72.27	₱1,705,572.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	400	₱23,600.00	12.06	₱284,616.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	400	₱23,600.00	58.37	₱1,377,532.00	1	None	DCWD reserve fund	1
BUHANGIN	MLCSP	400	₱23,600.00	1.98	₱46,728.00	1	None	DCWD reserve fund	1
BUHANGIN	MLCSP	400	₱23,600.00	13.48	₱318,128.00	1	None	DCWD reserve fund	1
SAN ANTONIO	MLCSP	400	₱23,600.00	207.81	₱4,904,316.00	1	None	DCWD reserve fund	1
SAN ANTONIO	MLCSP	400	₱23,600.00	19.44	₱458,784.00	1	None	DCWD reserve fund	1
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	113.36	₱2,675,296.00	1	None	DCWD reserve fund	1
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	43.75	₱1,032,500.00	1	None	DCWD reserve fund	1
28-C	MLCSP	150	₱11,200.00	41.08	₱460,096.00	1	None	DCWD reserve fund	1
30-C	MLCSP	400	₱23,600.00	85.55	₱2,018,980.00	1	None	DCWD reserve fund	1
30-C	MLCSP	150	₱11,200.00	159.98	₱1,791,776.00	1	None	DCWD reserve fund	1
14-B	MLCSP	400	₱23,600.00	71.45	₱1,686,220.00	1	None	DCWD reserve fund	1
30-C	MLCSP	400	₱23,600.00	7.64	₱180,304.00	1	None	DCWD reserve fund	1
14-B	MLCSP	400	₱23,600.00	59.98	₱1,415,528.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	200	₱12,500.00	20.1	₱251,250.00	1	None	DCWD reserve fund	1
40-D	MLCSP	250	₱17,700.00	283.77	₱5,022,729.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
2-A	MLCSP	250	₱17,700.00	7.32	₱129,564.00	1	None	DCWD reserve fund	1
39-D	MLCSP	250	₱17,700.00	45.97	₱813,669.00	1	None	DCWD reserve fund	1
39-D	MLCSP	250	₱17,700.00	150.29	₱2,660,133.00	1	None	DCWD reserve fund	1
19-B	MLCSP	300	₱19,100.00	55.61	₱1,062,151.00	1	None	DCWD reserve fund	1
19-B	MLCSP	300	₱19,100.00	106.45	₱2,033,195.00	1	None	DCWD reserve fund	1
19-B	MLCSP	300	₱19,100.00	92.88	₱1,774,008.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	150	₱11,200.00	15.86	₱177,632.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	5.45	₱61,040.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	421.48	₱9,946,928.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	750	₱48,500.00	67.96	₱3,296,060.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	750	₱48,500.00	95.39	₱4,626,415.00	1	None	DCWD reserve fund	1
MA-A	MLCSP	750	₱48,500.00	16.15	₱783,275.00	1	None	DCWD reserve fund	1
5-A	MLCSP	750	₱48,500.00	150.79	₱7,313,315.00	1	None	DCWD reserve fund	1
5-A	MLCSP	750	₱48,500.00	45.83	₱2,222,755.00	1	None	DCWD reserve fund	1
2-A	MLCSP	750	₱48,500.00	13.62	₱660,570.00	1	None	DCWD reserve fund	1
2-A	MLCSP	750	₱48,500.00	35.84	₱1,738,240.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	750	₱48,500.00	43.9	₱2,129,150.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	750	₱48,500.00	210.73	₱10,220,405.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	350	₱20,800.00	23.71	₱493,168.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	148.52	₱3,089,216.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	397	₱8,257,600.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	300	₱19,100.00	4.41	₱84,231.00	2	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	300	₱19,100.00	8.71	₱166,361.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	400	₱23,600.00	7.72	₱182,192.00	1	None	DCWD reserve fund	1
2-A	MLCSP	300	₱19,100.00	13.62	₱260,142.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	317.51	₱5,619,927.00	1	None	DCWD reserve fund	1
31-D	MLCSP	300	₱19,100.00	105.93	₱2,023,263.00	1	None	DCWD reserve fund	1
31-D	MLCSP	150	₱11,200.00	16.42	₱183,904.00	1	None	DCWD reserve fund	1
35-D	MLCSP	200	₱12,500.00	10.88	₱136,000.00	1	None	DCWD reserve fund	1
18-B	MLCSP	150	₱11,200.00	347.83	₱3,895,696.00	1	None	DCWD reserve fund	1
39-D	MLCSP	300	₱19,100.00	70.35	₱1,343,685.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
39-D	MLCSP	300	₱19,100.00	65.28	₱1,246,848.00	1	None	DCWD reserve fund	1
38-D	MLCSP	300	₱19,100.00	7.79	₱148,789.00	1	None	DCWD reserve fund	1
39-D	MLCSP	300	₱19,100.00	18.93	₱361,563.00	1	None	DCWD reserve fund	1
26-C	MLCSP	150	₱11,200.00	156.73	₱1,755,376.00	1	None	DCWD reserve fund	1
23-C	MLCSP	150	₱11,200.00	4.57	₱51,184.00	1	None	DCWD reserve fund	1
26-C	MLCSP	150	₱11,200.00	3.84	₱43,008.00	1	None	DCWD reserve fund	1
23-C	MLCSP	150	₱11,200.00	3.9	₱43,680.00	1	None	DCWD reserve fund	1
32-D	MLCSP	300	₱19,100.00	10.2	₱194,820.00	1	None	DCWD reserve fund	1
31-D	MLCSP	300	₱19,100.00	8.38	₱160,058.00	1	None	DCWD reserve fund	1
31-D	MLCSP	300	₱19,100.00	150.78	₱2,879,898.00	1	None	DCWD reserve fund	1
32-D	MLCSP	300	₱19,100.00	85.03	₱1,624,073.00	1	None	DCWD reserve fund	1
24-C	MLCSP	300	₱19,100.00	18.13	₱346,283.00	1	None	DCWD reserve fund	1
31-D	MLCSP	300	₱19,100.00	3.56	₱67,996.00	1	None	DCWD reserve fund	1
27-C	MLCSP	200	₱12,500.00	18.97	₱237,125.00	1	None	DCWD reserve fund	1
SASA	MLCSP	250	₱17,700.00	178.33	₱3,156,441.00	1	None	DCWD reserve fund	1
12-B	MLCSP	100	₱11,000.00	0.78	₱8,580.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	450	₱24,300.00	5.47	₱132,921.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	450	₱24,300.00	23.69	₱575,667.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	450	₱24,300.00	65.2	₱1,584,360.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	450	₱24,300.00	2.35	₱57,105.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	350	₱20,800.00	162.66	₱3,383,328.00	1	None	DCWD reserve fund	1
MATINA CROSSING	MLCSP	350	₱20,800.00	239.21	₱4,975,568.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	350	₱20,800.00	98.18	₱2,042,144.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	300	₱19,100.00	56.03	₱1,070,173.00	2	None	DCWD reserve fund	2
MATINA APLAYA	MLCSP	300	₱19,100.00	258.46	₱4,936,586.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	300	₱19,100.00	180.87	₱3,454,617.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	300	₱19,100.00	169.9	₱3,245,090.00	2	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	350	₱20,800.00	7.81	₱162,448.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	250	₱17,700.00	7.69	₱136,113.00	1	None	DCWD reserve fund	1
DUMOY	MLCSP	250	₱17,700.00	15	₱265,500.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	250	₱17,700.00	5.64	₱99,828.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACE- MENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERN- MENT RESOURCES	ADAPTIVE CAPACI- TY SCORE
BAGO APLAYA	MLCSP	250	₱17,700.00	26.25	₱464,625.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	250	₱17,700.00	1.77	₱31,329.00	1	None	DCWD reserve fund	1
BAGO GALLERA	MLCSP	250	₱17,700.00	6.99	₱123,723.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	300	₱19,100.00	3.45	₱65,895.00	1	None	DCWD reserve fund	1
V. HIZON	MLCSP	250	₱17,700.00	2.68	₱47,436.00	1	None	DCWD reserve fund	1
V. HIZON	MLCSP	250	₱17,700.00	8.89	₱157,353.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	43.61	₱771,897.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	182.18	₱3,224,586.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	27.61	₱488,697.00	2	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	20.56	₱363,912.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	337.97	₱5,982,069.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	27.17	₱480,909.00	2	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	149.5	₱2,646,150.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	355.99	₱6,301,023.00	1	None	DCWD reserve fund	1
TIBUNGCO	MLCSP	400	₱23,600.00	21.98	₱518,728.00	1	None	DCWD reserve fund	1
TIBUNGCO	MLCSP	400	₱23,600.00	50.15	₱1,183,540.00	1	None	DCWD reserve fund	1
TIBUNGCO	MLCSP	400	₱23,600.00	99.02	₱2,336,872.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	137.02	₱2,425,254.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	98.2	₱1,738,140.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	482.76	₱8,544,852.00	1	None	DCWD reserve fund	1
SASA	MLCSP	300	₱19,100.00	79.92	₱1,526,472.00	1	None	DCWD reserve fund	1
6-A	MLCSP	600	₱40,100.00	76.07	₱3,050,407.00	1	None	DCWD reserve fund	1
6-A	MLCSP	600	₱40,100.00	14.1	₱565,410.00	1	None	DCWD reserve fund	1
5-A	MLCSP	600	₱40,100.00	9.16	₱367,316.00	1	None	DCWD reserve fund	1
6-A	MLCSP	600	₱40,100.00	9.89	₱396,589.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	300	₱19,100.00	18.37	₱350,867.00	1	None	DCWD reserve fund	1
SASA	MLCSP	300	₱19,100.00	169.79	₱3,242,989.00	1	None	DCWD reserve fund	1
PAMPANGA	MLCSP	300	₱19,100.00	276.83	₱5,287,453.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	450	₱24,300.00	40.05	₱973,215.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	450	₱24,300.00	150.52	₱3,657,636.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	450	₱24,300.00	12.26	₱297,918.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
BAGO APLAYA	MLCSP	450	₱24,300.00	49.9	₱1,212,570.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	180.38	₱3,192,726.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	0.71	₱12,567.00	1	None	DCWD reserve fund	1
11-B	MLCSP	300	₱19,100.00	11.72	₱223,852.00	1	None	DCWD reserve fund	1
19-B	MLCSP	300	₱19,100.00	100.29	₱1,915,539.00	1	None	DCWD reserve fund	1
19-B	MLCSP	300	₱19,100.00	7.9	₱150,890.00	1	None	DCWD reserve fund	1
19-B	MLCSP	300	₱19,100.00	45.56	₱870,196.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	18.07	₱202,384.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	24.03	₱269,136.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	3.98	₱93,928.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	106.19	₱2,506,084.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	105.04	₱2,478,944.00	2	None	DCWD reserve fund	2
BAGO APLAYA	MLCSP	400	₱23,600.00	308.85	₱7,288,860.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	149.64	₱3,531,504.00	2	None	DCWD reserve fund	2
BAGO APLAYA	MLCSP	250	₱17,700.00	16.85	₱298,245.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	250	₱17,700.00	22.45	₱397,365.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	133.67	₱5,360,167.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	89.84	₱3,602,584.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	309.24	₱12,400,524.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	154.19	₱6,183,019.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	250	₱17,700.00	35.28	₱624,456.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	250	₱17,700.00	149.35	₱2,643,495.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	250	₱17,700.00	922.6	₱16,330,020.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	250	₱17,700.00	1,041.85	₱18,440,745.00	1	None	DCWD reserve fund	1
20-B	MLCSP	150	₱11,200.00	60.44	₱676,928.00	1	None	DCWD reserve fund	1
20-B	MLCSP	150	₱11,200.00	21.7	₱243,040.00	1	None	DCWD reserve fund	1
20-B	MLCSP	150	₱11,200.00	41.02	₱459,424.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	3.91	₱43,792.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	40.94	₱458,528.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	17.38	₱194,656.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	400	₱23,600.00	128.05	₱3,021,980.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY		
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
BAGO APLAYA	MLCSP	450	₱24,300.00	49.9	₱1,212,570.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	180.38	₱3,192,726.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	250	₱17,700.00	0.71	₱12,567.00	1	None	DCWD reserve fund	1
11-B	MLCSP	300	₱19,100.00	11.72	₱223,852.00	1	None	DCWD reserve fund	1
19-B	MLCSP	300	₱19,100.00	100.29	₱1,915,539.00	1	None	DCWD reserve fund	1
19-B	MLCSP	300	₱19,100.00	7.9	₱150,890.00	1	None	DCWD reserve fund	1
19-B	MLCSP	300	₱19,100.00	45.56	₱870,196.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	18.07	₱202,384.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	150	₱11,200.00	24.03	₱269,136.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	3.98	₱93,928.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	106.19	₱2,506,084.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	105.04	₱2,478,944.00	2	None	DCWD reserve fund	2
BAGO APLAYA	MLCSP	400	₱23,600.00	308.85	₱7,288,860.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	400	₱23,600.00	149.64	₱3,531,504.00	2	None	DCWD reserve fund	2
BAGO APLAYA	MLCSP	250	₱17,700.00	16.85	₱298,245.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	250	₱17,700.00	22.45	₱397,365.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	133.67	₱5,360,167.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	89.84	₱3,602,584.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	309.24	₱12,400,524.00	1	None	DCWD reserve fund	1
BAGO APLAYA	MLCSP	600	₱40,100.00	154.19	₱6,183,019.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	250	₱17,700.00	35.28	₱624,456.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	250	₱17,700.00	149.35	₱2,643,495.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	250	₱17,700.00	922.6	₱16,330,020.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	250	₱17,700.00	1,041.85	₱18,440,745.00	1	None	DCWD reserve fund	1
20-B	MLCSP	150	₱11,200.00	60.44	₱676,928.00	1	None	DCWD reserve fund	1
20-B	MLCSP	150	₱11,200.00	21.7	₱243,040.00	1	None	DCWD reserve fund	1
20-B	MLCSP	150	₱11,200.00	41.02	₱459,424.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	3.91	₱43,792.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	40.94	₱458,528.00	1	None	DCWD reserve fund	1
10-A	MLCSP	150	₱11,200.00	17.38	₱194,656.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	400	₱23,600.00	128.05	₱3,021,980.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
PANACAN	MLCSP	400	₱23,600.00	394.81	₱9,317,516.00	1	None	DCWD reserve fund	1
PANACAN	MLCSP	400	₱23,600.00	127.58	₱3,010,888.00	1	None	DCWD reserve fund	1
ILANG	MLCSP	400	₱23,600.00	175.96	₱4,152,656.00	2	None	DCWD reserve fund	2
ILANG	MLCSP	400	₱23,600.00	0	₱0.00	2	None	DCWD reserve fund	2
ILANG	MLCSP	400	₱23,600.00	0	₱0.00	2	None	DCWD reserve fund	1
ILANG	MLCSP	400	₱23,600.00	110.08	₱2,597,888.00	1	None	DCWD reserve fund	1
ILANG	MLCSP	400	₱23,600.00	1,130.94	₱26,690,184.00	1	None	DCWD reserve fund	1
ILANG	MLCSP	400	₱23,600.00	268.62	₱6,339,432.00	2	None	DCWD reserve fund	1
TIBUNGCO	MLCSP	400	₱23,600.00	109.09	₱2,574,524.00	1	None	DCWD reserve fund	1
TIBUNGCO	MLCSP	400	₱23,600.00	101.99	₱2,406,964.00	1	None	DCWD reserve fund	1
TIBUNGCO	MLCSP	400	₱23,600.00	200.18	₱4,724,248.00	1	None	DCWD reserve fund	1
ILANG	MLCSP	400	₱23,600.00	4.44	₱104,784.00	2	None	DCWD reserve fund	2
ILANG	MLCSP	400	₱23,600.00	25.45	₱600,620.00	1	None	DCWD reserve fund	1
ILANG	MLCSP	400	₱23,600.00	710.32	₱16,763,552.00	1	None	DCWD reserve fund	1
ILANG	MLCSP	400	₱23,600.00	316.97	₱7,480,492.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	54.26	₱1,036,366.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	300	₱19,100.00	59.75	₱1,141,225.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	450	₱24,300.00	6.06	₱147,258.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	750	₱48,500.00	17.28	₱838,080.00	2	None	DCWD reserve fund	2
TALOMO	MLCSP	750	₱48,500.00	411.28	₱19,947,080.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	750	₱48,500.00	45.2	₱2,192,200.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	750	₱48,500.00	69.41	₱3,366,385.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	350	₱20,800.00	39.38	₱819,104.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	350	₱20,800.00	569.71	₱11,849,968.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	250	₱17,700.00	16.21	₱286,917.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	350	₱20,800.00	5.75	₱119,600.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	350	₱20,800.00	347.65	₱7,231,120.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	350	₱20,800.00	89.7	₱1,865,760.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	250	₱17,700.00	161.17	₱2,852,709.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	250	₱17,700.00	166.83	₱2,952,891.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	250	₱17,700.00	0.61	₱10,797.00	1	None	DCWD reserve fund	1

Table LU-137. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
TALOMO	MLCSP	700	₱44,200.00	275.23	₱12,165,166.00	2	None	DCWD reserve fund	2
TALOMO	MLCSP	700	₱44,200.00	78.15	₱3,454,230.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	700	₱44,200.00	316.94	₱14,008,748.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	350	₱20,800.00	217.93	₱4,532,944.00	1	None	DCWD reserve fund	1
TALOMO	MLCSP	350	₱20,800.00	8.74	₱181,792.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	400	₱23,600.00	12.17	₱287,212.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	71.18	₱797,216.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	2.02	₱22,624.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	24.87	₱586,932.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	400	₱23,600.00	5.86	₱138,296.00	1	None	DCWD reserve fund	1
SAN ANTONIO	MLCSP	400	₱23,600.00	3.88	₱91,568.00	1	None	DCWD reserve fund	1
A. ANGLIONGTO	MLCSP	300	₱19,100.00	348.51	₱6,656,541.00	1	None	DCWD reserve fund	1
LAPU - LAPU	MLCSP	300	₱19,100.00	5.08	₱97,028.00	1	None	DCWD reserve fund	1
V. HIZON	MLCSP	300	₱19,100.00	37.03	₱707,273.00	1	None	DCWD reserve fund	1
V. HIZON	MLCSP	300	₱19,100.00	125.42	₱2,395,522.00	1	None	DCWD reserve fund	1
A. ANGLIONGTO	MLCSP	300	₱19,100.00	23.08	₱440,828.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	250	₱17,700.00	27.27	₱482,679.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	250	₱17,700.00	244.85	₱4,333,845.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	250	₱17,700.00	69.11	₱1,223,247.00	1	None	DCWD reserve fund	1
MATINA APLAYA	MLCSP	250	₱17,700.00	266.89	₱4,723,953.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	250	₱17,700.00	240.33	₱4,253,841.00	1	None	DCWD reserve fund	1
BUCANA	MLCSP	250	₱17,700.00	193.89	₱3,431,853.00	1	None	DCWD reserve fund	1
TIBUNGCO	MLCSP	400	₱23,600.00	10.06	₱237,416.00	1	None	DCWD reserve fund	1
TIBUNGCO	MLCSP	350	₱20,800.00	21.54	₱448,032.00	1	None	DCWD reserve fund	1
TIBUNGCO	MLCSP	350	₱20,800.00	5.56	₱115,648.00	1	None	DCWD reserve fund	1
TIBUNGCO	MLCSP	350	₱20,800.00	22.6	₱470,080.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	150	₱11,200.00	55.96	₱626,752.00	1	None	DCWD reserve fund	1
PACIANO BANGOY	MLCSP	150	₱11,200.00	8.48	₱94,976.00	1	None	DCWD reserve fund	1
AGDAO PROPER	MLCSP	150	₱11,200.00	37.93	₱424,816.00	1	None	DCWD reserve fund	1
15-B	MLCSP	150	₱11,200.00	19.13	₱214,256.00	1	None	DCWD reserve fund	1
SAN ANTONIO	MLCSP	400	₱23,600.00	78.61	₱1,855,196.00	1	None	DCWD reserve fund	1
WILFREDO AQUINO	MLCSP	400	₱23,600.00	122.72	₱2,896,192.00	1	None	DCWD reserve fund	1
SAN ANTONIO	MLCSP	400	₱23,600.00	79.36	₱1,872,896.00	1	None	DCWD reserve fund	1
SAN ANTONIO	MLCSP	400	₱23,600.00	166.74	₱3,935,064.00	1	None	DCWD reserve fund	1
SAN ANTONIO	MLCSP	400	₱23,600.00	121.28	₱2,862,208.00	1	None	DCWD reserve fund	1

Adaptive Capacity of DCWD Wells

All of the DCWD wells have high adaptive capacity. The mainline pipes do not have insurance coverage but has DCWD fund for repairs and for improvement

Table LU-138. Lifeline Utilities, Level III Water System, DCWD Production Wells, Adaptive Capacity Table for Storm Surge, Davao City

EXPOSURE				VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY		
LOCATION	STORM SURGE	PUMP TYPE	REPLACEMENT COST			INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
Km. 7, Talomo Sump Bangkal, Brgy. Talomo	5m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
UUHSA, Brgy. Talomo	4m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Km. 8 Ulas, Brgy. Talomo	5m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Puan Junction, Brgy. Talomo	4m	SUBMERSIBLE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Lower Rapnaga, Puan, Brgy. Bago Aplaya	4m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Lower Rapnaga, Puan, Brgy. Bago Aplaya	3m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Crossing Bago Aplaya, Brgy. Bago Aplaya	4m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Km. 10 Bago Aplaya fronting Ideal Subdivision, Brgy. Bago Aplaya	5m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	2m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Km. 11 Dumoy near the entrance to Dusnai, Brgy. Dumoy	5m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Bago Gallera Road near Gallera De Oro Subd., Brgy. Bago Gallera	5m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Km. 9, Puan along Davao Cotabato Road Brgy. Bago Aplaya	5m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Catotal Subdivision near Block 22, Brgy. Bago Aplaya	4m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1
Gallera de Oro Subdivision near Block 8, Brgy. Bago Aplaya	5m	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	NO	DCWD fund	1

Adaptive Capacity of Cell Sites

Two (2) cell sites in Toril, two (2) cell sites in Bunawan and one (1) cell site in Lasang have moderate adaptive capacity while the rest of the cell sites susceptible to storm surge have high adaptive capacity.

Table LU-139. Lifeline Utilities, Cell Sites, Adaptive Capacity Table for Storm Surge 2-meter wave, Davao City

EXPOSURE (Storm Surge - 2m)				ADAPTIVE CAPACITY			
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	AVE.	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
DIGITEL MOBILE PHILIPPINES, INC.	Lorenzo Manuel St., San Vicente Daliao, Toril, Davao City,	300 sq. m	₱12 -₱15 million	1.5	-	-	2
GLOBE TELECOM, INC.	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱12 -₱15 million	2	-	-	2
SMART COMMUNICATIONS, INC.	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	2	-	-	1
GLOBE TELECOM, INC.	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	JMS Bldg., #88 Maya Street, Barangay 76A, Ecoland,	300 sq. m	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Magno Prop., No. 64 V. Mapa St.,	300 sq. m	₱12 -₱15 million	1	-	-	1
SMART COMMUNICATIONS, INC.	No. 64 V. Mapa St.	300 sq. m	₱12 -₱15 million	1	-	-	1
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro corner Quimpo Blvd.	300 sq. m	₱12 -₱15 million	1	-	-	1
GLOBE TELECOM, INC.	Bonifacio St., cor M.L. Quezon Blvd	300 sq. m	₱12 -₱15 million	1.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	109 Piapi, Quezon Blvd,	300 sq. m	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Santiago's Lot, Brgy. Sasa Buhangin,	300 sq. m	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Erlinda Reyes Bldg., 19-Piapi Quezon Blvd.,	300 sq. m	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	D. Ponce St.,	300 sq. m	₱12 -₱15 million	1	-	-	1

Table LU-139. Lifeline Utilities, Cell Sites, Adaptive Capacity Table for Storm Surge 2-meter wave, Davao City

EXPOSURE (Storm Surge - 2m)				ADAPTIVE CAPACITY			
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	AVE.	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	1	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Chippens Bldg., 368 Padre Gomez St.,	300 sq. m	₱12 -₱15 million	1	-	-	1
SMART COMMUNICATIONS, INC.	Chippens Bldg., 368 Padre Gomez St.	300 sq. m	₱12 -₱15 million	1	-	-	1
SMART COMMUNICATIONS, INC.	Gov. Sales St., Brgy. 27	300 sq. m	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Jose Co Bldg., Gov. Sales St., Brgy. 27,	300 sq. m	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	NCC Mall Uyanguren	300 sq. m	₱12 -₱15 million	1.5	-	-	1
SMART COMMUNICATIONS, INC.	NCC Mall Unaguren	300 sq. m	₱12 -₱15 million	1.5	-	-	1
SMART COMMUNICATIONS, INC.	PBCOM Bldg., Monteverde cor. Bangoy St.,	300 sq. m	₱12 -₱15 million	1.5	-	-	1
SMART COMMUNICATIONS, INC.	PLDT Post fronting Chimes Store, Sales St.,	300 sq. m	₱12 -₱15 million	1	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Lapu Lapu corner Bangoy Sts., Agdao,	300 sq. m	₱12 -₱15 million	1	-	-	1
SMART COMMUNICATIONS, INC.	Lapu-lapu St., cor. Bangoy Agdao,	300 sq. m	₱12 -₱15 million	1	-	-	1
SMART COMMUNICATIONS, INC.	Banco Filipino Bldg., Lapu-lapu St., cor. Dacudao Ave.,	300 sq. m	₱12 -₱15 million	1	-	-	1
GLOBE TELECOM, INC.	Wescon Suites Cmpd., R. Castillo, Agdao	300 sq. m	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Llanes Prop 1, Cabaguio Ave., Agdao,	300 sq. m	₱12 -₱15 million	1.5	-	-	1
SMART COMMUNICATIONS, INC.	Cabaguio Ave., Agdao	300 sq. m	₱12 -₱15 million	1.5	-	-	1
GLOBE TELECOM, INC.	R. Castillo St., Otero Compound, Lapu-Lapu	300 sq. m	₱12 -₱15 million	2	-	-	1

Table LU-139. Lifeline Utilities, Cell Sites, Adaptive Capacity Table for Storm Surge 2-meter wave, Davao City

EXPOSURE (Storm Surge - 2m)					ADAPTIVE CAPACITY		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	AVE.	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
DIGITEL MOBILE PHILIPPINES, INC.	Leonor Property, Camia St., Ubalde Subd., Brgy. Ubalde	300 sq. m	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Camia St., Ubalde Subd., Brgy. Ubalde	300 sq. m	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Waterfront Hotel, Lanang,	300 sq. m	₱12 -₱15 million	1	-	-	1
SMART COMMUNICATIONS, INC.	Doña Asuncion Road, Brgy. Pampang, Lanang,	300 sq. m	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Km. 9, KMA, Brgy. Sasa	300 sq. m	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Sitio Nahul, Barangay Baliok,	300 sq. m	₱12 -₱15 million	1	-	-	1
SMART COMMUNICATIONS, INC.	Sitio Nahul, Brgy. Baliok	300 sq. m	₱12 -₱15 million	1	-	-	1
GLOBE TELECOM, INC.	National Highway Panacan	300 sq. m	₱12 -₱15 million	2	-	-	1

Table LU-139. Lifeline Utilities, Cell Sites, Adaptive Capacity Table for Storm Surge 3-meter wave

EXPOSURE (Storm Surge - 3m)				IMPACT	ADAPTIVE CAPACITY		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY
GLOBE TELECOM, INC.	Brgy. Daliao, Toril,	300 sq. m	₱12 -₱15 million	1.5	None	No Available Fund	2
SMART COMMUNICATIONS, INC.	Brgy. Daliao, Toril	300 sq. m	₱12 -₱15 million	1.5	None	No Available Fund	2
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	2	None	No Available Fund	1
DIGITEL MOBILE PHILIPPINES, INC.	Sandawa, McArthur Hi-Way, Matina,	300 sq. m	₱12 -₱15 million	1.5	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Sandawa, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	1.5	None	No Available Fund	1
GLOBE TELECOM, INC.	Magallanes St.	300 sq. m	₱12 -₱15 million	1.5	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	#88 Maya St., Brgy. 76A, Ecoland,	300 sq. m	₱12 -₱15 million	2	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro cor. Quimpo Blvd.	300 sq. m	₱12 -₱15 million	1.5	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Ponciano Reyes St. (crooked Rd.)	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
DIGITEL MOBILE PHILIPPINES, INC.	Magno Bldg., Ponciano Reyes St. (crooked rd.),	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Baguio (Pob.),	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
DIGITEL MOBILE PHILIPPINES, INC.	Km.12, National Highway, Barangay Catalunan Pequeno,	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	PLDT Ponciano, PLDT Bldg., Ponciano St.	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
DIGITEL MOBILE PHILIPPINES, INC.	Regency Inn, Villa Abrille St.,	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Holy Cross College, Sta. Ana Ave. Cor Guerero	300 sq. m	₱12 -₱15 mil-	1.5	None	No Available Fund	1

Table LU-139. Lifeline Utilities, Cell Sites, Adaptive Capacity Table for Storm Surge 3-meter wave

EXPOSURE (Storm Surge - 3m)				IMPACT	ADAPTIVE CAPACITY		
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RE-SOURCES	ADAPTIVE CAPACITY
GLOBE TELECOM, INC.	San Pedro Hospital Guzman St., Brgy. Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Brgy. Gov. Vicente Duterte,	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
GLOBE TELECOM, INC.	Corner Palma Gil & Cervantes St.	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	University of Southern Philippines, Trade School Drive	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Opal St., Obrero,	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Opal St., Obrero	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang,	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	SM Lanang, Km. 6 Lanang	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	SM Lanang, Km 6, Lanang,	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	1.5	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	SM Davao Ecoland	300 sq. m	₱12 -₱15 million	1.5	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	SM Davao Ecoland,	300 sq. m	₱12 -₱15 million	1.5	None	No Available Fund	1

Table LU-139. Lifeline Utilities, Cell Sites, Adaptive Capacity Table for Storm Surge 4-meter wave

NAME OF CELL SITE	EXPOSURE (STORM SURGE - 4M)			IMPACT		ADAPTIVE CAPACITY	
	LOCATION	AREA OCCU-	REPLACEMENT	DEGREE OF	INSURANCE	AVAILABLE GOVERN-	ADAPTIVE
SMART COMMUNICATIONS, INC.	Barangay Bago Aplaya, Talomo District, Davao City Golf Country Club	300 sq. m	₱12 -₱15 million	2.5	None	No Available Fund	1
DIGITEL MOBILE PHILIPPINES, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	3	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	3	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Crossing Puan, McArthur Highway	300 sq. m	₱12 -₱15 million	2	None	No Available Fund	1
DIGITEL MOBILE PHILIPPINES, INC.	Bago Aplaya, Talomo	300 sq. m	₱12 -₱15 million	2	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo,	300 sq. m	₱12 -₱15 million	2	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo	300 sq. m	₱12 -₱15 million	2	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Ortis Road, Brgy. Ulas	300 sq. m	₱12 -₱15 million	2	None	No Available Fund	1
DIGITEL MOBILE PHILIPPINES, INC.	Ortis road, Brgy. Ulas,	300 sq. m	₱12 -₱15 million	2	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	2	None	No Available Fund	1
DIGITEL MOBILE PHILIPPINES, INC.	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	2.5	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Matina Aplaya	300 sq. m	₱12 -₱15 million	2.5	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	5/F Gaisano Ilustre St.	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
DIGITEL MOBILE PHILIPPINES, INC.	Ilustre St.,	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	J.S. Gaisano Mall, Ilustre St., cor. Gen. Luna St.,	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	General Malvar St.	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Legaspi St. Cor. Bonifacio St.,	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Infront of Luisa Avenue Square Bldg., B. Jacinto Ext. St.	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Landco Bldg., JP Laurel St.	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Billboard on Synchar Hotel, J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	J.P. Laurel Avenue, Bajada,	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
GLOBE TELECOM, INC.	SM Lanang Former Lanang Golf and Country Club, J.P. Laurel Ave., Lanang District, Brgy. San Antonio	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	1	None	No Available Fund	1
GLOBE TELECOM, INC.	J.P. Laurel Ave., Monark Compound, Brgy. Rafael Castillo	300 sq. m	₱12 -₱15 million	2.5	None	No Available Fund	1
DIGITEL MOBILE PHILIPPINES, INC.	Malagamot Road, Panacan,	300 sq. m	₱12 -₱15 million	2.5	None	No Available Fund	1
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway, Panacan	300 sq. m	₱12 -₱15 million	2.5	None	No Available Fund	1
DIGITEL MOBILE PHILIPPINES, INC.	Mercado Property, Purok 3 (Near Market Site), Brgy. Bunawan	300 sq. m	₱12 -₱15 million	2	None	No Available Fund	2
SMART COMMUNICATIONS, INC.	Purok 3, (near Market site), Brgy. Bunawan	300 sq. m	₱12 -₱15 million	2	None	No Available Fund	2
SMART COMMUNICATIONS, INC.	Lasang	300 sq. m	₱12 -₱15 million	2	None	No Available Fund	2

Table LU-139. Lifeline Utilities, Cell Sites, Adaptive Capacity Table for Storm Surge 5-meter wave

EXPOSURE (STORM SURGE - 5M)				IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
SMART COMMUNICATIONS, INC.	Along National Highway, Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	1.5	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Commandante Property, Along National Highway, Brgy. Bago Aplaya, Talomo District,	300 sq. m	₱12 -₱15 million	2	-	-	1
GLOBE TELECOM, INC.	Doña Luisa Subdivision, Phase 2, Brgy. Matina Aplaya	300 sq. m	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana	300 sq. m	₱12 -₱15 million	2.5	-	-	1
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana,	300 sq. m	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	2.5	-	-	1
SMART COMMUNICATIONS, INC.	University Ave., Juna Subd., Martina	300 sq. m	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Abarquez Prop., University Ave., Juna Subd., Martina,	300 sq. m	₱12 -₱15 million	2	-	-	1
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St., Barangay 20-B (Pob.)	300 sq. m	₱12 -₱15 million	1	-	-	1
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St. Acacia,	300 sq. m	₱12 -₱15 million	1	-	-	1
GLOBE TELECOM, INC.	JP Laurel St., Barangay 20-B (Pob.),	300 sq. m	₱12 -₱15 million	1	-	-	1
SMART COMMUNICATIONS, INC.	Malagamot Road, Bayani Diaz Compound, Panacan	300 sq. m	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway	300 sq. m	₱12 -₱15 million	2	-	-	1
DIGITEL MOBILE PHILIPPINES, INC.	Tefasco Lot, Panacan	300 sq. m	₱12 -₱15 million	2	-	-	1
SMART COMMUNICATIONS, INC.	Panacan	300 sq. m	₱12 -₱15 million	2	-	-	1

Adaptive Capacity of Roads

All roads highly and moderately susceptible to earthquake have moderate adaptive capacity. These roads have local fund for rehabilitation repair and improvement and quick response fund for its government resources.

Table LU-140. Lifeline Utilities, Roads, Adaptive Capacity Table for Faultline, Davao City

EXPOSURE		IMPACT	ADAPTIVE CAPACITY						
ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
						GROUP 1	GROUP 2	GROUP 3	AVERAGE
Calinan-Baguio-Cadalian Road	0.0106	372,526	1.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Calinan-Baguio-Cadalian Road	0.0108	378,525	1.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Davao-Bukidnon Road	0.0100	400,800	P3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Davao-Bukidnon Road	0.0100	400,064	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Davao-Bukidnon Road	0.0117	469,160	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Davao-Bukidnon Road	0.0179	714,648	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Davao-Bukidnon Road	0.0264	1,057,104	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Fatima-Malabog Road	0.0319	1,723,275	2.7	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Fatima-Malabog Road	0.0108	583,146	2.7	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Inawayan-Baracatan Road	0.0100	350,004	2.7	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Mc. Arthur Highway	0.0611	3,422,031	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Mc. Arthur Highway	0.1842	10,315,648	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Mc. Arthur Highway	0.0101	563,153	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0
Mc. Arthur Highway	0.1541	8,630,328	3.0	No insurance but has local fund for rehabilitation and improvement	Quick Response fund	2.0	2.0	2.0	2.0

Adaptive Capacity of Bridges

All bridges which are exposed to earthquake have moderate adaptive capacity.

Table LU-141. Lifeline Utilities, Bridges, Adaptive Capacity Table for Faultline, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
NAME	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST PER LINEAR METER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE			
							GROUP 1	GROUP 2	GROUP 3	AVERAGE
Lipadas Br. I	37.80	1,200,000.00	45,360,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.	2	2	2	2.00
Lipadas Br. II	40.00	1,200,000.00	48,000,000	3.0	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies.	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes.	2	2	2	2.00

Adaptive Capacity of Level II Water Supply System

A well in Manambulan has low adaptive capacity.

Table LU-142. Lifeline Utilities, Level II Water System, Adaptive Capacity Table for Faultline, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY			
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	DEGREE OF IMPACT	ADAPTIVE CAPACITY
MANAMBULAN	3 HP	60,500	60,500	3	None, but there is warranty 1 month if the waterpump is installed by the supplier.	Yes. Subject to proposal		3

Adaptive Capacity of Level II Water Supply System

All mainline pipes have moderate adaptive capacity. It has DCWD fund for repair and rehabilitation.

Table LU-143. Lifeline Utilities, Level III Water System, Adaptive Capacity Table for Active Fault, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	ADAPTIVE CAPACITY SCORE
WANGAN	MLCSP	200	₱12,500.00	0.12	₱1,500.00	2	None	DCWD Reserve Fund	2
CALINAN	MLCSP	200	₱12,500.00	0.09	₱1,125.00	2	None	DCWD Reserve Fund	2
TUGBOK	MLCSP	500	₱33,200.00	10.04	₱333,328.00	2	None	DCWD Reserve Fund	2
MINTAL	MLCSP	350	₱20,800.00	11.19	₱232,752.00	2	None	DCWD Reserve Fund	2
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	10.37	₱215,696.00	2	None	DCWD Reserve Fund	2
TALOMO	MLCSP	350	₱20,800.00	10.02	₱208,416.00	2	None	DCWD Reserve Fund	2
LOS AMIGOS	MLCSP	250	₱17,700.00	35.73	₱632,421.00	2	None	DCWD Reserve Fund	2
WANGAN	MLCSP	200	₱12,500.00	4.52	₱56,500.00	2	None	DCWD Reserve Fund	2
WANGAN	MLCSP	200	₱12,500.00	4.52	₱56,500.00	2	None	DCWD Reserve Fund	2
CALINAN	MLCSP	200	₱12,500.00	5.27	₱65,875.00	2	None	DCWD Reserve Fund	2
CALINAN	MLCSP	200	₱12,500.00	5.27	₱65,875.00	2	None	DCWD Reserve Fund	2

Vulnerability Assessment of Roads for Flood

A total of 12 road networks measuring a total of 37 kilometers are highly vulnerable to flooding. These road networks include: Carlos P. Garcia Highway, Dacudao Avenue, Davao-Bukidnon Road, Davao - Agusan Highway, Don Julian Rodriguez Ave. (Maa Road), Inawayan-Baracatan Road, J.P. Cabaguio Avenue, Maa Radio Station St., Mc. Arthur Highway, Pichon St., Quimpo Boulevard, Quirino Avenue, and Rafael Castillo St.

Table LU-144. Lifeline Utilities, Roads, Vulnerability Table for Flood, Davao City

ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY SCORE	VULNERABILITY RATING
2nd Avenue	0.0055	60,000,000	327,355	1.0	3.0	3.0	Low
Agdao Flyover	0.4734	56,000,000	26,508,216	3.0	2.0	6.0	Moderate
Calinan-Baguio-Cadalian Road	2.4488	35,000,000	85,708,700	1.0	2.0	2.0	Low
Calinan-Baguio-Cadalian Road	0.4303	35,000,000	15,059,240	1.0	2.0	2.0	Low
Carlos P. Garcia Highway	0.1052	60,000,000	6,310,020	3.0	2.3	7.0	High
Carlos P. Garcia Highway	0.0399	60,000,000	2,394,378	3.0	2.3	7.0	High
Carlos P. Garcia Highway	0.0817	60,000,000	4,899,636	3.0	2.3	7.0	High
Carlos P. Garcia Highway	0.3295	60,000,000	19,772,940	3.0	2.3	7.0	High
Carlos P. Garcia Highway	0.0314	60,000,000	1,886,508	3.0	2.3	7.0	High
Carlos P. Garcia Highway	0.3522	60,000,000	21,129,360	3.0	2.3	7.0	High
Carlos P. Garcia Highway	0.1119	60,000,000	6,711,120	3.0	2.3	7.0	High
Carlos P. Garcia Highway	0.0129	60,000,000	775,470	3.0	2.3	7.0	High
Carlos P. Garcia Highway	0.0063	60,000,000	375,574	3.0	2.3	7.0	High
Carlos P. Garcia Highway	0.3292	60,000,000	19,751,820	3.0	2.3	7.0	High
Carlos P. Garcia Highway	0.2961	60,000,000	17,768,520	3.0	2.3	7.0	High
Dacudao Avenue	1.1168	56,000,000	62,540,800	3.0	2.3	7.0	High
Davao-Bukidnon Road	2.2435	40,000,000	89,739,600	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.5888	40,000,000	23,551,720	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.9692	40,000,000	38,769,520	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.3905	40,000,000	15,621,320	3.0	2.3	7.0	High
Davao-Bukidnon Road	1.6118	40,000,000	64,471,600	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.6323	40,000,000	25,293,080	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.9835	40,000,000	39,340,080	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.8472	40,000,000	33,889,920	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.2592	40,000,000	10,369,640	3.0	2.3	7.0	High
Davao-Bukidnon Road	1.9633	40,000,000	78,531,600	3.0	2.3	7.0	High

Table LU-144. Lifeline Utilities, Roads, Vulnerability Table for Flood, Davao City

ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY SCORE	VULNERABILITY RATING
Davao-Bukidnon Road	1.1280	40,000,000	45,121,200	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.5791	40,000,000	23,165,360	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.6943	40,000,000	27,773,760	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.0412	40,000,000	1,647,920	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.5601	40,000,000	22,405,360	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.3309	40,000,000	13,237,880	3.0	2.3	7.0	High
Davao-Bukidnon Road	2.0777	40,000,000	83,107,600	3.0	2.3	7.0	High
Davao-Bukidnon Road	1.6613	40,000,000	66,450,400	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.2861	40,000,000	11,445,040	3.0	2.3	7.0	High
Davao-Bukidnon Road	2.4449	40,000,000	97,797,600	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0825	56,000,000	4,621,092	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0331	56,000,000	1,851,041	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0126	56,000,000	704,346	3.0	2.3	7.0	High
Davao - Agusan Highway	0.2037	56,000,000	11,408,544	3.0	2.3	7.0	High
Davao - Agusan Highway	0.1551	56,000,000	8,688,064	3.0	2.3	7.0	High
Davao - Agusan Highway	0.6234	56,000,000	34,908,384	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0860	56,000,000	,813,519	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0480	56,000,000	2,690,055	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0329	56,000,000	1,843,610	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0842	56,000,000	4,716,370	3.0	2.3	7.0	High
Davao - Agusan Highway	0.1324	56,000,000	7,415,800	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0685	56,000,000	3,835,726	3.0	2.3	7.0	High
Davao - Agusan Highway	0.1062	56,000,000	5,948,488	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0245	56,000,000	1,374,548	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0880	56,000,000	4,928,465	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0993	56,000,000	5,559,999	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0226	56,000,000	1,262,839	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0444	56,000,000	2,484,166	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0796	56,000,000	4,456,368	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0262	56,000,000	1,469,451	3.0	2.3	7.0	High
Don Julian Rodriguez Ave. (Maa Road)	0.5272	28,000,000	14,760,536	3.0	2.3	7.0	High
Don Julian Rodriguez Ave. (Maa Road)	0.3069	28,000,000	8,593,004	3.0	2.3	7.0	High
Don Julian Rodriguez Ave. (Maa Road)	0.3612	28,000,000	10,113,488	3.0	2.3	7.0	High

Table LU-144. Lifeline Utilities, Roads, Vulnerability Table for Flood, Davao City

ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY SCORE	VULNERABILITY RATING
Eden-Tagurano Road	0.1210	35,000,000	4,235,595	2.0	2.0	4.0	Moderate
Inawayan-Baracatan Road	0.0328	35,000,000	1,146,572	3.0	2.3	7.0	High
J.P. Cabaguio Avenue	1.4047	56,000,000	78,662,080	3.0	2.3	7.0	High
Leon Garcia St.	0.2600	49,000,000	12,740,588	3.0	2.0	6.0	Moderate
Libby Road	0.0494	25,000,000	1,235,630	3.0	2.0	6.0	Moderate
Libby Road	0.0075	25,000,000	186,545	3.0	2.0	6.0	Moderate
Libby Road	1.7755	25,000,000	44,387,750	3.0	2.0	6.0	Moderate
Maa Radio Station St.	0.1871	28,000,000	5,238,352	3.0	2.3	7.0	High
Maa Radio Station St.	0.1576	28,000,000	4,411,904	3.0	2.3	7.0	High
Mabuhay-Pañalum-Paquibato Road	0.2632	44,000,000	11,582,604	2.0	2.0	4.0	Moderate
Mabuhay-Pañalum-Paquibato Road	0.1382	4,000,000	6,081,108	2.0	2.0	4.0	Moderate
Davao - Agusan Highway	0.0262	56,000,000	1,469,451	3.0	2.3	7.0	High
Don Julian Rodriguez Ave. (Maa Road)	0.5272	28,000,000	14,760,536	3.0	2.3	7.0	High
Don Julian Rodriguez Ave. (Maa Road)	0.3069	28,000,000	8,593,004	3.0	2.3	7.0	High
Don Julian Rodriguez Ave. (Maa Road)	0.3612	28,000,000	10,113,488	3.0	2.3	7.0	High
Eden-Tagurano Road	0.1210	35,000,000	4,235,595	2.0	2.0	4.0	Moderate
Inawayan-Baracatan Road	0.0328	35,000,000	1,146,572	3.0	2.3	7.0	High
J.P. Cabaguio Avenue	1.4047	56,000,000	78,662,080	3.0	2.3	7.0	High
Leon Garcia St.	0.2600	49,000,000	12,740,588	3.0	2.0	6.0	Moderate
Libby Road	0.0494	25,000,000	1,235,630	3.0	2.0	6.0	Moderate
Libby Road	0.0075	25,000,000	186,545	3.0	2.0	6.0	Moderate
Libby Road	1.7755	25,000,000	44,387,750	3.0	2.0	6.0	Moderate
Maa Radio Station St.	0.1871	28,000,000	5,238,352	3.0	2.3	7.0	High
Maa Radio Station St.	0.1576	28,000,000	4,411,904	3.0	2.3	7.0	High
Mabuhay-Pañalum-Paquibato Road	0.2632	44,000,000	11,582,604	2.0	2.0	4.0	Moderate
Mabuhay-Pañalum-Paquibato Road	0.1382	44,000,000	6,081,108	2.0	2.0	4.0	Moderate
Manggahan St.	0.5772	25,000,000	14,431,225	3.0	2.0	6.0	Moderate
Mc. Arthur Highway	0.0730	56,000,000	4,087,412	3.0	2.3	7.0	High
Mc. Arthur Highway	0.1741	56,000,000	9,750,720	3.0	2.3	7.0	High
Mc. Arthur Highway	0.7103	56,000,000	39,776,016	3.0	2.3	7.0	High
Mc. Arthur Highway	0.1954	56,000,000	10,942,848	3.0	2.3	7.0	High
Mc. Arthur Highway	0.2950	56,000,000	16,518,208	3.0	2.3	7.0	High
Mc. Arthur Highway	0.7051	56,000,000	39,485,432	3.0	2.3	7.0	High

Table LU-144. Lifeline Utilities, Roads, Vulnerability Table for Flood, Davao City

ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY SCORE	VULNERABILITY RATING
Mc. Arthur Highway	0.1347	56,000,000	7,544,768	3.0	2.3	7.0	High
Mc. Arthur Highway	0.2224	56,000,000	12,452,832	3.0	2.3	7.0	High
Mc. Arthur Highway	0.1283	56,000,000	7,186,872	3.0	2.3	7.0	High
Mc. Arthur Highway	0.2059	56,000,000	11,531,912	3.0	2.3	7.0	High
Mc. Arthur Highway	0.4105	56,000,000	22,990,352	3.0	2.3	7.0	High
Mc. Arthur Highway	0.4010	56,000,000	22,458,464	3.0	2.3	7.0	High
Mc. Arthur Highway	0.1792	56,000,000	10,035,200	3.0	2.3	7.0	High
Mc. Arthur Highway	0.2129	56,000,000	11,922,904	3.0	2.3	7.0	High
Mc. Arthur Highway	0.4510	56,000,000	25,258,128	3.0	2.3	7.0	High
Mc. Arthur Highway	0.2950	56,000,000	16,520,392	3.0	2.3	7.0	High
Mc. Arthur Highway	1.1842	56,000,000	66,314,080	3.0	2.3	7.0	High
Pakiputan Wharf Road	0.4554	56,000,000	25,500,328	2.0	2.0	4.0	Moderate
Pichon St.	0.1014	56,000,000	5,677,560	3.0	2.3	7.0	High
Quimpo Boulevard	0.5484	50,000,000	27,422,300	3.0	2.3	7.0	High
Quimpo Boulevard	0.0351	50,000,000	1,756,095	3.0	2.3	7.0	High
Quimpo Boulevard	0.3839	50,000,000	19,194,450	3.0	2.3	7.0	High
Quimpo Boulevard	0.4730	50,000,000	23,650,750	3.0	2.3	7.0	High
Quirino Avenue	0.2199	40,000,000	8,794,920	3.0	2.3	7.0	High
Rafael Castillo St.	0.4003	86,000,000	34,426,144	3.0	2.3	7.0	High
Rafael Castillo St.	0.8161	86,000,000	70,183,224	3.0	2.3	7.0	High
Toril-Bayabas-Eden Road	0.2472	30,000,000	7,414,650	2.0	2.0	4.0	Moderate
Toril-Bayabas-Eden Road	0.2321	30,000,000	6,962,490	2.0	2.0	4.0	Moderate
Toril-Bayabas-Eden Road	0.0626	30,000,000	1,877,580	2.0	2.0	4.0	Moderate
Toril-Bayabas-Eden Road	0.2519	30,000,000	7,555,530	2.0	2.0	4.0	Moderate
Carlos P. Garcia Highway	0.0003	60,000,000	17,217	3.0	2.3	7.0	High
Carlos P. Garcia Highway	0.0003	60,000,000	17,217	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.0002	40,000,000	8,169	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.0002	40,000,000	8,169	3.0	2.3	7.0	High
J.P. Cabaguio Avenue	0.0001	56,000,000	6,043	3.0	2.3	7.0	High
Pichon St.	0.0005	56,000,000	28,962	2.0	2.0	4.0	Moderate
Quimpo Boulevard	0.0001	50,000,000	5,460	3.0	2.3	7.0	High
Quimpo Boulevard	0.0001	50,000,000	4,624	3.0	2.3	7.0	High
Quimpo Boulevard	0.0001	50,000,000	4,624	3.0	2.3	7.0	High

Table LU-144. Lifeline Utilities, Roads, Vulnerability Table for Flood, Davao City

ROAD NAME	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY SCORE	VULNERABILITY RATING
Quimpo Boulevard	0.0008	50,000,000	38,908	3.0	2.3	7.0	High
Quimpo Boulevard	0.0008	50,000,000	38,908	3.0	2.3	7.0	High
Quirino Avenue	0.0001	40,000,000	3,889	3.0	2.3	7.0	High
Rafael Castillo St.	0.0003	86,000,000	25,057	3.0	2.3	7.0	High
Rafael Castillo St.	0.0003	86,000,000	26,521	3.0	2.3	7.0	High

Table LU-145. Climate Change Vulnerability Assessment Summary Matrix of Roads for Flood, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Agdao Flyover	<ul style="list-style-type: none"> This road network is moderately vulnerable. Brgy. Agdao proper and Leon Garcia Sr. with a total 0.4734 km road length, are barangays vulnerable to hazard within Agdao Flyover. 	<ul style="list-style-type: none"> There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. There will be disruption for road access. Traffic congestion (due re-routing). Delay of delivery of goods and services. Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.
Eden-Tagurano Road	<ul style="list-style-type: none"> Brgy Eden and Tagurano with a total of 0.1221 km road length, are barangays vulnerable to hazard within the Eden-Tagurano Road. 	<ul style="list-style-type: none"> There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. There will be disruption for road access. Traffic congestion (due re-routing). Delay of delivery of goods and services. Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.
Leon Garcia St.	<ul style="list-style-type: none"> Brgy. Leon Garcia Sr. has a total of 0.260 km road length and is the barangay vulnerable to hazard within "Leon Garcia St." Road. 	<ul style="list-style-type: none"> There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. There will be disruption for road access. Traffic congestion (due re-routing). Delay of delivery of goods and services. Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.
Libby Road	<ul style="list-style-type: none"> Brgy. Talomo, Baliok , Bago Aplaya and Bago Gallera has a total of 1.8324 km road length, are the exposed barangays within the Libby Road. 	<ul style="list-style-type: none"> There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. There will be disruption for road access. Traffic congestion (due re-routing). Delay of delivery of goods and services. Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation Re-routing scheme within the affected areas.

Table LU-145. Climate Change Vulnerability Assessment Summary Matrix of Roads for Flood, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Mabuhay-Pañalum-Paquibato Road	<ul style="list-style-type: none"> ● Paradise Embak has a total of 1.8324 km road length and is the barangay vulnerable to hazard within the Mabuhay-Pañalum-Paquibato Road. 	<ul style="list-style-type: none"> ● There maybe be minimal damage to the roads system due to flooding specially within those areas that have moderate adaptive capacity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.
Manggahan St.	<ul style="list-style-type: none"> ● Lubogan has a total of 0.5772 km road length and is the barangay vulnerable to hazard within the Manggahan St. Road. A total 	<ul style="list-style-type: none"> ● There maybe be minimal damage to the roads system due to flooding specially within those areas that have moderate adaptive capacity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.
Pakiputan Wharf Road	<ul style="list-style-type: none"> ● Sasa has a total of 0.4554 km road length and is the barangay vulnerable to hazard within the Pakiputan Wharf Road. 	<ul style="list-style-type: none"> ● There maybe be minimal damage to the roads system due to flooding specially within those areas that have moderate adaptive capacity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.
Toril-Bayabas-Eden Road	<ul style="list-style-type: none"> ● Eden and Marapangi has a total of 0.7937 km road length and are the barangays vulnerable to hazard within the Toril-Bayabas-Eden Road. 	<ul style="list-style-type: none"> ● There maybe be minimal damage to the drainage system due to flooding specially within those areas that have moderate adaptive capacity. ● There will be disruption for road access . ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.

Table LU-145. Climate Change Vulnerability Assessment Summary Matrix of Roads for Flood, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Pichon St.	<ul style="list-style-type: none"> ● Brgy. 39-D has a total of 0.0005 km road length and the barangay vulnerable to hazard within the “Pichon St.” road. ● There are no recorded incidents of damage due to flooding. 	<ul style="list-style-type: none"> ● There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation ● Re-routing scheme within the affected areas.
Carlos P. Garcia Highway	<ul style="list-style-type: none"> ● These road networks are highly vulnerable. ● Brgy. Buhangin has a total of 0.03144 km, Cabantian has a total of 0.00626 km, Ma-a has a total of 0.50034km, Talomo has a total of 0.0049 km, Matina Crossing has a total of 0.88985 km and Tigatto has a total of 0.08166 km. These are exposed barangays within the Carlos P. Garcia Highway. 	<ul style="list-style-type: none"> ● There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.
Dacudao Avenue	<ul style="list-style-type: none"> ● Brgy. Paciano Bangoy has a total of 0.75019 km and Agdao Proper has a total of 0.36661 km road length - are the barangays exposed within Dacudao Avenue Road. 	<ul style="list-style-type: none"> ● There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.

Table LU-145. Climate Change Vulnerability Assessment Summary Matrix of Roads for Flood, Davao City

Road Name	Technical Findings	Implications	Policy Interventions
Davao-Bukidnon Road	<ul style="list-style-type: none"> Brgy. Calinan, Gumalang, Lacson, Los amigos, Malagos, Mintal, Riverside, Sto Niño, Suawan, Talomo, Talomo river, Tamugan and Tugbok are vulnerable barangays within Davao-Bukidnon Road. 	<ul style="list-style-type: none"> There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. There will be disruption for road access. Traffic congestion (due re-routing). Delay of delivery of goods and services. Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.
Davao - Agusan Highway	<ul style="list-style-type: none"> Brgy. Tugbok has a total of 3.164 km , Los Amigos has a total of 0.647 km , Tamugan has a total of 1.110 km, Suawan has a total of 1.353 km, Gumalang, Calinan has a total of 1.544 km, Talomo River has a total of .004222 km, Riverside has a total of .9107 km - are exposed barangays within Davao-Agusan Highway. 	<ul style="list-style-type: none"> There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. There will be disruption for road access. Traffic congestion (due re-routing). Delay of delivery of goods and services. L Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.
Don Julian Rodriguez Ave. (Maa Road)	<ul style="list-style-type: none"> Brgy. Ma-a is the exposed barangay within the Don Julian Rodriguez Ave. (Maa Road). 	<ul style="list-style-type: none"> There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. There will be disruption for road access. Traffic congestion (due re-routing). Delay of delivery of goods and services. Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.
Inawayan-Baracatan Road	<ul style="list-style-type: none"> Sibulan is the exposed barangay within the Inawayan-Baracatan Road. 	<ul style="list-style-type: none"> There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. There will be disruption for road access. Traffic congestion (due re-routing). Delay of delivery of goods and services. Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.

Table LU-145. Climate Change Vulnerability Assessment Summary Matrix of Roads for Flood, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
J.P. Cabaguio Avenue	<ul style="list-style-type: none"> ● Agdao Proper and Wilfredo Aquino are the exposed barangays within the J.P Cabaguio Avenue Road. 	<ul style="list-style-type: none"> ● There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.
Maa Radio Station St.	<ul style="list-style-type: none"> ● Ma-a is the barangay exposed within the Maa Radio Station St. 	<ul style="list-style-type: none"> ● There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.
Mc.Arthur Highway	<ul style="list-style-type: none"> ● Bago-Aplaya, Binugao, Bucana, Lizada, Ma-a, Matina Crossing, Sirawan and Talomo are the exposed barangays within Mc. Arthur Highway. 	<ul style="list-style-type: none"> ● There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.
Pichon St.	<ul style="list-style-type: none"> ● 2-A and 39-D are the exposed barangays within Pichon St. 	<ul style="list-style-type: none"> ● There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.

Table LU-145. Climate Change Vulnerability Assessment Summary Matrix of Roads for Flood, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Quimpo Boulevard	<ul style="list-style-type: none"> ● Bucana, 39-D and 40-D are the exposed barangays within Quimpo Boulevard 	<ul style="list-style-type: none"> ● There maybe be minimal damage to the roads due to flooding specially within those areas that have moderate adaptive capacity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.
Rafael Castillo St.	<ul style="list-style-type: none"> ● Agdao Proper, Centro, Gov. Vicente Duterte, Lapu-lapu and Ubalde are the exposed barangays within Rafael Castillo St. ● A total of 37.09679 km. are exposed to hazard within these roads. ● There are no recorded incidents of damage due to flooding. 	<ul style="list-style-type: none"> ● There maybe be minimal damage to the roads drainage due to flooding specially within those areas that have moderate adaptive capacity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Appropriation of fund for maintenance/replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.

Vulnerability Assessment for Bridges

Davao River Bridge, Tamugan Bridge and Pangí Bridge have high vulnerability to flood. These bridges are located in areas highly susceptible to flood namely: Barangay Ma-a, Barangay Matina Crossing, and Barangay Tamugan. These bridges have high degree of impact and moderate adaptive capacity. Aside from that, bridges with moderate vulnerability are: Agdao Flyover, Angalan Bridge III, Angalan Bridge VI, Bato Br, Bolton Bridge 2, Generoso Bridge I, Generoso Bridge 2, Lipadas Bridge I, Lipadas Bridge 2, Pagan Grande, Pagan Pequeño, Piedad Br., Talomo Bridge 1, and Talomo Bridge 2. Bridges with moderate vulnerability are those which have high to moderate degree of impact and moderate adaptive capacity.

Table LU-146. Lifeline Utilities, Bridges, Vulnerability Table for Flood, Davao City

Road Name	Replacement Cost per (Linear meter)	Exposed Length (Linear Meters)	Value of Exposed Lifeline	Degree of impact	Adaptive Capacity	Vulnerability Index	Vulnerability
Agdao Flyover	1,200,000	383.0	459,576,000	2.3	1.7	3.9	Moderate
Angalan Br. I	1,200,000	12.10	14,520,000	2.0	1.0	2.0	Low
Angalan Br. II	1,200,000	11.92	14,304,000	3.0	1.0	3.0	Low
Angalan Br. III	1,200,000	48.88	58,656,000	2.0	2.0	4.0	Moderate
Angalan Br. IV	1,200,000	15.90	19,080,000	2.0	1.0	2.0	Low
Angalan Br. V	1,200,000	18.00	21,600,000	3.0	1.0	3.0	Low
Angalan Br. VI	1,200,000	45.00	54,000,000	3.0	2.0	6.0	Moderate
Bago Br.	1,200,000	31.21	37,452,000	3.0	1.0	3.0	Low
Bato Br.	1,200,000	20.70	24,840,000	3.0	2.0	6.0	Moderate
Bolton Br. 1	1,200,000	185.30	222,360,000	3.0	1.0	3.0	Low
Bolton Br. 2	1,200,000	196.88	236,256,000	3.0	2.0	6.0	Moderate
Bunawan Br. 1	1,200,000	49.76	59,712,000	3.0	1.0	3.0	Low
Bunawan Br. 2	1,200,000	47.79	57,348,000	3.0	1.0	3.0	Low
Davao River Br.	1,200,000	141.11	169,332,000	3.0	2.3	7.0	High
Generoso Br. 1	1,200,000	89.94	107,928,000	3.0	1.7	5.0	Moderate
Generoso Br. 2	1,200,000	87.60	105,120,000	3.0	1.7	5.0	Moderate
Libby Br.	1,200,000	24.69	29,628,000	2.0	1.0	2.0	Low
Lipadas Br. I	1,200,000	37.80	45,360,000	2.0	2.0	4.0	Moderate
Lipadas Br. II	1,200,000	40.00	48,000,000	2.0	2.0	4.0	Moderate
Matina Br.	1,200,000	38.66	46,392,000	3.0	1.0	3.0	Low
Pagan Grande	1,200,000	45.48	54,576,000	3.0	2.0	6.0	Moderate
Pagan Pequeño	1,200,000	89.93	107,916,000	3.0	1.7	5.0	Moderate

Table LU-146. Lifeline Utilities, Bridges, Vulnerability Table for Flood, Davao City

Road Name	Replacement Cost per (Linear meter)	Exposed Length (Linnear Meters)	Value of Exposed Lifeline	Degree of impact	Adaptive Capacity	Vulnerability Index	Vulnerability
Panacan Br.	1,200,000	23.53	28,236,000	3.0	1.0	3.0	Low
Pangi Br.	1,200,000	121.69	146,028,000	3.0	2.3	7.0	High
Piedad Br.	1,200,000	47.82	57,384,000	2.0	2.0	4.0	Moderate
Sasa Br.	1,200,000	1.43	22,116,000	3.0	1.0	3.0	Low
Tagurano Br.	1,200,000	12.46	14,952,000	3.0	1.0	3.0	Low
Talomo Br. 1	2,053,000	48.10	98,749,300	3.0	1.7	5.0	Moderate
Talomo Br. 2	2,053,000	48.11	98,769,830	3.0	1.7	5.0	Moderate
Tamugan Br.	1,200,000	104.96	125,952,000	3.0	2.3	6.9	High

Table LU-147. Climate Change Vulnerability Assessment Summary Matrix of Bridges for Flood, Davao City

Bridge Name	Technical Findings	Implications	Policy Interventions
Davao River Br.	<ul style="list-style-type: none"> • This bridge is highly vulnerable to flood. • This bridge is located in Barangay Ma-a. • It has high degree of impact and moderate adaptive capacity. • The total exposed length of Davao River bridge is 141.11 with a total value of ₱169, 332,000. • This bridge located in Diversion Road connects Talomo District and Buhangin District. 	<ul style="list-style-type: none"> • A portion of the bridge maybe partially or totally damaged. • Delay of delivery of goods and services. • Inconvenience in commuting public • Traffic congestion (due re-routing • Connecting roads cannot traverse due to maintenance/ replacement activity. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Re-routing scheme within the affected areas.
Pangi Br.	<ul style="list-style-type: none"> • This bridge is highly vulnerable to flood. • This bridge is located at Barangay Matina Pangi • This bridge has a degree of impact of 3, or high degree of impact and adaptive capacity of 2.3 or moderate adaptive capacity. • The total exposed length of Pangi Bridge is 121.69 meters which as a total value of ₱146,128,000 • This bridge serves as an access road to Barangay Langub and Catalunan Grande. 	<ul style="list-style-type: none"> • A portion of the bridge maybe partially or totally damaged. • Delay of delivery of goods and services. • Inconvenience in commuting public • Traffic congestion (due re-routing • Connecting roads cannot traverse due to maintenance/ replacement activity.. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Re-routing scheme within the affected areas..
Tamugan Br.	<ul style="list-style-type: none"> • This bridge is highly vulnerable to flood. • This is located at Barangay Tamugan • This bridge has high degree of impact and a moderate adaptive capacity. • The total exposed length 104.96 meters which has a total value of ₱125, 952,000. • This bridge crosses Tamugan River along Davao- Budge National Highway road segment. 	<ul style="list-style-type: none"> • A portion of the bridge maybe partially or totally damaged. • Delay of delivery of goods and services. • Inconvenience in commuting public • Traffic congestion (due re-routing • Connecting roads cannot traverse due to maintenance/ replacement activity. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Re-routing scheme within the affected areas.
Agdao Flyover	<ul style="list-style-type: none"> • This bridge is moderately vulnerable to flood. • This bridge is located in Agdao Proper. • It has a total exposed length of 383.0 meters with a total value of exposed lifeline of ₱459,576,000. • It has moderate degree of impact and adaptive capacity. 	<ul style="list-style-type: none"> • A portion of the bridge maybe partially or totally damaged. • Delay of delivery of goods and services. • Inconvenience in commuting public • Traffic congestion (due re-routing • Connecting roads cannot traverse due to maintenance/ replacement activity. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Re-routing scheme within the affected areas.

Table LU-147. Climate Change Vulnerability Assessment Summary Matrix of Bridges for Flood, Davao City

Bridge Name	Technical Findings	Implications	Policy Interventions
Angalan Br. III	<ul style="list-style-type: none"> • This bridge is an RCDG type bridge located at Barangay Tugbok. • It has a total length of 48.88 meters with a total value of ₱58,656,000. • The adaptive capacity and the degree of impact is moderate. 	<ul style="list-style-type: none"> • A portion of the bridge maybe partially or totally damaged. • Delay of delivery of goods and services. • Inconvenience in commuting public • Traffic congestion (due re-routing • Connecting roads cannot traverse due to maintenance/ replacement activity. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Re-routing scheme within the affected areas.
Angalan Br. VI	<ul style="list-style-type: none"> • This bridge is moderately vulnerable to flood. • It is located in Barangay Tugbok. • It has a total exposed length of 45.00 meters with a total value of ₱54,000,000. • The degree of impact is high and the adaptive capacity is moderate. 	<ul style="list-style-type: none"> • A portion of the bridge maybe partially or totally damaged. • Delay of delivery of goods and services. • Inconvenience in commuting public • Traffic congestion (due re-routing • Connecting roads cannot traverse due to maintenance/ replacement activity. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Re-routing scheme within the affected areas.
Bato Br.	<ul style="list-style-type: none"> • This bridge is moderately vulnerable to flood with an exposed length of 20.70 meters with a total value of ₱24,840,000. • The degree impact is high and the adaptive capacity is moderate. • This bridge is located at Barangay Bato. • It is an overflow bridge. 	<ul style="list-style-type: none"> • A portion of the bridge maybe partially or totally damaged. • Delay of delivery of goods and services. • Inconvenience in commuting public • Traffic congestion (due re-routing • Connecting roads cannot traverse due to maintenance/ replacement activity. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Re-routing scheme within the affected areas.
Bolton Br. 2	<ul style="list-style-type: none"> • This bridge is moderately vulnerable to flood. It has an exposed length of 196.88 meters with a total value of ₱236,256,000. • It has high degree of impact and moderate adaptive capacity. • Bolton Bridge is located in Barangay Bucana, constructed in the year 2000. • It is an RCDG type with a 15-ton load capacity. 	<ul style="list-style-type: none"> • A portion of the bridge maybe partially or totally damaged. • Delay of delivery of goods and services. • Inconvenience in commuting public • Traffic congestion (due re-routing) • Connecting roads cannot traverse due to maintenance/ replacement activity. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Re-routing scheme within the affected areas.

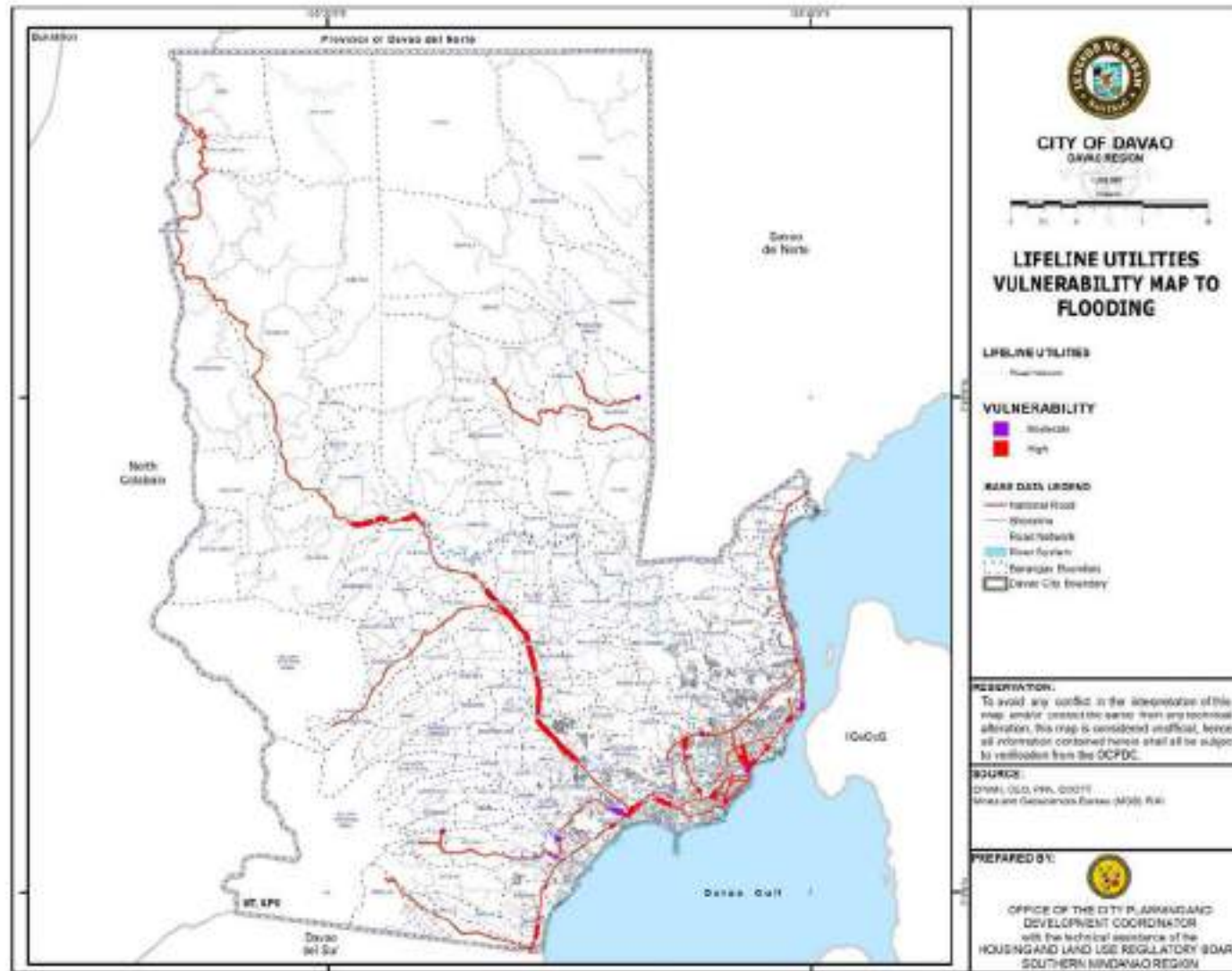
Table LU-147. Climate Change Vulnerability Assessment Summary Matrix of Bridges for Flood, Davao City

Bridge Name	Technical Findings	Implications	Policy Interventions
Generoso Br. 1	<ul style="list-style-type: none"> ● This bridge is moderately vulnerable to flood. ● It has a total exposed length of 89.94 meters with a total value of ₱107,928,000. ● It has a high degree of impact and moderate adaptive capacity. ● It is a RCDG type bridge with a 15-ton capacity located at Barangay 5-A. 	<ul style="list-style-type: none"> ● A portion of the bridge maybe partially or totally damaged. ● Delay of delivery of goods and services. ● Inconvenience in commuting public ● Traffic congestion (due re-routing) ● Connecting roads cannot traverse due to maintenance/ replacement activity. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.
Generoso Br. 2	<ul style="list-style-type: none"> ● This bridge is moderately vulnerable to flood. ● It has a total exposed length of 87.60 meters with a total value of ₱105,120,000. ● It has high degree of impact and moderate adaptive capacity. ● It is an RCDG bridge with 15-ton capacity located at Barangay 5-A. 	<ul style="list-style-type: none"> ● A portion of the bridge maybe partially or totally damaged. ● Delay of delivery of goods and services. ● Inconvenience in commuting public ● Traffic congestion (due re-routing) ● Connecting roads cannot traverse due to maintenance/ replacement activity. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.
Lipadas Br. I	<ul style="list-style-type: none"> ● This bridge is moderately vulnerable to flood with an exposed length of 37.80 meters, with a total value of ₱45,360,000 ● It has moderate degree of impact and adaptive capacity. 	<ul style="list-style-type: none"> ● A portion of the bridge maybe partially or totally damaged. ● Delay of delivery of goods and services. ● Inconvenience in commuting public ● Traffic congestion (due re-routing) ● Connecting roads cannot traverse due to maintenance/ replacement activity. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.
Lipadas Br. II	<ul style="list-style-type: none"> ● This bridge is moderately vulnerable to flood with an exposed length of 40.00 meters which has a total value of ₱48, 000,000. ● It has moderate degree of impact and adaptive capacity. 	<ul style="list-style-type: none"> ● A portion of the bridge maybe partially or totally damaged. ● Delay of delivery of goods and services. ● Inconvenience in commuting public ● Traffic congestion (due re-routing) ● Connecting roads cannot traverse due to maintenance/ replacement activity. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.

Table LU-147. Climate Change Vulnerability Assessment Summary Matrix of Bridges for Flood, Davao City

Bridge Name	Technical Findings	Implications	Policy Interventions
Pagan Grande Bridge	<ul style="list-style-type: none"> This bridge is moderately vulnerable to flood with a total exposed length of 45.48 meters and a total value of ₱54, 576,000. It has high degree of impact and moderate adaptive capacity. 	<ul style="list-style-type: none"> A portion of the bridge maybe partially or totally damaged Delay of delivery of goods and services Inconvenience in commuting public Traffic congestion (due re-routing Connecting roads cannot traverse due to maintenance/ replacement activity. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.
Pagan Pequeño Bridge	<ul style="list-style-type: none"> This bridge is moderately vulnerable to flood with a total exposed length of 89.93 meters which has a total value of ₱107, 916,000. This bridge has a high degree of impact moderate adaptive capacity. 	<ul style="list-style-type: none"> A portion of the bridge maybe partially or totally damaged Delay of delivery of goods and services. Inconvenience in commuting public Traffic congestion (due re-routing Connecting roads cannot traverse due to maintenance/ replacement activity. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.
Talomo Br. I	<ul style="list-style-type: none"> This bridge is moderately vulnerable to flood with a total exposed length of 48.10 meters which has a total values of ₱98,749,300. It has high degree of impact moderate adaptive capacity. 	<ul style="list-style-type: none"> A portion of the bridge may be partially or totally damaged Delay of delivery of goods and services. Inconvenience in commuting public Traffic congestion (due re-routing Connecting roads cannot traverse due to maintenance/ replacement activity. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.
Talomo Bridge II	<ul style="list-style-type: none"> This bridge is moderately vulnerable to flood with a total exposed length of 48.11 meters which has a total value of ₱98, 769,830. It ahs high degree of impact moderate adaptive capacity 	<ul style="list-style-type: none"> A portion of the bridge maybe partially or totally damaged Delay of delivery of goods and services. Inconvenience in commuting public Traffic congestion (due re-routing Connecting roads cannot traverse due to maintenance/ replacement activity. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.

Map 5.17 Lifeline Utilities Vulnerability Map to Flooding, Davao City



Vulnerability Assessment of Power Substations

Substations which are highly susceptible to flood have low vulnerability to flood.

Table LU-148. Lifeline Utilities, Power Substations, Vulnerability Table for Flood, Davao City

Name of Power Plant	Area Occupied (sq.m)	Replacement Cost	Value of exposed Lifeline	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
Calinan Substation	1,000.00	140 Million	140 Million	2	1	2	LOW
Tugbok Substation	1,809.00	130 Million	130 Million	2	1	2	LOW
Matina Substation	1,000.00	120 Million	120 Million	2	1	2	LOW
Pampanga Substation	1,031.00	118 Million	118 Million	1.5	1	1.5	LOW

Vulnerability Assessment of Level I Water System

Thirty-one spring sources are moderately vulnerable to flood with the index score ranging (4-6). Two spring sources in Tibungco, two (2) spring sources in Panacan, four (4) spring sources in Lizada, and two (2) spring sources in Binugao have highest vulnerability score rate at six (6). This could be Databased to the high degree of impact rating and moderate adaptive capacity rating. Moreover, those which have vulnerability rating of 4 have both moderate degree of impact and moderate adaptive capacity.

Table LU-149. Lifeline Utilities, Level I Water Supply System, Vulnerability Table for Flood, Davao City

BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY CATEGORY
BUNAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
BUNAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
TIBUNGCO	SPRING	41,586.32	41,586.32	3	2	6	MODERATE
TIBUNGCO	SPRING	41,586.32	41,586.32	3	2	6	MODERATE
TIBUNGCO	SPRING	41,586.32	41,586.32	3	2	6	MODERATE
PANACAN	SPRING	41,586.32	41,586.32	3	2	6	MODERATE
PANACAN	SPRING	41,586.32	41,586.32	3	2	6	MODERATE
TALOMO RIVER	DEEPWELL	5,500,000	5,500,000	2	1	2	LOW
ULA	DEEPWELL	5,500,000	5,500,000	2	1	2	LOW

Table LU-149. Lifeline Utilities, Level I Water Supply System, Vulnerability Table for Flood, Davao City

BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY CATEGORY
RIVERSIDE	DEEPWELL	5,500,000	5,500,000	2	1	2	LOW
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
LIZADA	SPRING	41,586.32	41,586.32	3	2	6	MODERATE
LIZADA	SPRING	41,586.32	41,586.32	3	2	6	MODERATE
LIZADA	SPRING	41,586.32	41,586.32	3	2	6	MODERATE
LIZADA	SPRING	41,586.32	41,586.32	3	2	6	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
BINUGAO	SPRING	41,586.32	41,586.32	3	2	6	MODERATE
BINUGAO	SPRING	41,586.32	41,586.32	3	2	6	MODERATE

Table LU-150. Climate Change Vulnerability Assessment of Level I Water Supply for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
BUNAWAN	<p>No. of sources: 7 Susceptibility: 2-MF Type: SPRING Replacement Cost : :41586.32 Total Replacement Cost::291104.24 Degree of Impact :2 Adaptive Capacity:2 Vulnerability: 4 Vulnerability Score: Moderate</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
TIBUNGCO	<p>No. of sources: 6 Susceptibility: 3-HF Type: SPRING Replacement Cost :41586.32 Total Replacement Cost :249517.92 Degree of Impact :2 AdaptiveCapacity:2 Vulnerability Score: 4 Vulnerability Category: Moderate</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Material
PANACAN	<p>No. of sources :3 Susceptibility: 2-HF Type: SPRING Replacement Cost :41586.32 Total Replacement Cost :124758.96 Degree of Impact :2 Adaptive Capacity:2 Vulnerability Score: 4 Vulnerability Category: Moderate</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-150. Climate Change Vulnerability Assessment of Level I Water Supply for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
DALIAO	<p>No. of sources: 24 Susceptibility:14-LF, 10-MF Type: SPRING Replacement Cost :41586.32 Total Replacement Cost :998071.68 Degree of Impact :2 Adaptive Capacity:2 Vulnerability Score: 4 Vulnerability Category : Moderate</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
LIZADA	<p>No. of sources: 3 Susceptibility MF Type: SPRING Replacement Cost :41587.32 Total Replacement Cost :124761.96 Degree of Impact :3 Adaptive Capacity:2 Vulnerability Score: 6 Vulnerability Category: Moderate</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
SIRAWAN	<p>No. of sources: 11 Susceptibility 8-MF, 3-LF Type: SPRING Replacement Cost :41588.32 Total Replacement Cost :457471.52 Degree of Impact :2 Adaptive Capacity:2 Vulnerability Score: 4 Vulnerability Category: Moderate</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-150. Climate Change Vulnerability Assessment of Level I Water Supply for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
BINUGAO	No. of sources: 2 Susceptibility HF-2 Type: SPRING Replacement Cost :41589.32 Total Replacement Cost :83178.64 Degree of Impact :3 Adaptive Capacity:2 Vulnerability Score: 6 Vulnerability Category: Moderate	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Vulnerability Assessment of Level II Water System

A total of eight (8) level II water systems water systems are moderately vulnerable to flood. These are found in Sirawan, Marapangi, Daliaon Plantation, Waan and Tigatto. Moreover, the remaining 46 wells and 11 spring sources have low vulnerability to flood.

Table LU-151. Lifeline Utilities, Level II Water System, Vulnerability Table for Flood, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT SCORE	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
BINUGAO	SPRING	41,586.32	41,586.32	2	1	2	LOW
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
BINUGAO	SPRING	41,586.32	41,586.32	1	1	1	LOW
SIRAWAN	2HP	46,200.00	46,200.00	2	2	4	MODERATE
SIRAWAN	2HP	46,200.00	46,200.00	2	2	4	MODERATE
MARAPANGI	2HP	46,200.00	46,200.00	2	2	4	MODERATE
SIBULAN	SPRING	41,586.32	41,586.32	2	1	2	LOW
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	2	1	2	LOW
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	2	1	2	LOW
TUNGKALAN	SPRING	41,586.32	41,586.32	2	1	2	LOW
TUNGKALAN	SPRING	41,586.32	41,586.32	2	1	2	LOW
DALIAON PLANTATION	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
MANUEL GUIANGA	2HP	46,200.00	46,200.00	1	1	1	LOW
SIRIB	5HP	82,500.00	82,500.00	1	1	1	LOW
ANGALAN	2HP	46,200.00	46,200.00	1	1	1	LOW
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	2	1	2	LOW
TAGAKPAN	2HP	46,200.00	46,200.00	1	1	1	LOW
BALENGAENG	2HP	46,200.00	46,200.00	1	1	1	LOW
ANGALAN	2HP	46,200.00	46,200.00	1	1	1	LOW
SIRIB	2HP	46,200.00	46,200.00	1	1	1	LOW
SIRIB	2HP	46,200.00	46,200.00	1	1	1	LOW
SIRIB	3HP	60,500.00	60,500.00	1	1	1	LOW
TAGAKPAN	2HP	46,200.00	46,200.00	1	1	1	LOW
SUBASTA	2HP	46,200.00	46,200.00	2	1	2	LOW

Table LU-151. Lifeline Utilities, Level II Water System, Vulnerability Table for Flood, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT SCORE	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
WAAN	18GS20	46,200.00	46,200.00	2	2	4	MODERATE
WAAN	2HP	46,200.00	46,200.00	2	2	4	MODERATE
TAGAKPAN	2HP	46,200.00	46,200.00	1	1	1	LOW
TIGATTO	2HP	46,200.00	46,200.00	2	2	4	MODERATE
BALENGAENG	2HP	46,200.00	46,200.00	1	1	1	LOW
MATINA BIAO	2HP	46,200.00	46,200.00	1	1	1	LOW
LOS AMIGOS	3HP	60,500.00	60,500.00	1	1	1	LOW
SUBASTA	3HP	60,500.00	60,500.00	2	1	2	LOW
CAWAYAN	3HP	60,500.00	60,500.00	1	1	1	LOW
SUBASTA	2HP	46,200.00	46,200.00	1	1	1	LOW
BIAO ESCUELA	2HP	46,200.00	46,200.00	1	1	1	LOW
LOS AMIGOS	2HP	46,200.00	46,200.00	1	1	1	LOW
LOS AMIGOS	1HP	31,000.00	31,000.00	1	1	1	LOW
CAWAYAN	SPRING	41,586.32	41,586.32	2	1	2	LOW
MATINA BIAO	2HP	46,200.00	46,200.00	1	1	1	LOW
BIAO GUIANGA	2HP	46,200.00	46,200.00	1	1	1	LOW
BIAO GUIANGA	2HP	46,200.00	46,200.00	1	1	1	LOW
BIAO ESCUELA	3HP	60,500.00	60,500.00	1	1	1	LOW
SUBASTA	2HP	46,200.00	46,200.00	1	1	1	LOW
CAWAYAN	3HP	60,500.00	60,500.00	1	1	1	LOW
BIAO ESCUELA	2HP	46,200.00	46,200.00	1	1	1	LOW
BIAO GUIANGA	2HP	46,200.00	46,200.00	1	1	1	LOW
BIAO ESCUELA	2HP	46,200.00	46,200.00	1	1	1	LOW
BIAO GUIANGA	2HP	46,200.00	46,200.00	1	1	1	LOW
BAGUIO	3HP	60,500.00	60,500.00	2	1	2	LOW
BIAO JOAQUIN	1.5HP	38,500.00	38,500.00	1	1	1	LOW
TALOMO RIVER	2HP	46,200.00	46,200.00	1	1	1	LOW
TALOMO RIVER	2HP	46,200.00	46,200.00	1	1	1	LOW
BIAO JOAQUIN	2HP	46,200.00	46,200.00	1	1	1	LOW
TALANDANG	2HP	46,200.00	46,200.00	1	1	1	LOW
BIAO JOAQUIN	1.5HP	38,500.00	38,500.00	1	1	1	LOW
TALOMO RIVER	2HP	46,200.00	46,200.00	1	1	1	LOW
TALOMO RIVER	1.5HP	38,500.00	38,500.00	1	1	1	LOW

Table LU-151. Lifeline Utilities, Level II Water System, Vulnerability Table for Flood, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT SCORE	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
TALOMO RIVER	2HP	46,200.00	46,200.00	1	1	1	LOW
TALOMO RIVER	2HP	46,200.00	46,200.00	1	1	1	LOW
TALOMO RIVER	2HP	46,200.00	46,200.00	1	1	1	LOW
BIAO JOAQUIN	2HP	46,200.00	46,200.00	1	1	1	LOW
MALAGOS	SPRING	41,586.32	41,586.32	2	1	2	LOW
TALOMO RIVER	2HP	46,200.00	46,200.00	1	1	1	LOW
GUMALANG	3HP	60,500.00	60,500.00	1	1	1	LOW
SALAYSAY	SPRING	41,586.32	41,586.32	2	1	2	LOW

Vulnerability for Level III Water Supply

A total of five (5) main line pipes in Bago Aplaya ranging from (400-600 mm) in diameter are moderately vulnerable. Meanwhile, two main line pipes in Ilang, one in Matina Aplaya and one (1) in Tibungco are also moderately vulnerable. This is based to the moderate degree of impact and moderate adaptive capacity. These identified pipelines are those within the bridges. Those which got the low vulnerability index score predominantly have low degree of impact and high adaptive capacity.

Table LU-153. Lifeline Utilities, Level III Water Supply, Vulnerability Table for Flood, Davao City

EXPOSURE							IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
Administrative District	Barangay	Type	Size	Replacement Cost	Length	Value of Exposed Lifeline	Degree of Impact	Adaptive Capacity Score	Vulnerability Index Score	Vulnerability Index Category
Calinan	CALINAN	MLCSP	150	₱11,200.00	30.35	₱339,954.43	1	1	1	LOW
Calinan	CALINAN	MLCSP	200	₱12,500.00	85.89	₱1,073,606.74	1	1	1	LOW
Calinan	CALINAN	MLCSP	200	₱12,500.00	91.26	₱1,140,743.07	1	1	1	LOW
Calinan	WANGAN	MLCSP	200	₱12,500.00	20.62	₱257,799.02	1	1	1	LOW
Calinan	CALINAN	MLCSP	200	₱12,500.00	22.81	₱285,146.15	1	1	1	LOW
Calinan	RIVERSIDE	MLCSP	250	₱17,700.00	47.65	₱843,361.22	1	1	1	LOW
Calinan	RIVERSIDE	MLCSP	150	₱11,200.00	22.74	₱254,712.19	1	1	1	LOW
Calinan	CALINAN	MLCSP	200	₱12,500.00	87.38	₱1,092,252.20	1	1	1	LOW
Poblacion	39-D	MLCSP	300	₱19,100.00	21.63	₱413,045.71	1	1	1	LOW
Agdao	AGDAO PROPER	MLCSP	400	₱23,600.00	175.51	₱4,142,036.00	1	1	1	LOW
Agdao	AGDAO PROPER	MLCSP	150	₱11,200.00	28.8	₱322,560.00	1	1	1	LOW
Agdao	WILFREDO AQUINO	MLCSP	300	₱19,100.00	22.26	₱425,166.00	1	1	1	LOW
Agdao	AGDAO PROPER	MLCSP	400	₱23,600.00	17.76	₱419,136.00	1	1	1	LOW
Agdao	AGDAO PROPER	MLCSP	400	₱23,600.00	63.34	₱1,494,824.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	250	₱17,700.00	158.17	₱2,799,609.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	250	₱17,700.00	604.49	₱10,699,473.00	1	1	1	LOW
Talomo	DUMOY	MLCSP	400	₱23,600.00	51.53	₱1,216,108.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	300	₱19,100.00	106.54	₱2,034,914.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	300	₱19,100.00	90.25	₱1,723,775.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	250	₱17,700.00	229.3	₱4,058,610.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	250	₱17,700.00	3.93	₱69,561.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	800	₱52,800.00	44.64	₱2,356,992.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	61.88	₱693,056.00	1	1	1	LOW

Table LU-153. Lifeline Utilities, Level III Water Supply, Vulnerability Table for Flood, Davao City

EXPOSURE							IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
Administrative District	Barangay	Type	Size	Replacement Cost	Length	Value of Exposed Lifeline	Degree of Impact	Adaptive Capacity Score	Vulnerability Index Score	Vulnerability Index Category
Talomo	MATINA CROSSING	MLCSP	750	₱48,500.00	18.19	₱882,215.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	750	₱48,500.00	126.37	₱6,128,945.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	750	₱48,500.00	146.85	₱7,122,225.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	96.58	₱1,081,696.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	38.24	₱428,288.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	154.2	₱1,727,040.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	149.77	₱1,677,424.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	700	₱44,200.00	49.78	₱2,200,276.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	750	₱48,500.00	109.99	₱5,334,515.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	74.05	₱829,360.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	7.28	₱81,536.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	220.22	₱2,466,464.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	174.49	₱1,954,288.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	106.03	₱1,187,536.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	2.66	₱29,792.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	750	₱48,500.00	112.32	₱5,447,520.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	750	₱48,500.00	153.34	₱7,436,990.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	326.59	₱3,657,808.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	750	₱48,500.00	8.67	₱420,495.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	750	₱48,500.00	1	₱48,500.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	600	₱40,100.00	571.17	₱22,903,917.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	900	₱56,500.00	46.82	₱2,645,330.00	1	1	1	LOW
Agdao	AGDAO PROPER	MLCSP	400	₱23,600.00	90.43	₱2,134,148.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	250	₱17,700.00	74.23	₱1,313,871.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	400	₱23,600.00	223.09	₱5,264,924.00	2	2	4	MODERATE
Talomo	BAGO APLAYA	MLCSP	400	₱23,600.00	99.67	₱2,352,212.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	700	₱44,200.00	231.11	₱10,215,062.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	700	₱44,200.00	4.72	₱208,624.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	750	₱48,500.00	301.54	₱14,624,690.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	413.54	₱4,631,648.00	1	1	1	LOW

Table LU-153. Lifeline Utilities, Level III Water Supply, Vulnerability Table for Flood, Davao City

EXPOSURE							IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
Administrative District	Barangay	Type	Size	Replacement Cost	Length	Value of Exposed Lifeline	Degree of Impact	Adaptive Capacity Score	Vulnerability Index Score	Vulnerability Index Category
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	117.78	₱1,319,136.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	700	₱44,200.00	21.82	₱964,444.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	750	₱48,500.00	18.45	₱894,825.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	95.18	₱1,066,016.00	1	1	1	LOW
Agdao	AGDAO PROPER	MLCSP	400	₱23,600.00	9.02	₱212,872.00	1	1	1	LOW
Poblacion	15-B	MLCSP	400	₱23,600.00	28.77	₱678,972.00	1	1	1	LOW
Talomo	MA-A	MLCSP	750	₱48,500.00	68.62	₱3,328,070.00	1	1	1	LOW
Talomo	MA-A	MLCSP	350	₱20,800.00	13.06	₱271,648.00	1	1	1	LOW
Talomo	MA-A	MLCSP	300	₱19,100.00	194.93	₱3,723,163.00	1	1	1	LOW
Talomo	MA-A	MLCSP	300	₱19,100.00	188.62	₱3,602,642.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	32.52	₱364,224.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	750	₱48,500.00	72.6	₱3,521,100.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	750	₱48,500.00	4.59	₱222,615.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	750	₱48,500.00	201.95	₱9,794,575.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	750	₱48,500.00	19.29	₱935,565.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	18.95	₱212,240.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	0.87	₱9,744.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	900	₱56,500.00	78.13	₱4,414,345.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	800	₱52,800.00	248.74	₱13,133,472.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	800	₱52,800.00	45.84	₱2,420,352.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	750	₱48,500.00	79.51	₱3,856,235.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	47.99	₱537,488.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	14.63	₱163,856.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	38.75	₱434,000.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	87.81	₱983,472.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	28.56	₱319,872.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	34.89	₱390,768.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	250	₱17,700.00	341.35	₱6,041,895.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	300	₱19,100.00	62.21	₱1,188,211.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	300	₱19,100.00	331.11	₱6,324,201.00	1	1	1	LOW

Table LU-153. Lifeline Utilities, Level III Water Supply, Vulnerability Table for Flood, Davao City

EXPOSURE							IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
Administrative District	Barangay	Type	Size	Replacement Cost	Length	Value of Exposed Lifeline	Degree of Impact	Adaptive Capacity Score	Vulnerability Index Score	Vulnerability Index Category
Talomo	BAGO APLAYA	MLCSP	600	₱40,100.00	130.39	₱5,228,639.00	1	1	1	LOW
Agdao	TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	153.26	₱1,716,512.00	1	1	1	LOW
Agdao	TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	169.1	₱1,893,920.00	1	1	1	LOW
Agdao	AGDAO PROPER	MLCSP	150	₱11,200.00	6.83	₱76,496.00	1	1	1	LOW
Agdao	TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	46.1	₱516,320.00	1	1	1	LOW
Poblacion	2-A	MLCSP	300	₱19,100.00	71.13	₱1,358,583.00	1	1	1	LOW
Poblacion	39-D	MLCSP	300	₱19,100.00	5.37	₱102,567.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	600	₱40,100.00	169.94	₱6,814,594.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	250	₱17,700.00	85.41	₱1,511,757.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	300	₱19,100.00	154.59	₱2,952,669.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	400	₱23,600.00	48.77	₱1,150,972.00	1	1	1	LOW
Talomo	DUMOY	MLCSP	250	₱17,700.00	269.22	₱4,765,194.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	900	₱56,500.00	119.84	₱6,770,960.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	900	₱56,500.00	10.74	₱606,810.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	900	₱56,500.00	45.08	₱2,547,020.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	31.66	₱354,592.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	91.74	₱1,027,488.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	450	₱24,300.00	8.64	₱209,952.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	450	₱24,300.00	39.25	₱953,775.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	600	₱40,100.00	4.63	₱185,663.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	600	₱40,100.00	41.6	₱1,668,160.00	1	1	1	LOW
Talomo	DUMOY	MLCSP	400	₱23,600.00	315.81	₱7,453,116.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	350	₱20,800.00	18.62	₱387,296.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	450	₱24,300.00	171.98	₱4,179,114.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	700	₱44,200.00	13.77	₱608,634.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	700	₱44,200.00	219.87	₱9,718,254.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	700	₱44,200.00	7.87	₱347,854.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	250	₱17,700.00	405.51	₱7,177,527.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	450	₱24,300.00	423.27	₱10,285,461.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	300	₱19,100.00	207.43	₱3,961,913.00	1	1	1	LOW

Table LU-153. Lifeline Utilities, Level III Water Supply, Vulnerability Table for Flood, Davao City

EXPOSURE							IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
Administrative District	Barangay	Type	Size	Replacement Cost	Length	Value of Exposed Lifeline	Degree of Impact	Adaptive Capacity Score	Vulnerability Index Score	Vulnerability Index Category
Agdao	AGDAO PROPER	MLCSP	300	₱19,100.00	239.57	₱4,575,787.00	1	1	1	LOW
Agdao	AGDAO PROPER	MLCSP	400	₱23,600.00	53.67	₱1,266,612.00	1	1	1	LOW
Agdao	GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	206.29	₱4,868,444.00	1	1	1	LOW
Agdao	GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	24.97	₱589,292.00	1	1	1	LOW
Agdao	GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	20.82	₱491,352.00	1	1	1	LOW
Agdao	GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	66.75	₱1,575,300.00	1	1	1	LOW
Agdao	UBALDE	MLCSP	400	₱23,600.00	8.77	₱206,972.00	1	1	1	LOW
Agdao	LAPU - LAPU	MLCSP	400	₱23,600.00	77.32	₱1,824,752.00	1	1	1	LOW
Agdao	UBALDE	MLCSP	400	₱23,600.00	56.8	₱1,340,480.00	1	1	1	LOW
Agdao	LAPU - LAPU	MLCSP	400	₱23,600.00	162.28	₱3,829,808.00	1	1	1	LOW
Agdao	CENTRO	MLCSP	400	₱23,600.00	93.79	₱2,213,444.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	16.87	₱188,944.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	32.12	₱359,744.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	11.21	₱125,552.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	21.56	₱241,472.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	143.01	₱1,601,712.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	42.88	₱480,256.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	123.86	₱1,387,232.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	100.87	₱1,129,744.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	69.27	₱775,824.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	40.6	₱454,720.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	44.36	₱496,832.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	73.05	₱818,160.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	38.45	₱430,640.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	42.39	₱474,768.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	43.58	₱488,096.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	52.77	₱591,024.00	1	1	1	LOW
Agdao	AGDAO PROPER	MLCSP	150	₱11,200.00	72.06	₱807,072.00	1	1	1	LOW
Buhangin	SASA	MLCSP	200	₱12,500.00	95.78	₱1,197,250.00	1	1	1	LOW
Buhangin	PAMPANGA	MLCSP	300	₱19,100.00	5	₱95,500.00	1	1	1	LOW

Table LU-153. Lifeline Utilities, Level III Water Supply, Vulnerability Table for Flood, Davao City

EXPOSURE							IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
Administrative District	Barangay	Type	Size	Replacement Cost	Length	Value of Exposed Lifeline	Degree of Impact	Adaptive Capacity Score	Vulnerability Index Score	Vulnerability Index Category
Buhangin	PAMPANGA	MLCSP	300	₱19,100.00	14.98	₱286,118.00	1	1	1	LOW
Buhangin	PAMPANGA	MLCSP	300	₱19,100.00	45.71	₱873,061.00	1	1	1	LOW
Buhangin	V. HIZON	MLCSP	250	₱17,700.00	2.85	₱50,445.00	1	1	1	LOW
Buhangin	PAMPANGA	MLCSP	250	₱17,700.00	12.43	₱220,011.00	1	1	1	LOW
Buhangin	SASA	MLCSP	250	₱17,700.00	75.16	₱1,330,332.00	1	1	1	LOW
Buhangin	PAMPANGA	MLCSP	250	₱17,700.00	13.9	₱246,030.00	1	1	1	LOW
Buhangin	PAMPANGA	MLCSP	250	₱17,700.00	209.85	₱3,714,345.00	1	1	1	LOW
Buhangin	SASA	MLCSP	200	₱12,500.00	61.06	₱763,250.00	1	1	1	LOW
Buhangin	V. HIZON	MLCSP	250	₱17,700.00	386.94	₱6,848,838.00	1	1	1	LOW
Buhangin	PAMPANGA	MLCSP	250	₱17,700.00	23.61	₱417,897.00	1	1	1	LOW
Buhangin	PAMPANGA	MLCSP	250	₱17,700.00	23.06	₱408,162.00	1	1	1	LOW
Buhangin	PAMPANGA	MLCSP	300	₱19,100.00	336.36	₱6,424,476.00	1	1	1	LOW
Buhangin	SASA	MLCSP	250	₱17,700.00	87.14	₱1,542,378.00	1	1	1	LOW
Talomo	MA-A	MLCSP	350	₱20,800.00	348.23	₱7,243,184.00	1	1	1	LOW
Talomo	MA-A	MLCSP	350	₱20,800.00	137.11	₱2,851,888.00	1	1	1	LOW
Talomo	MA-A	MLCSP	800	₱52,800.00	194.54	₱10,271,712.00	1	1	1	LOW
Talomo	MA-A	MLCSP	800	₱52,800.00	10.29	₱543,312.00	1	1	1	LOW
Talomo	MA-A	MLCSP	800	₱52,800.00	12.31	₱649,968.00	1	1	1	LOW
Buhangin	V. HIZON	MLCSP	250	₱17,700.00	5	₱88,500.00	1	1	1	LOW
Buhangin	CABANTIAN	MLCSP	400	₱23,600.00	5.59	₱131,924.00	1	1	1	LOW
Buhangin	CABANTIAN	MLCSP	350	₱20,800.00	5.2	₱108,160.00	1	1	1	LOW
Buhangin	BUHANGIN	MLCSP	600	₱40,100.00	9.88	₱396,188.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	350	₱20,800.00	489.24	₱10,176,192.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	350	₱20,800.00	663.83	₱13,807,664.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	350	₱20,800.00	104.91	₱2,182,128.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	350	₱20,800.00	505.33	₱10,510,864.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	350	₱20,800.00	280.59	₱5,836,272.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	350	₱20,800.00	186.97	₱3,888,976.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	350	₱20,800.00	104.92	₱2,182,336.00	1	1	1	LOW
Poblacion	19-B	MLCSP	600	₱40,100.00	181.38	₱7,273,338.00	1	1	1	LOW

Table LU-153. Lifeline Utilities, Level III Water Supply, Vulnerability Table for Flood, Davao City

EXPOSURE							IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
Administrative District	Barangay	Type	Size	Replacement Cost	Length	Value of Exposed Lifeline	Degree of Impact	Adaptive Capacity Score	Vulnerability Index Score	Vulnerability Index Category
Poblacion	19-B	MLCSP	600	₱40,100.00	229.36	₱9,197,336.00	1	1	1	LOW
Poblacion	19-B	MLCSP	600	₱40,100.00	191.74	₱7,688,774.00	1	1	1	LOW
Agdao	WILFREDO AQUINO	MLCSP	300	₱19,100.00	190.87	₱3,645,617.00	1	1	1	LOW
Agdao	PACIANO BANGOY	MLCSP	150	₱11,200.00	25.58	₱286,496.00	1	1	1	LOW
Agdao	PACIANO BANGOY	MLCSP	150	₱11,200.00	38.83	₱434,896.00	1	1	1	LOW
Agdao	PACIANO BANGOY	MLCSP	150	₱11,200.00	171.17	₱1,917,104.00	1	1	1	LOW
Agdao	WILFREDO AQUINO	MLCSP	300	₱19,100.00	3.66	₱69,906.00	1	1	1	LOW
Agdao	AGDAO PROPER	MLCSP	300	₱19,100.00	111.52	₱2,130,032.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	37.85	₱423,920.00	1	1	1	LOW
Agdao	AGDAO PROPER	MLCSP	200	₱12,500.00	20.1	₱251,250.00	1	1	1	LOW
Poblacion	40-D	MLCSP	250	₱17,700.00	283.77	₱5,022,729.00	1	1	1	LOW
Poblacion	2-A	MLCSP	250	₱17,700.00	7.32	₱129,564.00	1	1	1	LOW
Poblacion	39-D	MLCSP	250	₱17,700.00	196.26	₱3,473,802.00	1	1	1	LOW
Agdao	WILFREDO AQUINO	MLCSP	150	₱11,200.00	15.86	₱177,632.00	1	1	1	LOW
Agdao	PACIANO BANGOY	MLCSP	150	₱11,200.00	5.45	₱61,040.00	1	1	1	LOW
Agdao	AGDAO PROPER	MLCSP	400	₱23,600.00	421.48	₱9,946,928.00	1	1	1	LOW
Talomo	MA-A	MLCSP	750	₱48,500.00	37.27	₱1,807,595.00	1	1	1	LOW
Talomo	MA-A	MLCSP	750	₱48,500.00	126.08	₱6,114,880.00	1	1	1	LOW
Talomo	MA-A	MLCSP	750	₱48,500.00	16.15	₱783,275.00	1	1	1	LOW
Poblacion	2-A	MLCSP	750	₱48,500.00	100.64	₱4,881,040.00	1	1	1	LOW
Talomo	BUCANA	MLCSP	750	₱48,500.00	145.29	₱7,046,565.00	1	1	1	LOW
Talomo	BUCANA	MLCSP	750	₱48,500.00	162.06	₱7,859,910.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	208.98	₱2,340,576.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	350	₱20,800.00	23.71	₱493,168.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	350	₱20,800.00	206.38	₱4,292,704.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	350	₱20,800.00	339.14	₱7,054,112.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	300	₱19,100.00	4.41	₱84,231.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	300	₱19,100.00	8.71	₱166,361.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	48.42	₱542,304.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	244.32	₱2,736,384.00	1	1	1	LOW

Table LU-153. Lifeline Utilities, Level III Water Supply, Vulnerability Table for Flood, Davao City

EXPOSURE							IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
Administrative District	Barangay	Type	Size	Replacement Cost	Length	Value of Exposed Lifeline	Degree of Impact	Adaptive Capacity Score	Vulnerability Index Score	Vulnerability Index Category
Buhangin	CABANTIAN	MLCSP	350	₱20,800.00	6.12	₱127,296.00	1	1	1	LOW
Buhangin	BUHANGIN	MLCSP	350	₱20,800.00	15.38	₱319,904.00	1	1	1	LOW
Buhangin	A. ANGLIONGTO	MLCSP	350	₱20,800.00	13.91	₱289,328.00	1	1	1	LOW
Buhangin	A. ANGLIONGTO	MLCSP	350	₱20,800.00	7.64	₱158,912.00	1	1	1	LOW
Talomo	MA-A	MLCSP	350	₱20,800.00	46.31	₱963,248.00	1	1	1	LOW
Talomo	MA-A	MLCSP	400	₱23,600.00	40.19	₱948,484.00	1	1	1	LOW
Talomo	MA-A	MLCSP	450	₱24,300.00	35.26	₱856,818.00	1	1	1	LOW
Talomo	MA-A	MLCSP	500	₱33,200.00	22.76	₱755,632.00	1	1	1	LOW
Talomo	MA-A	MLCSP	600	₱40,100.00	105.56	₱4,232,956.00	1	1	1	LOW
Buhangin	SASA	MLCSP	250	₱17,700.00	212.79	₱3,766,383.00	1	1	1	LOW
Buhangin	SASA	MLCSP	250	₱17,700.00	61.19	₱1,083,063.00	1	1	1	LOW
Buhangin	BUHANGIN	MLCSP	600	₱40,100.00	21.48	₱861,348.00	1	1	1	LOW
Buhangin	BUHANGIN	MLCSP	600	₱40,100.00	34.67	₱1,390,267.00	1	1	1	LOW
Talomo	MA-A	MLCSP	800	₱52,800.00	124.31	₱6,563,568.00	1	1	1	LOW
Talomo	MATINA PANGI	MLCSP	800	₱52,800.00	163.78	₱8,647,584.00	1	1	1	LOW
Talomo	MATINA PANGI	MLCSP	800	₱52,800.00	644.38	₱34,023,264.00	1	1	1	LOW
Talomo	MATINA PANGI	MLCSP	800	₱52,800.00	65.99	₱3,484,272.00	1	1	1	LOW
Talomo	MATINA PANGI	MLCSP	800	₱52,800.00	158.75	₱8,382,000.00	1	1	1	LOW
Talomo	MATINA PANGI	MLCSP	800	₱52,800.00	9.89	₱522,192.00	1	1	1	LOW
Talomo	MATINA PANGI	MLCSP	800	₱52,800.00	186.78	₱9,861,984.00	1	1	1	LOW
Talomo	MATINA PANGI	MLCSP	800	₱52,800.00	72.4	₱3,822,720.00	1	1	1	LOW
Buhangin	SASA	MLCSP	300	₱19,100.00	107.31	₱2,049,621.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	450	₱24,300.00	5.47	₱132,921.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	450	₱24,300.00	88.89	₱2,160,027.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	450	₱24,300.00	2.35	₱57,105.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	350	₱20,800.00	524.62	₱10,912,096.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	350	₱20,800.00	99.6	₱2,071,680.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	350	₱20,800.00	98.18	₱2,042,144.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	300	₱19,100.00	665.27	₱12,706,657.00	2	2	4	MODERATE
Buhangin	TIGATTO	MLCSP	400	₱23,600.00	64	₱1,510,400.00	1	1	1	LOW

Table LU-153. Lifeline Utilities, Level III Water Supply, Vulnerability Table for Flood, Davao City

EXPOSURE							IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
Administrative District	Barangay	Type	Size	Replacement Cost	Length	Value of Exposed Lifeline	Degree of Impact	Adaptive Capacity Score	Vulnerability Index Score	Vulnerability Index Category
Buhangin	TIGATTO	MLCSP	400	₱23,600.00	458.47	₱10,819,892.00	1	1	1	LOW
Buhangin	BUHANGIN	MLCSP	400	₱23,600.00	0.36	₱8,496.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	250	₱17,700.00	28.02	₱495,954.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	250	₱17,700.00	11.23	₱198,771.00	1	1	1	LOW
Buhangin	PAMPANGA	MLCSP	300	₱19,100.00	3.45	₱65,895.00	1	1	1	LOW
Toril	LUBOGAN	MLCSP	250	₱17,700.00	168.9	₱2,989,530.00	1	1	1	LOW
Toril	LUBOGAN	MLCSP	250	₱17,700.00	47.96	₱848,892.00	1	1	1	LOW
Toril	LUBOGAN	MLCSP	250	₱17,700.00	12.19	₱215,763.00	1	1	1	LOW
Toril	LUBOGAN	MLCSP	250	₱17,700.00	137.93	₱2,441,361.00	1	1	1	LOW
Toril	LUBOGAN	MLCSP	250	₱17,700.00	282.38	₱4,998,126.00	1	1	1	LOW
Buhangin	SASA	MLCSP	250	₱17,700.00	28.84	₱510,468.00	1	1	1	LOW
Buhangin	SASA	MLCSP	250	₱17,700.00	24.48	₱433,296.00	1	1	1	LOW
Buhangin	SASA	MLCSP	250	₱17,700.00	96.01	₱1,699,377.00	1	1	1	LOW
Bunawan	PANACAN	MLCSP	250	₱17,700.00	3.35	₱59,295.00	1	1	1	LOW
Buhangin	SASA	MLCSP	250	₱17,700.00	1.65	₱29,205.00	1	1	1	LOW
Bunawan	PANACAN	MLCSP	250	₱17,700.00	33.39	₱591,003.00	1	1	1	LOW
Bunawan	PANACAN	MLCSP	250	₱17,700.00	85.39	₱1,511,403.00	1	1	1	LOW
Bunawan	PANACAN	MLCSP	250	₱17,700.00	95.73	₱1,694,421.00	1	1	1	LOW
Bunawan	PANACAN	MLCSP	250	₱17,700.00	75.91	₱1,343,607.00	1	1	1	LOW
Bunawan	PANACAN	MLCSP	250	₱17,700.00	59.91	₱1,060,407.00	1	1	1	LOW
Toril	LUBOGAN	MLCSP	250	₱17,700.00	179.66	₱3,179,982.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	500	₱33,200.00	184.44	₱6,123,408.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	250	₱17,700.00	79.53	₱1,407,681.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	250	₱17,700.00	207.01	₱3,664,077.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	350	₱20,800.00	88.59	₱1,842,672.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	350	₱20,800.00	24.58	₱511,264.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	350	₱20,800.00	22.63	₱470,704.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	350	₱20,800.00	159.72	₱3,322,176.00	1	1	1	LOW
Talomo	CATALUNAN GRANDE	MLCSP	350	₱20,800.00	41.16	₱856,128.00	1	1	1	LOW
Talomo	CATALUNAN GRANDE	MLCSP	350	₱20,800.00	272.28	₱5,663,424.00	1	1	1	LOW

Table LU-153. Lifeline Utilities, Level III Water Supply, Vulnerability Table for Flood, Davao City

EXPOSURE							IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
Administrative District	Barangay	Type	Size	Replacement Cost	Length	Value of Exposed Lifeline	Degree of Impact	Adaptive Capacity Score	Vulnerability Index Score	Vulnerability Index Category
Talomo	CATALUNAN GRANDE	MLCSP	350	₱20,800.00	100.91	₱2,098,928.00	1	1	1	LOW
Talomo	CATALUNAN GRANDE	MLCSP	350	₱20,800.00	88.11	₱1,832,688.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	500	₱33,200.00	156.72	₱5,203,104.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	500	₱33,200.00	505.59	₱16,785,588.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	500	₱33,200.00	308.15	₱10,230,580.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	500	₱33,200.00	52.67	₱1,748,644.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	500	₱33,200.00	545.75	₱18,118,900.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	500	₱33,200.00	10.49	₱348,268.00	1	1	1	LOW
Tugbok	STO. NIÑO	MLCSP	350	₱20,800.00	163.39	₱3,398,512.00	1	1	1	LOW
Tugbok	STO. NIÑO	MLCSP	350	₱20,800.00	279.44	₱5,812,352.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	350	₱20,800.00	91.03	₱1,893,424.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	350	₱20,800.00	540.72	₱11,246,976.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	500	₱33,200.00	11.85	₱393,420.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	500	₱33,200.00	256.82	₱8,526,424.00	1	1	1	LOW
Talomo	CATALUNAN GRANDE	MLCSP	350	₱20,800.00	20.49	₱426,192.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	250	₱17,700.00	79.26	₱1,402,902.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	250	₱17,700.00	20.77	₱367,629.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	500	₱33,200.00	304.69	₱10,115,708.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	500	₱33,200.00	77.19	₱2,562,708.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	500	₱33,200.00	214.48	₱7,120,736.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	150	₱11,200.00	36.45	₱408,240.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	200	₱12,500.00	101.31	₱1,266,375.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	200	₱12,500.00	310.22	₱3,877,750.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	200	₱12,500.00	192.23	₱2,402,875.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	200	₱12,500.00	332.13	₱4,151,625.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	150	₱11,200.00	5.07	₱56,784.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	250	₱17,700.00	5.62	₱99,474.00	1	1	1	LOW
Buhangin	TIGATTO	MLCSP	400	₱23,600.00	733.65	₱17,314,140.00	1	1	1	LOW
Buhangin	BUHANGIN	MLCSP	1000	₱62,400.00	33.44	₱2,086,656.00	1	1	1	LOW
Buhangin	BUHANGIN	MLCSP	800	₱52,800.00	0.06	₱3,168.00	1	1	1	LOW

Table LU-153. Lifeline Utilities, Level III Water Supply, Vulnerability Table for Flood, Davao City

EXPOSURE							IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
Administrative District	Barangay	Type	Size	Replacement Cost	Length	Value of Exposed Lifeline	Degree of Impact	Adaptive Capacity Score	Vulnerability Index Score	Vulnerability Index Category
Bunawan	PANACAN	MLCSP	250	₱17,700.00	44.03	₱779,331.00	1	1	1	LOW
Buhangin	SASA	MLCSP	300	₱19,100.00	79.92	₱1,526,472.00	1	1	1	LOW
Buhangin	PAMPANGA	MLCSP	300	₱19,100.00	18.37	₱350,867.00	1	1	1	LOW
Buhangin	SASA	MLCSP	300	₱19,100.00	73.23	₱1,398,693.00	1	1	1	LOW
Buhangin	SASA	MLCSP	300	₱19,100.00	96.55	₱1,844,105.00	1	1	1	LOW
Buhangin	PAMPANGA	MLCSP	300	₱19,100.00	65.98	₱1,260,218.00	1	1	1	LOW
Buhangin	PAMPANGA	MLCSP	300	₱19,100.00	210.86	₱4,027,426.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	450	₱24,300.00	159.31	₱3,871,233.00	1	1	1	LOW
Talomo	BAGO GALLERA	MLCSP	450	₱24,300.00	226.66	₱5,507,838.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	450	₱24,300.00	186.83	₱4,539,969.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	450	₱24,300.00	62.16	₱1,510,488.00	1	1	1	LOW
Tugbok	LOS AMIGOS	MLCSP	350	₱20,800.00	51.37	₱1,068,496.00	1	1	1	LOW
Tugbok	LOS AMIGOS	MLCSP	350	₱20,800.00	####	₱25,881,024.00	1	1	1	LOW
Calinan	RIVERSIDE	MLCSP	350	₱20,800.00	839.64	₱17,464,512.00	1	1	1	LOW
Calinan	RIVERSIDE	MLCSP	350	₱20,800.00	836.24	₱17,393,792.00	1	1	1	LOW
Tugbok	ULA	MLCSP	250	₱17,700.00	214.1	₱3,789,570.00	1	1	1	LOW
Tugbok	TACUNAN	MLCSP	250	₱17,700.00	148.72	₱2,632,344.00	1	1	1	LOW
Tugbok	TACUNAN	MLCSP	250	₱17,700.00	324.24	₱5,739,048.00	1	1	1	LOW
Tugbok	BIAO ESCUELA	MLCSP	300	₱19,100.00	3.29	₱62,839.00	1	1	1	LOW
Tugbok	BIAO GUIANGA	MLCSP	300	₱19,100.00	785.43	₱15,001,713.00	1	1	1	LOW
Tugbok	BIAO ESCUELA	MLCSP	300	₱19,100.00	139.87	₱2,671,517.00	1	1	1	LOW
Tugbok	BIAO ESCUELA	MLCSP	300	₱19,100.00	956.66	₱18,272,206.00	1	1	1	LOW
Tugbok	BIAO ESCUELA	MLCSP	300	₱19,100.00	18.93	₱361,563.00	1	1	1	LOW
Tugbok	BIAO ESCUELA	MLCSP	350	₱20,800.00	3.96	₱82,368.00	1	1	1	LOW
Tugbok	BIAO ESCUELA	MLCSP	350	₱20,800.00	19.93	₱414,544.00	1	1	1	LOW
Tugbok	BIAO ESCUELA	MLCSP	350	₱20,800.00	251.49	₱5,230,992.00	1	1	1	LOW
Talomo	MATINA PANGI	MLCSP	250	₱17,700.00	223.69	₱3,959,313.00	1	1	1	LOW
Talomo	MATINA PANGI	MLCSP	250	₱17,700.00	231.79	₱4,102,683.00	1	1	1	LOW
Talomo	CATALUNAN GRANDE	MLCSP	250	₱17,700.00	315.15	₱5,578,155.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	500	₱33,200.00	34.6	₱1,148,720.00	1	1	1	LOW

Table LU-153. Lifeline Utilities, Level III Water Supply, Vulnerability Table for Flood, Davao City

EXPOSURE							IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
Administrative District	Barangay	Type	Size	Replacement Cost	Length	Value of Exposed Lifeline	Degree of Impact	Adaptive Capacity Score	Vulnerability Index Score	Vulnerability Index Category
Tugbok	MINTAL	MLCSP	500	₱33,200.00	11.83	₱392,756.00	1	1	1	LOW
Bunawan	PANACAN	MLCSP	300	₱19,100.00	67.51	₱1,289,441.00	1	1	1	LOW
Bunawan	PANACAN	MLCSP	300	₱19,100.00	279.2	₱5,332,720.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	18.07	₱202,384.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	150	₱11,200.00	24.03	₱269,136.00	1	1	1	LOW
Buhangin	TIGATTO	MLCSP	400	₱23,600.00	280.8	₱6,626,880.00	1	1	1	LOW
Buhangin	TIGATTO	MLCSP	400	₱23,600.00	25.15	₱593,540.00	1	1	1	LOW
Buhangin	TIGATTO	MLCSP	400	₱23,600.00	52.58	₱1,240,888.00	1	1	1	LOW
Buhangin	MANDUG	MLCSP	400	₱23,600.00	90.74	₱2,141,464.00	1	1	1	LOW
Buhangin	MANDUG	MLCSP	400	₱23,600.00	309.63	₱7,307,268.00	1	1	1	LOW
Buhangin	MANDUG	MLCSP	400	₱23,600.00	92.98	₱2,194,328.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	400	₱23,600.00	45.16	₱1,065,776.00	2	2	4	MODERATE
Talomo	BAGO APLAYA	MLCSP	400	₱23,600.00	76.34	₱1,801,624.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	400	₱23,600.00	163.75	₱3,864,500.00	2	2	4	MODERATE
Talomo	BAGO APLAYA	MLCSP	400	₱23,600.00	79.14	₱1,867,704.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	250	₱17,700.00	39.3	₱695,610.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	600	₱40,100.00	64.71	₱2,594,871.00	2	2	4	MODERATE
Talomo	BAGO APLAYA	MLCSP	600	₱40,100.00	75.18	₱3,014,718.00	1	1	1	LOW
Talomo	BAGO APLAYA	MLCSP	600	₱40,100.00	158.54	₱6,357,454.00	2	2	4	MODERATE
Talomo	BAGO APLAYA	MLCSP	600	₱40,100.00	76.23	₱3,056,823.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	250	₱17,700.00	576.96	₱10,212,192.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	250	₱17,700.00	875	₱15,487,500.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	250	₱17,700.00	45.78	₱810,306.00	1	1	1	LOW
Buhangin	COMMUNAL	MLCSP	350	₱20,800.00	4.28	₱89,024.00	1	1	1	LOW
Buhangin	COMMUNAL	MLCSP	350	₱20,800.00	13.89	₱288,912.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	500	₱33,200.00	786.72	₱26,119,104.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	500	₱33,200.00	103.31	₱3,429,892.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	500	₱33,200.00	68.54	₱2,275,528.00	1	1	1	LOW
Bunawan	ILANG	MLCSP	400	₱23,600.00	32.4	₱764,640.00	2	2	4	MODERATE
Bunawan	ILANG	MLCSP	400	₱23,600.00	19.49	₱459,964.00	2	2	4	MODERATE

Table LU-153. Lifeline Utilities, Level III Water Supply, Vulnerability Table for Flood, Davao City

EXPOSURE							IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
Administrative District	Barangay	Type	Size	Replacement Cost	Length	Value of Exposed Lifeline	Degree of Impact	Adaptive Capacity Score	Vulnerability Index Score	Vulnerability Index Category
Talomo	TALOMO	MLCSP	250	₱17,700.00	328	₱5,805,600.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	250	₱17,700.00	0.61	₱10,797.00	1	1	1	LOW
Tugbok	BIAO GUIANGA	MLCSP	350	₱20,800.00	417.93	₱8,692,944.00	1	1	1	LOW
Tugbok	BIAO ESCUELA	MLCSP	350	₱20,800.00	139.93	₱2,910,544.00	1	1	1	LOW
Tugbok	BIAO ESCUELA	MLCSP	350	₱20,800.00	625.51	₱13,010,608.00	1	1	1	LOW
Tugbok	BIAO ESCUELA	MLCSP	350	₱20,800.00	80.82	₱1,681,056.00	1	1	1	LOW
Bunawan	PANACAN	MLCSP	300	₱19,100.00	24.42	₱466,422.00	1	1	1	LOW
Talomo	MA-A	MLCSP	800	₱52,800.00	120.09	₱6,340,752.00	1	1	1	LOW
Buhangin	TIGATTO	MLCSP	800	₱52,800.00	83.03	₱4,383,984.00	1	1	1	LOW
Buhangin	TIGATTO	MLCSP	800	₱52,800.00	97.57	₱5,151,696.00	1	1	1	LOW
Buhangin	BUHANGIN	MLCSP	800	₱52,800.00	34.49	₱1,821,072.00	1	1	1	LOW
Talomo	MA-A	MLCSP	800	₱52,800.00	87.21	₱4,604,688.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	700	₱44,200.00	353.39	₱15,619,838.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	700	₱44,200.00	224.7	₱9,931,740.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	350	₱20,800.00	280.51	₱5,834,608.00	1	1	1	LOW
Agdao	PACIANO BANGOY	MLCSP	150	₱11,200.00	71.18	₱797,216.00	1	1	1	LOW
Agdao	PACIANO BANGOY	MLCSP	150	₱11,200.00	2.02	₱22,624.00	1	1	1	LOW
Agdao	AGDAO PROPER	MLCSP	400	₱23,600.00	24.87	₱586,932.00	1	1	1	LOW
Agdao	AGDAO PROPER	MLCSP	400	₱23,600.00	5.86	₱138,296.00	1	1	1	LOW
Buhangin	BUHANGIN	MLCSP	1000	₱62,400.00	30.9	₱1,928,160.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	250	₱17,700.00	341.23	₱6,039,771.00	1	1	1	LOW
Talomo	MATINA APLAYA	MLCSP	250	₱17,700.00	44.03	₱779,331.00	1	1	1	LOW
Tugbok	LOS AMIGOS	MLCSP	250	₱17,700.00	8.8	₱155,760.00	1	1	1	LOW
Tugbok	LOS AMIGOS	MLCSP	250	₱17,700.00	2.67	₱47,259.00	1	1	1	LOW
Tugbok	LOS AMIGOS	MLCSP	250	₱17,700.00	2.22	₱39,294.00	1	1	1	LOW
Tugbok	LOS AMIGOS	MLCSP	250	₱17,700.00	260.44	₱4,609,788.00	1	1	1	LOW
Tugbok	LOS AMIGOS	MLCSP	250	₱17,700.00	2.08	₱36,816.00	1	1	1	LOW
Tugbok	LOS AMIGOS	MLCSP	250	₱17,700.00	553.2	₱9,791,640.00	1	1	1	LOW
Tugbok	LOS AMIGOS	MLCSP	250	₱17,700.00	359.81	₱6,368,637.00	1	1	1	LOW
Tugbok	LOS AMIGOS	MLCSP	250	₱17,700.00	16.73	₱296,121.00	1	1	1	LOW

Table LU-153. Lifeline Utilities, Level III Water Supply, Vulnerability Table for Flood, Davao City

EXPOSURE							IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
Administrative District	Barangay	Type	Size	Replacement Cost	Length	Value of Exposed Lifeline	Degree of Impact	Adaptive Capacity Score	Vulnerability Index Score	Vulnerability Index Category
Bunawan	TIBUNGCO	MLCSP	400	₱23,600.00	25.62	₱604,632.00	2	2	4	MODERATE
Talomo	CATALUNAN GRANDE	MLCSP	350	₱20,800.00	6.88	₱143,104.00	1	1	1	LOW
Talomo	CATALUNAN GRANDE	MLCSP	350	₱20,800.00	46.53	₱967,824.00	1	1	1	LOW
Talomo	CATALUNAN GRANDE	MLCSP	350	₱20,800.00	47.91	₱996,528.00	1	1	1	LOW
Talomo	CATALUNAN GRANDE	MLCSP	350	₱20,800.00	103.67	₱2,156,336.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	250	₱17,700.00	14.61	₱258,597.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	250	₱17,700.00	177.45	₱3,140,865.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	250	₱17,700.00	630.04	₱11,151,708.00	1	1	1	LOW
Tugbok	TUGBOK	MLCSP	250	₱17,700.00	91.68	₱1,622,736.00	1	1	1	LOW
Calinan	CALINAN	MLCSP	200	₱12,500.00	47.96	₱599,500.00	1	1	1	LOW
Calinan	CALINAN	MLCSP	200	₱12,500.00	16.51	₱206,375.00	1	1	1	LOW
Calinan	CALINAN	MLCSP	200	₱12,500.00	79.38	₱992,250.00	1	1	1	LOW
Calinan	CALINAN	MLCSP	200	₱12,500.00	169.11	₱2,113,875.00	1	1	1	LOW
Toril	BANKAS HEIGHTS	MLCSP	250	₱17,700.00	701.77	₱12,421,329.00	1	1	1	LOW
Toril	BANKAS HEIGHTS	MLCSP	250	₱17,700.00	4.69	₱83,013.00	1	1	1	LOW
Buhangin	TIGATTO	MLCSP	400	₱23,600.00	368.62	₱8,699,432.00	1	1	1	LOW
Buhangin	TIGATTO	MLCSP	400	₱23,600.00	478.61	₱11,295,196.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	250	₱17,700.00	414.87	₱7,343,199.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	250	₱17,700.00	440.61	₱7,798,797.00	1	1	1	LOW
Tugbok	MINTAL	MLCSP	250	₱17,700.00	100.79	₱1,783,983.00	1	1	1	LOW
Tugbok	BIAO GUIANGA	MLCSP	350	₱20,800.00	367.36	₱7,641,088.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	450	₱24,300.00	6.06	₱147,258.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	750	₱48,500.00	277.64	₱13,465,540.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	750	₱48,500.00	111.56	₱5,410,660.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	750	₱48,500.00	3.04	₱147,440.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	350	₱20,800.00	39.38	₱819,104.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	350	₱20,800.00	569.71	₱11,849,968.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	250	₱17,700.00	16.21	₱286,917.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	350	₱20,800.00	5.75	₱119,600.00	1	1	1	LOW
Talomo	TALOMO	MLCSP	350	₱20,800.00	437.34	₱9,096,672.00	1	1	1	LOW

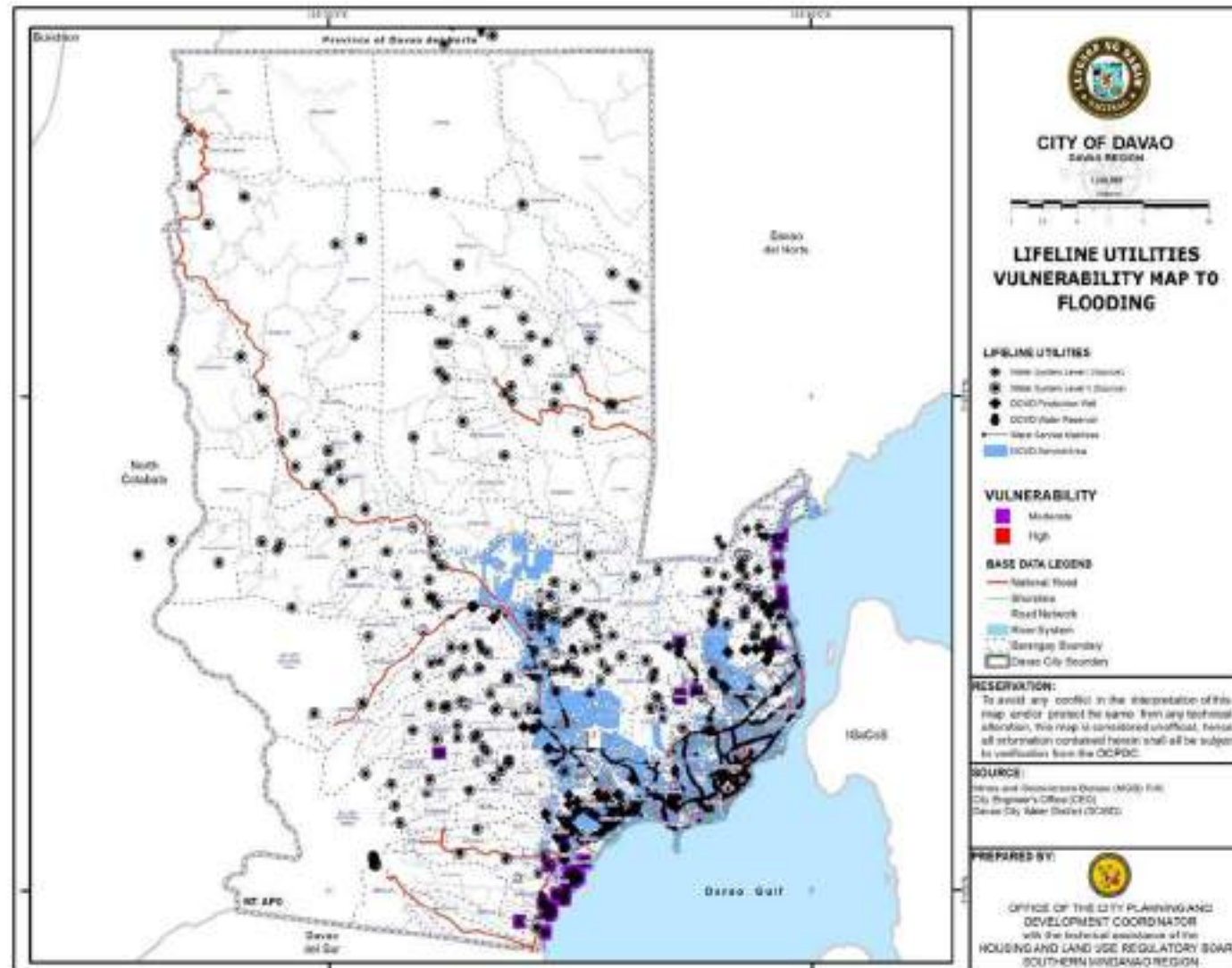
Table LU-153. Lifeline Utilities, Level III Water Supply, Vulnerability Table for Flood, Davao City

EXPOSURE							IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
Administrative District	Barangay	Type	Size	Replacement Cost	Length	Value of Exposed Lifeline	Degree of Impact	Adaptive Capacity Score	Vulnerability Index Score	Vulnerability Index Category
Poblacion	39-D	MLCSP	300	₱19,100.00	0.51	₱9,741.00	1	1	1	LOW
Agdao	WILFREDO AQUINO	MLCSP	300	₱19,100.00	0.37	₱7,067.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	0.41	₱4,592.00	1	1	1	LOW
Talomo	MATINA CROSSING	MLCSP	150	₱11,200.00	0.41	₱4,592.00	1	1	1	LOW
Agdao	GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	0.31	₱7,316.00	1	1	1	LOW
Agdao	LAPU - LAPU	MLCSP	400	₱23,600.00	0.29	₱6,844.00	1	1	1	LOW
Poblacion	2-A	MLCSP	750	₱48,500.00	0.06	₱2,910.00	1	1	1	LOW
Tugbok	TACUNAN	MLCSP	250	₱17,700.00	1.87	₱33,099.00	1	1	1	LOW
Tugbok	TACUNAN	MLCSP	250	₱17,700.00	1.87	₱33,099.00	1	1	1	LOW
Bunawan	PANACAN	MLCSP	300	₱19,100.00	1.22	₱23,302.00	1	1	1	LOW
Buhangin	MANDUG	MLCSP	400	₱23,600.00	2.89	₱68,204.00	1	1	1	LOW
Buhangin	MANDUG	MLCSP	400	₱23,600.00	2.89	₱68,204.00	1	1	1	LOW
Buhangin	COMMUNAL	MLCSP	350	₱20,800.00	26.77	₱556,816.00	1	1	1	LOW
Buhangin	COMMUNAL	MLCSP	350	₱20,800.00	26.77	₱556,816.00	1	1	1	LOW
Buhangin	COMMUNAL	MLCSP	350	₱20,800.00	33.32	₱693,056.00	1	1	1	LOW
Buhangin	COMMUNAL	MLCSP	350	₱20,800.00	33.32	₱693,056.00	1	1	1	LOW

Table LU-154. Climate Change Vulnerability Assessment Summary Matrix of Level III Water Supply System for Flood, Davao City

Area Name	Technical Findings	Implications	Policy Interventions
Bago Aplaya	<ul style="list-style-type: none"> • A total of 655.25 meters of main line pipes are moderately vulnerable to flood • The area is highly susceptible to flood • The degree of impact and adaptive capacity is moderate 	<ul style="list-style-type: none"> • There will be disruption of regular operations. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings;
Matina Aplaya	<ul style="list-style-type: none"> • A total of 665.27 meters of 300 mm in diameter main pipeline is highly susceptible to flood • These pipes are suspended in a bridge. • There is a moderate degree of impact, because the possibility of being hit by debris in the event of flood. However the adaptive capacity is moderate. • DCWD is compliant to all applied standards. • This main line pipes have low vulnerability to flood. 	<ul style="list-style-type: none"> • There will be disruption of regular operations. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings
Ilang,Tibungco	<ul style="list-style-type: none"> • A total of 59.81 meters of two 400 m line is highly susceptible to flood • These pipes are suspended in a bridge • There is a moderate degree of impact, because the possibility of being hit by debris in the event of flood. However the adaptive capacity is high since DCWD is compliant to all applied standards. • The main line pipes identified have low vulnerability to flood 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings

Map 5.15. Lifeline Utilities, Water Supply, Vulnerability Map to Flooding, Davao City



Vulnerability for Cell sites

All cell sites have low vulnerability rating. This is based on the moderate degree of impact and high adaptive capacity. As discussed in the adaptive capacity tables, these cell sites are not exposed to flood since majority are located in highly elevated areas.

Table LU-155. Lifeline Utilities, Cell Sites, Vulnerability Table for Flood, Davao City

EXPOSURE					Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability
Name of Cell Site	Location	Area Occupied (sq. m)	Replacement Cost	Value of exposed Lifeline				
GLOBE TELECOM, INC.	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGTEL MOBILE PHILIPPINES, INC.	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGTEL MOBILE PHILIPPINES, INC.	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Centerpoint Mall, Brgy. Matina Crossing,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGTEL MOBILE PHILIPPINES, INC.	Peralta Property, Seminary Rd., Brgy Catalunan Grande Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGTEL MOBILE PHILIPPINES, INC.	Mc Arthur Hiway, Brgy. 74-A, Matina Crossing	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGTEL MOBILE PHILIPPINES, INC.	Magno Prop., No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	#88 Maya St., Brgy. 76A, Ecoland, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low

Table LU-155. Lifeline Utilities, Cell Sites, Vulnerability Table for Flood, Davao City

EXPOSURE					Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability
Name of Cell Site	Location	Area Occupied (sq. m)	Replacement Cost	Value of exposed Lifeline				
GLOBE TELECOM, INC.	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGTEL MOBILE PHILIPPINES, INC.	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGTEL MOBILE PHILIPPINES, INC.	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Centerpoint Mall, Brgy. Matina Crossing,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGTEL MOBILE PHILIPPINES, INC.	Peralta Property, Seminary Rd., Brgy Catalunan Grande Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGTEL MOBILE PHILIPPINES, INC.	Mc Arthur Hiway, Brgy. 74-A, Matina Crossing	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGTEL MOBILE PHILIPPINES, INC.	Magno Prop., No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	#88 Maya St., Brgy. 76A, Ecoland, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Crossing Puan, McArthur Highway, Brgy. Bago Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	1	1.5	Low
DIGTEL MOBILE PHILIPPINES, INC.	Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	1	1.5	Low
SMART COMMUNICATIONS, INC.	PLDT Village, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	1	1.5	Low

Table LU-155. Lifeline Utilities, Cell Sites, Vulnerability Table for Flood, Davao City

EXPOSURE					Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability
Name of Cell Site	Location	Area Occupied (sq. m)	Replacement Cost	Value of exposed Lifeline				
SMART COMMUNICATIONS, INC.	PLDT Village, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	1	1.5	Low
SMART COMMUNICATIONS, INC.	Ortis Road, Ulas, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	1	1.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Ortis road, Ulas, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	1	1.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Upper Rapnaga, Bago Gallera Talumo Dist.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	1	1.5	Low
SMART COMMUNICATIONS, INC.	Purok 16, Sitio Durian, Brgy. Bago Gallera	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	1	1.5	Low
SMART COMMUNICATIONS, INC.	Upper Rapnaga, Bago Gallera Talumo Dist.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	1	1.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Sandawa, McArthur Hi-Way, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Sandawa, McArthur Hi-Way, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
GLOBE TELECOM, INC.	Km 12.5, Talomo Dist , Brgy. Catalanun Pequeño, Davao City, Davao del Sur	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	1	1.5	Low

Table LU-156. Climate Change Vulnerability Assessment Summary Matrix of Cell Sites for Flood, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Brgy. Matina Aplaya	<ul style="list-style-type: none"> ● There are five (5) cell sites highly susceptible to flood and one cell site moderately susceptible to flood ● These cell sites have moderate degree of impact and high adaptive capacity. ● 6 cell sites have low vulnerability to flood ● Cell sites are constructed in a highly elevated areas. 	<ul style="list-style-type: none"> ● Minimal to negligible implications 	<ul style="list-style-type: none"> ● Maintain/Upgrade all telecommunication utilities from time to time in order to cope with the current climate change. ● Government intervenes by way of securing these facilities from man-made hazards.
Brgy. Matina Crossing	<ul style="list-style-type: none"> ● Two cell sites are highly susceptible to flood ● These cell sites have moderate degree of impact of flood and high adaptive capacity ● 2 cell sites have low vulnerability to flood ● Cell sites are constructed in a highly elevated areas 	<ul style="list-style-type: none"> ● Minimal to negligible implications 	<ul style="list-style-type: none"> ● Maintain/Upgrade all telecommunication utilities from time to time in order to cope with the current climate change. ● Government intervenes by way of securing these facilities from man-made hazards.
Brgy. Catalunan Grande	<ul style="list-style-type: none"> ● One cell site is highly susceptible to flood 	<ul style="list-style-type: none"> ● Minimal to negligible implications 	<ul style="list-style-type: none"> ● Maintain/Upgrade all telecommunication utilities from time to time in order to cope with the current climate change.
Brgy. Maa	<ul style="list-style-type: none"> ● One cell site is highly susceptible to flood 	<ul style="list-style-type: none"> ● Minimal to negligible implications 	<ul style="list-style-type: none"> ● Maintain/Upgrade all telecommunication utilities from time to time in order to cope with the current climate change.
Brgy. 11-B	<ul style="list-style-type: none"> ● There are two (2) cell sites are highly susceptible to flood ● These cell sites have moderate degree of impact of flood and high adaptive capacity. ● These cell sites have low vulnerability to flood ● Cell sites are constructed in highly elevated areas. 	<ul style="list-style-type: none"> ● Minimal to negligible implications 	<ul style="list-style-type: none"> ● Maintain/Upgrade all telecommunication utilities from time to time in order to cope with the current climate change. ● Government intervenes by way of securing these facilities from man-made hazards.
Brgy. Bucana	<ul style="list-style-type: none"> ● One cell site is highly susceptible to flood and two (2) cell sites are moderately susceptible to flood. ● These cell site have moderate degree of impact of flood but have high adaptive capacity. ● These cell sites have low vulnerability to flood. ● Cell sites are constructed in a high elevated areas. 	<ul style="list-style-type: none"> ● Minimal to negligible implications 	<ul style="list-style-type: none"> ● Maintain/Upgrade all telecommunication utilities from time to time in order to cope with the current climate change. ● Government intervenes by way of securing these facilities from man-made hazards.

Table LU-156. Climate Change Vulnerability Assessment Summary Matrix of Cell Sites for Flood, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Brgy. Talomo Proper	<ul style="list-style-type: none"> ● There are four (4) cell sites which are moderately susceptible to flood ● These cell sites have low degree of impact and high adaptive capacity. ● These cell sites have low vulnerability to flood. ● These cell sites are constructed in highly elevated areas. 	<ul style="list-style-type: none"> ● Minimal to negligible implications 	<ul style="list-style-type: none"> ● Maintain/Upgrade all telecommunication utilities from time to time in order to cope with the current climate change. ● Government intervenes by way of securing these facilities from man-made hazards.
Brgy. Bago Gallera	<ul style="list-style-type: none"> ● There are four (4) cell sites moderately susceptible to flood ● Three (3) cell sites have low degree of impact and high adaptive capacity ● One cell site has moderate degree of impact of flood and high adaptive capacity. ● All four (4) cell sites have low vulnerability to flood. ● All cell sites constructed in highly elevated areas. 	<ul style="list-style-type: none"> ● Minimal to negligible implications 	<ul style="list-style-type: none"> ● Maintain/Upgrade all telecommunication utilities from time to time in order to cope with the current climate change. ● Government intervenes by way of securing these facilities from man-made hazards.
Brgy. Catalunan Pequeño	<ul style="list-style-type: none"> ● One cell site is moderately susceptible to flood ● This cell site has low degree of impact of flood and high adaptive capacity. ● One cell site has low vulnerability to flood. ● All cell sites are constructed in a highly elevated areas. 	<ul style="list-style-type: none"> ● Minimal to negligible implications 	<ul style="list-style-type: none"> ● Maintain/Upgrade all telecommunication utilities from time to time in order to cope with the current climate change. ● Government intervenes by way of securing these facilities from man-made hazards.

Vulnerability to Landslide

Vulnerability of Roads to Landslide

The total road length highly vulnerable to landslide is 60.8778641 kilometers. It is divided among four road networks namely: Carlos P. Garcia Highway with a total length of 5.5451 kilometers, Davao-Bukidnon Road with the total length of 33.3586 kilometers, Fatima- Malabog Roads with 17. 5861 kilometers, and Toril-Bayabas-Eden Road. These road networks have high degree of impact and moderate adaptive capacity.

Table LU-157. Lifeline Utilities, Roads, Vulnerability Table for Landslide, Davao City

Road Name	Exposed Length (Kilometers)	Replacement Cost per Linear Kilometer	Value of Exposed Lifeline	Degree of impact	Adaptive Capacity	Vulnerability Index	Vulnerability
Calinan-Baguio-Cadalian Road	0.8466	35,000,000	29,632,050	3.0	2.0	6.0	Moderate
Carlos P. Garcia Highway	4.9353	60,000,000	296,118,000	3.0	2.3	7.0	High
Carlos P. Garcia Highway	0.6098	60,000,000	36,587,100	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.1525	40,000,000	6,100,120	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.0305	40,000,000	1,219,384	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.1078	40,000,000	4,310,200	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.1419	40,000,000	5,676,080	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.0376	40,000,000	1,505,592	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.1442	40,000,000	5,769,840	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.0636	40,000,000	2,544,348	3.0	2.3	7.0	High
Davao-Bukidnon Road	15.1655	40,000,000	606,620,000	3.0	2.3	7.0	High
Davao-Bukidnon Road	17.5150	40,000,000	700,600,000	3.0	2.3	7.0	High
Eden-Tagurano Road	0.1042	35,000,000	3,646,895	2.0	2.0	4.0	Moderate
Eden-Tagurano Road	0.3792	35,000,000	13,273,470	2.0	3.0	6.0	Moderate
Fatima-Malabog Road	8.8631	54,000,000	478,604,700	3.0	2.3	7.0	High
Fatima-Malabog Road	8.7231	54,000,000	471,045,780	3.0	2.3	7.0	High
Inawayan-Baracatan Road	1.8346	35,000,000	64,212,050	3.0	2.0	6.0	Moderate
Inawayan-Baracatan Road	5.2520	35,000,000	183,818,600	2.0	2.0	4.0	Moderate
Mabuhay-Pañalum-Paquibato Road	0.4214	44,000,000	18,542,700	2.0	2.0	4.0	Moderate
Mabuhay-Pañalum-Paquibato Road	1.4726	44,000,000	64,793,080	3.0	2.0	6.0	Moderate
Toril-Bayabas-Eden Road	0.8748	30,000,000	26,245,020	2.0	2.0	4.0	Moderate
Toril-Bayabas-Eden Road	4.3880	30,000,000	131,640,600	3.0	2.3	7.0	High

Table LU-158. Climate Change Vulnerability Assessment Summary Matrix of Roads for Landslide, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Calinan-Baguio-Cadalian Road	<ul style="list-style-type: none"> • This road network is moderately vulnerable to landslide. • The exposed length is 0.8466 with a total value of P 29,632,050 • The degree of impact is high. • The adaptive capacity is moderate • This road network traverses along Barangay Carmen 	<ul style="list-style-type: none"> • There will be minimal damage to the roads especially within those areas that have moderate adaptive capacity. • There will be disruption for road access. • Traffic congestion (due re-routing). • Delay of delivery of goods and services. • Cost for maintenance/replacement based on the degree of damage that maybe used for other priority. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Strengthen the slope protection projects by concerned agencies.
Eden-Tagurano Road	<ul style="list-style-type: none"> • This road network is moderately vulnerable to landslide. • The total exposed length is .48 kilometers. • The degree of impact is moderate. • The adaptive capacity is moderate. • Tagurano and Eden are the exposed barangays within the Eden-Tagurano Road. 	<ul style="list-style-type: none"> • There will be minimal damage to the roads especially within those areas that have moderate adaptive capacity. • There will be disruption for road access. • Traffic congestion (due re-routing). • Delay of delivery of goods and services. • Cost for maintenance/replacement based on the degree of damage that maybe used for other priority. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Strengthen the slope protection projects by concerned agencies.
Inawayan-Baracatan Road	<ul style="list-style-type: none"> • This road network is moderately vulnerable to landslide. • The total exposed length is .08 kilometers with a total value of P248,030,650. • Sibulan, Catigan and Baracatan are the exposed barangays within the Inawayan-Baracatan Road. 	<ul style="list-style-type: none"> • There will be minimal damage to the roads especially within those areas that have moderate adaptive capacity. • There will be disruption for road access. • Traffic congestion (due re-routing). • Delay of delivery of goods and services. • Cost for maintenance/replacement based on the degree of damage that maybe used for other priority. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Strengthen the slope protection projects by concerned agencies.

Table LU-158. Climate Change Vulnerability Assessment Summary Matrix of Roads for Landslide, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Mabuhay-Pañalum-Paquibato Road	<ul style="list-style-type: none"> ● This road network is moderately vulnerable to landslide. ● The total exposed length is 1.98 kilometers with a total value of P 83,335,780 ● Paradise Embac, Pañalum and Mabuhay are the exposed barangays within the Mabuhay-Pañalum-Paquibato Road. 	<ul style="list-style-type: none"> ● There will be minimal damage to the roads especially within those areas that have moderate adaptive capacity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Cost for maintenance/replacement based on the degree of damage that maybe used for other priority. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Strengthen the slope protection projects by concerned agencies.
Toril-Bayabas-Eden Road	<ul style="list-style-type: none"> ● This road network is moderately and highly vulnerable to landslide. ● Total exposed length moderately vulnerable is 0.87 kilometers with the total value of P 26,025,020. It has moderate degree of impact and moderate adaptive capacity. ● Total exposed length highly vulnerable is 4.39 kilometers with the value of P 131,640, 600. This road length has high degree of impact and moderate adaptive capacity. ● Marapangi, Eden and Bayabas are the exposed barangays within the Toril-Bayabas-Eden Road. 	<ul style="list-style-type: none"> ● There will be minimal damage to the roads especially within those areas that have moderate adaptive capacity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Cost for maintenance/replacement based on the degree of damage that maybe used for other priority. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Strengthen the slope protection projects by concerned agencies.
Carlos P. Garcia Highway	<ul style="list-style-type: none"> ● This road network is highly vulnerable to landslide. ● The total length is 5.55 kilometers with the value of P332,705,100. ● It has high degree of impact and moderate adaptive capacity. ● Ma-a, Talomo, Matina Pangi, Matina Crossing, Magtuod, Langub, Cabantian and Buhangin are the exposed barangays within the Carlos P. Garcia Highway. 	<ul style="list-style-type: none"> ● There will be minimal damage to the roads especially within those areas that have moderate adaptive capacity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Cost for maintenance/replacement based on the degree of damage that maybe used for other priority. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Strengthen the slope protection projects by concerned agencies.

Table LU-158. Climate Change Vulnerability Assessment Summary Matrix of Roads for Landslide, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Davao-Bukidnon Road	<ul style="list-style-type: none"> • This road network is highly vulnerable to landslide. • The total length is 33.36 kilometers with the value of P1, 334,345,564. • It has high degree of impact and moderate adaptive capacity • Calinan, Marilog and Baguio are the exposed barangays within the Davao-Bukidnon Road. 	<ul style="list-style-type: none"> • There will be minimal damage to the roads especially within those areas that have moderate adaptive capacity. • There will be disruption for road access. • Traffic congestion (due re-routing). • Delay of delivery of goods and services. • Cost for maintenance/replacement based on the degree of damage that maybe used for other priority. • 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Strengthen the slope protection projects by concerned agencies.
Fatima-Malabog Road	<ul style="list-style-type: none"> • This road network is highly vulnerable to landslide • The total exposed length 17.49 kilometers with the value of P949, 650,480. • It has high degree of impact and moderate adaptive capacity. • Paquibato, Pañalum, Malabog, Mabuhay and Fatima are the exposed barangays within the Fatima-Malabog Road. 	<ul style="list-style-type: none"> • There will be minimal damage to the roads especially within those areas that have moderate adaptive capacity. • There will be disruption for road access. • Traffic congestion (due re-routing). • Delay of delivery of goods and services. • Cost for maintenance/replacement based on the degree of damage that maybe used for other priority. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Strengthen the slope protection projects by concerned agencies.

Vulnerability of Bridges

A total of three bridges are moderately vulnerable to landslide and these are Baracatan Bridge, with a total exposed length of 22.20 meters, Crossing Malabog Bridge with a total exposed length of 41.02 meters, and Tagurano Bridge with a total exposed length of 12.46 meters. The vulnerability rating of the bridges

Table LU-159. Lifeline Utilities, Bridges, Vulnerability Table for Landslide, Davao City

Road Name	Replacement Cost per (Linear meter)	Exposed Length (Linear Meters)	Value of Exposed Lifeline	Degree of impact	Adaptive Capacity	Vulnerability Index	Vulnerability
Lipadas Br. II	1,200,000	40.00	48,000,000	3.0	1.0	3.0	Low
Tagurano Br.	1,200,000	12.46	14,952,000	3.0	1.7	5.0	Moderate
Baracatan Br.	1,200,000	22.20	26,640,000	2.0	1.7	3.3	Moderate
Crossing Malabog Br.	1,200,000	41.02	49,224,000	2.0	2.0	4.0	Moderate
Lipadas Br. I	1,200,000	37.80	45,360,000	3.0	1.0	3.0	Low

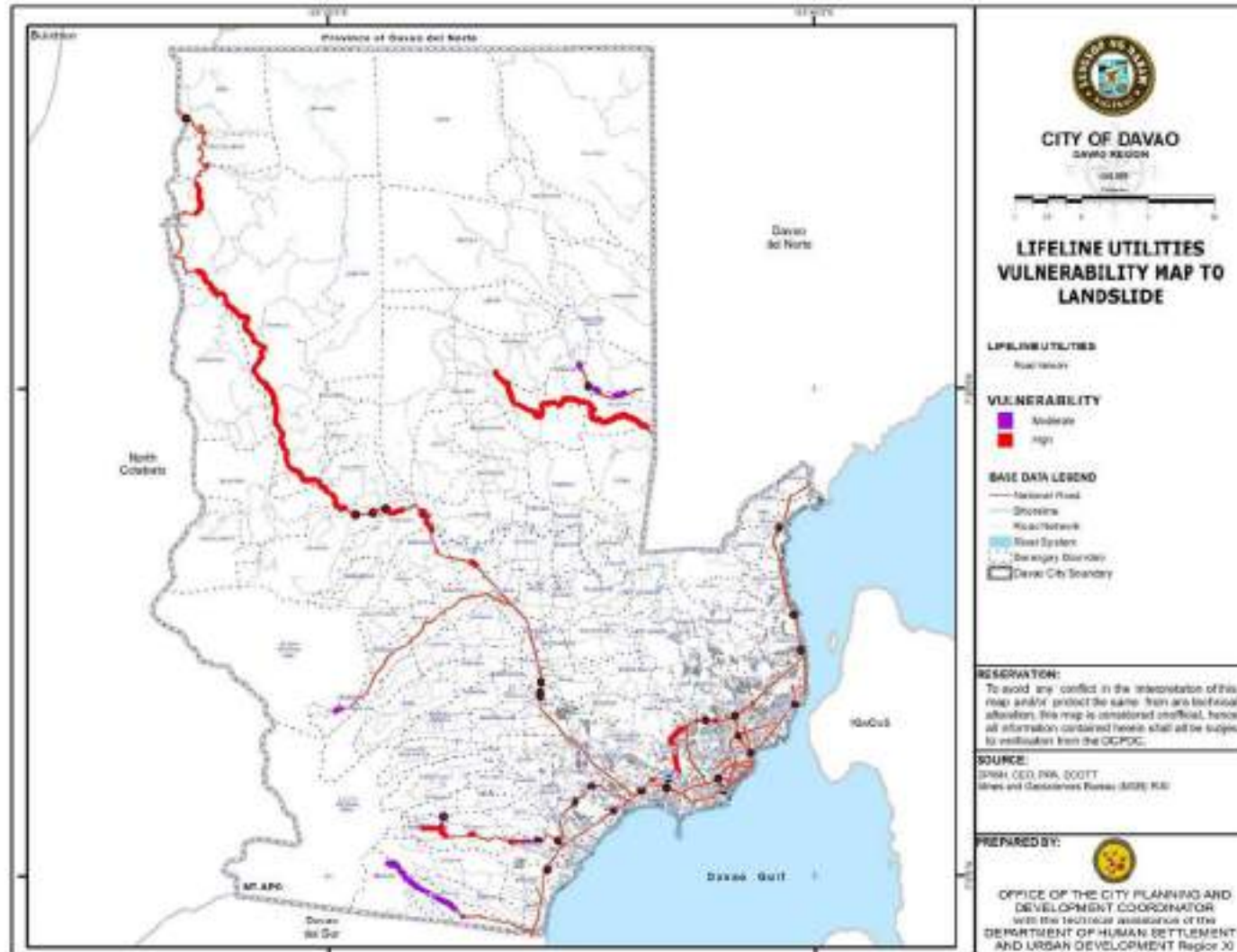
Table LU-160. Climate Change Vulnerability Assessment Summary Matrix of Bridges for Landslide, Davao City

BRIDGE NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Baracatan Br.	<ul style="list-style-type: none"> This bridge is located at Barangay Sibulan. Exposed length is 22.20 meters. Degree of impact is moderate. Adaptive capacity is moderate. Total value of exposed length is 26,640,000 	<ul style="list-style-type: none"> A portion of the bridge maybe partially or totally damaged. Connecting roads cannot traverse due to maintenance/ replacement activity. There will be disruption for road access. Traffic congestion (due re-routing). Delay of delivery of goods and services. Cost for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Strengthen the slope protection projects by concerned agencies.

Table LU-160. Climate Change Vulnerability Assessment Summary Matrix of Bridges for Landslide, Davao City

BRIDGE NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Crossing Malabog Br.	<ul style="list-style-type: none"> ● This bridge is located at Barangay Malabog. ● Exposed length is 41.02 meters ● Degree of impact is high. ● Adaptive capacity is moderate. ● Total value of exposed length is 49,224,000 	<ul style="list-style-type: none"> ● A portion of the bridge maybe partially or totally damaged. ● Connecting roads cannot traverse due to maintenance/ replacement activity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Cost for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Strengthen the slope protection projects by concerned agencies.
Tagurano Br.	<ul style="list-style-type: none"> ● This bridge is located at Barangay Eden. ● Exposed length is 12.46 meters ● Degree of impact is high. ● Adaptive capacity is moderate. ● Total value of exposed length is 14,952,000 	<ul style="list-style-type: none"> ● A portion of the bridge may be partially or totally damaged. ● Connecting roads cannot traverse due to maintenance/ replacement activity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● Cost for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Strengthen the slope protection projects by concerned agencies.

Map 5.16. Lifeline Utilities Vulnerability Map to Landslide



Vulnerability of Power Substations to Landslide

Tibungco Substation has low vulnerability to landslide. As shown in the table, the degree of impact is moderate and its adaptive capacity is high.

Table LU-161 Lifeline Utilities, Power Substations, Vulnerability Table for Landslide, Davao City

NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY CATEGORY
Tibungco Substation	2,626.00	118 Million	118 Million	1.5	1	1.5	LOW

Table LU-162 Climate Change Vulnerability Assessment Summary Matrix of Power Substations for Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Brgy. Tibungco (Tibungco Substation)	<ul style="list-style-type: none"> The location of this power substation is within the moderate landslide susceptibility. This power substation has low degree of impact of landslide. This power substation is identified in low vulnerability of landslide. All power substations are designed as resilient to hazards and properly managed by DLPC. 	<ul style="list-style-type: none"> Minimal to negligible implications 	<ul style="list-style-type: none"> Maintain/Upgrade all power utilities from time to time in order to cope with the current climate change. Government interventions by way of securing these facilities from man-made hazards.

Vulnerability of Level I Water Supply System to Landslide

A total of seven (7) spring sources are highly vulnerable to landslide. These sources can be found in Ilang, Bunawan, Cabantian and Daliao.

Table LU-162. Lifeline Utilities, Level I Water Supply, Vulnerability Table for Landslide, Davao City

BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX SCORE	VULNERABILITY INDEX RATING
BUNAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
CABANTIAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
ILANG	SPRING	41,586.32	41,586.32	3	3	9	HIGH

Table LU-163. Lifeline Utilities, Level I Water Supply, Vulnerability Table for Landslide, Davao City

BARANGAY	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Ilang	No of sources : 1 Susceptibility :1-Moderate Type :SPRING Replacement Cost:41586.32 Total Value: 41586.32 Degree of Impact:3 (HIGH) Adaptive Capacity 3 (LOW) Vulnerability :9 Vulnerability Category :HIGH	<ul style="list-style-type: none"> • There will be disruption of regular operations. • There will be replacement cost/repair cost based on the degree of damage 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strengthen the slope stability protection projects by concerned agencies • Development of reservoirs near spring sources to ensure continuity of water supply.
Bunawan	No of sources : `1 Susceptibility :-Moderate Type :SPRING Replacement Cost:41586.32 Total Value: 41586.32 Degree of Impact:3 (HIGH) Adaptive Capacity 3 (LOW) Vulnerability :9 Vulnerability Category :HIGH	<ul style="list-style-type: none"> • There will be disruption of regular operations. • There will be replacement cost/repair cost based on the degree of damage 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strengthen the slope stability protection projects by concerned agencies • Development of reservoirs near spring sources to ensure continuity of water supply.
Cabantian	No of sources : `1 Susceptibility :-Moderate Type :SPRING Replacement Cost:41586.32 Total Value: 41586.32 Degree of Impact:3 (HIGH) Adaptive Capacity 3 (LOW) Vulnerability :9 Vulnerability Category :HIGH	<ul style="list-style-type: none"> • There will be disruption of regular operations. • There will be replacement cost/repair cost based on the degree of damage 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strengthen the slope stability protection projects by concerned agencies • Development of reservoirs near spring sources to ensure continuity of water supply.
Daliao	No of sources : `5 Susceptibility :-Moderate Type :SPRING Replacement Cost:41586.32 Total Value: 166,345.28 Degree of Impact:3 (HIGH) Adaptive Capacity 3 (LOW) Vulnerability :9 Vulnerability Category :HIGH	<ul style="list-style-type: none"> • There will be disruption of regular operations. • There will be replacement cost/repair cost based on the degree of damage 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strengthen the slope stability protection projects by concerned agencies • Development of reservoirs near spring sources to ensure continuity of water supply.

Vulnerability of Level II Water System to Landslide

A total of 74 spring sources found in Baguio District, Calinan District, Marilog District, Paquibato District, Toril and Tugbok District have high vulnerability to landslide. At the same time 81 wells found in Toril, Talomo, Bunawan, Tugbok, Buhangin, Calinan, and Paquibato are also highly vulnerable to landslide.

Table LU-164. Lifeline Utilities, Level II Water System, Vulnerability Table for Landslide, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
BINUGAO	2HP	46,600	46,600	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
SIBULAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
SIBULAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
SIBULAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
SIBULAN	SPRING	41,586.32	41,586.32	2	2	8	HIGH
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	3	3	9	HIGH
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	3	3	9	HIGH
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	3	3	9	HIGH
TUNGKALAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
TUNGKALAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAON PLANTATION	SPRING	41,586.32	41,586.32	3	3	9	HIGH
TUNGKALAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
TUNGKALAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	3	3	9	HIGH
CAMANSI	SPRING	41,586.32	41,586.32	3	3	9	HIGH
CAMANSI	3HP	60,500.00	60,500.00	3	3	9	HIGH
DALIAON PLANTATION	SPRING	41,586.32	41,586.32	3	3	9	HIGH

Table LU-164. Lifeline Utilities, Level II Water System, Vulnerability Table for Landslide, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
MAGTUOD	2HP	46200	46200	3	3	9	HIGH
MAGTUOD	3HP	60,500.00	60,500.00	3	3	9	HIGH
MT. APO NATIONAL PARK	SPRING	41,586.32	41,586.32	3	3	9	HIGH
MAGTUOD	3HP	60,500.00	60,500.00	3	3	9	HIGH
CARMEN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
MAGTUOD	2HP	46200	46200	3	3	9	HIGH
MAGTUOD	2HP	46200	46200	3	3	9	HIGH
NEW CARMEN	2HP	46200	46200	3	3	9	HIGH
NEW CARMEN	3HP	60500	60500	3	3	9	HIGH
NEW CARMEN	3HP	60500	60500	3	3	9	HIGH
MUDIANG	2HP	46200	46200	3	3	9	HIGH
MUDIANG	2HP	46200	46200	3	3	9	HIGH
MUDIANG	2HP	46200	46200	3	3	9	HIGH
ACACIA	256S18	46200	46200	3	3	9	HIGH
MUDIANG	2HP	46200	46200	3	3	9	HIGH
ACACIA	33GS20	60500	60500	3	3	9	HIGH
SUAWAN	SPRING	41586.32	41586.32	3	3	9	HIGH
ACACIA	18GS20	46200	46200	3	3	9	HIGH
ACACIA	3HP	60500	60500	3	3	9	HIGH
ACACIA	3HP	60500	60500	3	3	9	HIGH
TIBUNGCO	2HP	46200	46200	3	3	9	HIGH
TALANDANG	SPRING	41586.32	41586.32	3	3	9	HIGH
ACACIA	25GS20	46200	46200	3	3	9	HIGH
TIBUNGCO	2HP	46200	46200	3	3	9	HIGH
GATUNGAN	25GS20	60500	60500	3	3	9	HIGH
TAMBOBONG	SPRING	41586.32	41586.32	3	3	9	HIGH
GATUNGAN	3HP	60500	60500	3	3	9	HIGH
CALLAWA	18GS15	46200	46200	3	3	9	HIGH
DALAG LUMOT	SPRING	41586.32	41586.32	3	3	9	HIGH
LAMPIDANAO	2HP	46200	46200	3	3	9	HIGH
SUAWAN	SPRING	41586.32	41586.32	3	3	9	HIGH

Table LU-164. Lifeline Utilities, Level II Water System, Vulnerability Table for Landslide, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
SALAYSAY	SPRING	41586.32	41586.32	3	3	9	HIGH
SUAWAN	SPRING	41586.32	41586.32	3	3	9	HIGH
GUMALANG	SPRING	41586.32	41586.32	3	3	9	HIGH
SALAYSAY	SPRING	41586.32	41586.32	3	3	9	HIGH
SUAWAN	SPRING	41586.32	41586.32	3	3	9	HIGH
MARILOG	SPRING	41586.32	41586.32	3	3	9	HIGH
MALAMBA	SPRING	41586.32	41586.32	3	3	9	HIGH
MALAMBA	SPRING	41586.32	41586.32	3	3	9	HIGH
MARILOG	SPRING	41586.32	41586.32	3	3	9	HIGH
MALAMBA	SPRING	41586.32	41586.32	3	3	9	HIGH
MEGKAWAYAN	SPRING	41586.32	41586.32	3	3	9	HIGH
BANTOL	SPRING	41586.32	41586.32	3	3	9	HIGH
MARILOG	SPRING	41586.32	41586.32	3	3	9	HIGH
MALABOG	SPRING	41586.32	41586.32	3	3	9	HIGH
BANTOL	SPRING	41586.32	41586.32	3	3	9	HIGH
MARILOG	SPRING	41586.32	41586.32	3	3	9	HIGH
MALABOG	SPRING	41586.32	41586.32	3	3	9	HIGH
SALOY	SPRING	41586.32	41586.32	3	3	9	HIGH
MAGSAYSAY	SPRING	41586.32	41586.32	3	3	9	HIGH
PAÑALUM	SPRING	41586.32	41586.32	3	3	9	HIGH
MALABOG	SPRING	41586.32	41586.32	3	3	9	HIGH
MALABOG	SPRING	41586.32	41586.32	3	3	9	HIGH
MARILOG	SPRING	41586.32	41586.32	3	3	9	HIGH
PAÑALUM	SPRING	41586.32	41586.32	3	3	9	HIGH
PAQUIBATO	SPRING	41586.32	41586.32	3	3	9	HIGH
MALABOG	SPRING	41586.32	41586.32	3	3	9	HIGH
MALABOG	SPRING	41586.32	41586.32	3	3	9	HIGH
PAÑALUM	SPRING	41586.32	41586.32	3	3	9	HIGH
PAQUIBATO	SPRING	41586.32	41586.32	3	3	9	HIGH
MAGSAYSAY	SPRING	41586.32	41586.32	3	3	9	HIGH
MALABOG	SPRING	41586.32	41586.32	3	3	9	HIGH

Table LU-164. Lifeline Utilities, Level II Water System, Vulnerability Table for Landslide, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY		
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
MALABOG	SPRING	41586.32	41586.32	3	3	9	HIGH
PAQUIBATO	SPRING	41586.32	41586.32	3	3	9	HIGH
PARADISE EMBAC	3HP	60500	60500	3	3	9	HIGH
LUMIAD	SPRING	41586.32	41586.32	3	3	9	HIGH
GUMITAN	SPRING	41586.32	41586.32	3	3	9	HIGH
LUMIAD	SPRING	41586.32	41586.32	3	3	9	HIGH
LUMIAD	SPRING	41586.32	41586.32	3	3	9	HIGH
LUMIAD	SPRING	41586.32	41586.32	3	3	9	HIGH
LUMIAD	SPRING	41586.32	41586.32	3	3	9	HIGH
LUMIAD	SPRING	41586.32	41586.32	3	3	9	HIGH
LUMIAD	SPRING	41586.32	41586.32	3	3	9	HIGH
PANDAITAN	SPRING	41586.32	41586.32	3	3	9	HIGH
PANDAITAN	2HP	46200	46200	3	3	9	HIGH
PANDAITAN	SPRING	41586.32	41586.32	3	3	9	HIGH
MAPULA	SPRING	41586.32	41586.32	3	3	9	HIGH
MARILOG	SPRING	41586.32	41586.32	3	3	9	HIGH
GUMITAN	SPRING	41586.32	41586.32	3	3	9	HIGH
MARILOG	SPRING	41586.32	41586.32	3	3	9	HIGH
SALAPAWAN	SPRING	41586.32	41586.32	3	3	9	HIGH
MARILOG	SPRING	41586.32	41586.32	3	3	9	HIGH
TAPAK	SPRING	41586.32	41586.32	3	3	9	HIGH

Table LU-165. Climate Change Vulnerability Assessment Summary Matrix Level II Water Supply for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Binugao	<ul style="list-style-type: none"> ● One unit of 2 horsepower (2HP) deep well is in this area. ● The degree of impact is moderate ● The adaptive capacity is moderate. ● The water source in this area is moderately vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of wells. ● Though the wells are embedded, there will be difficulties in excavation in cases of leak repairs. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies.
Acacia	<ul style="list-style-type: none"> ● Two units of 3 horsepower (3HP) deep well, one unit of 25GS18 deep well, one unit of 33GS20 deep well, one unit of 18GS20 deep well and one unit of 25GS20 deep well are found in this area. ● The degree of Impact is high. ● The adaptive Capacity is low 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies.
Bantol	<ul style="list-style-type: none"> ● There are two spring sources in this area. ● The degree of Impact is high. ● The adaptive capacity is low. ● The water sources in this area is highly vulnerable 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Bayabas	<ul style="list-style-type: none"> ● There is one spring source in this area. ● The degree of Impact is high. ● The adaptive Capacity is low ● The water source in this area is highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and

Table LU-165. Climate Change Vulnerability Assessment Summary Matrix Level II Water Supply for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Binugao	<ul style="list-style-type: none"> ● One unit of 2 horsepower (2HP) deep well is in this area. ● The degree of Impact is moderate. ● The adaptive capacity is moderate. ● The water source in this area is highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Callawa	<ul style="list-style-type: none"> ● One unit of 18GS15 deep well is found in this area. ● The degree of Impact is high. ● The adaptive capacity is low. ● The water source in this area is highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Camansi	<ul style="list-style-type: none"> ● One spring source and one unit of 3 horsepower deep well are found in this area. ● The degree of Impact is high. ● The adaptive capacity is low. ● The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-165. Climate Change Vulnerability Assessment Summary Matrix Level II Water Supply for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Carmen	<ul style="list-style-type: none"> ● This area has one spring source. ● The degree of Impact is high ● The adaptive capacity is low ● The water facility is highly vulnerable 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies.
Dalag Lumot	<ul style="list-style-type: none"> ● This area has one spring source. ● The degree of Impact is high. ● The adaptive capacity is low. ● The water facility is highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Daliaon Plantation	<ul style="list-style-type: none"> ● This area has two spring sources. ● The degree of impact is high. ● The adaptive capacity is low. ● The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-165. Climate Change Vulnerability Assessment Summary Matrix Level II Water Supply for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Gatungan	<ul style="list-style-type: none"> ● One unit of 3 horsepower (3HP) well and one unit of 25GS20 deep well are in this area. ● The degree of impact is high. ● The adaptive capacity is low. ● The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Gumalang	<ul style="list-style-type: none"> ● This area has one spring source. ● The degree of impact is high. ● The adaptive capacity is low. ● The water facility is highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Gumitan	<ul style="list-style-type: none"> ● This area has two spring sources. ● The degree of Impact is high. ● The adaptive capacity is low. ● The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-165. Climate Change Vulnerability Assessment Summary Matrix Level II Water Supply for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Lampianao	<ul style="list-style-type: none"> ● The area has one unit of 2 horsepower (2HP) deep well. ● The degree of impact is high. ● The adaptive capacity is low. ● The water facility is highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Lumiad	<ul style="list-style-type: none"> ● There are seven spring sources in this area. ● The degree of impact is high. ● The adaptive capacity is low. ● The water facility is highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Magsaysay	<ul style="list-style-type: none"> ● There are two spring sources in this area. ● The degree of Impact is high. ● The adaptive capacity is low. ● The water facility is highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-165. Climate Change Vulnerability Assessment Summary Matrix Level II Water Supply for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Magtuod	<ul style="list-style-type: none"> ● There are two units of 3 horsepower (3HP) wells and three units of 2 horsepower (2HP) deep well in this area. ● The degree of Impact is high. ● The adaptive capacity is low. ● The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Malabog	<ul style="list-style-type: none"> ● There are eight spring sources in this area. ● The degree of Impact is high. ● The adaptive capacity is low. ● The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Malamba	<ul style="list-style-type: none"> ● There are three spring sources in this area. ● The degree of Impact is high. ● The adaptive capacity is low. ● The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-165. Climate Change Vulnerability Assessment Summary Matrix Level II Water Supply for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Mapula	<ul style="list-style-type: none"> ● There is one spring source found in this area. ● The degree of Impact is high. ● The adaptive capacity is low. ● The water facility is highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Marilog	<ul style="list-style-type: none"> ● There are eight spring sources in this area. ● The degree of impact is high. ● The adaptive capacity is low. ● The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Megkawayan	<ul style="list-style-type: none"> ● There is one spring source in this area. ● The degree of Impact is high. ● The adaptive capacity is low. ● The water facility is highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-165. Climate Change Vulnerability Assessment Summary Matrix Level II Water Supply for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Mt. Apo National Park (Tagurano)	<ul style="list-style-type: none"> ● There are five spring sources in this area. ● The degree of Impact is high. ● The adaptive capacity is low. ● The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Mudiang	<ul style="list-style-type: none"> ● There are four units of 2 horsepower (2HP) well in this area. ● The degree of impact is high. ● The adaptive capacity is low. ● The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
New Carmen	<ul style="list-style-type: none"> ● One unit of 2 horsepower (2HP) well and two units of 3 horsepower (3HP) well are in this area. ● The Degree of Impact is high. ● The Adaptive Capacity is low. ● The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standards Specifications and American Society for Testing and Materials.

Table LU-165. Climate Change Vulnerability Assessment Summary Matrix Level II Water Supply for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Pañalum	<ul style="list-style-type: none"> • There are three spring sources in the area. • The Degree of Impact is high. • The Adaptive Capacity is low. • The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> • There will be disruption of regular operations. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strengthen the slope stability protection projects by concerned agencies. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Pandaitan	<ul style="list-style-type: none"> • There are two spring sources and one unit 2 horsepower (HP) well in the area. • The Degree of Impact is high. • The Adaptive Capacity is low. • The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> • There will be disruption of regular operations. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strengthen the slope stability protection projects by concerned agencies. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Paquibato	<ul style="list-style-type: none"> • There are three spring sources in this area. • The Degree of Impact is high. • The Adaptive Capacity is low • The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> • There will be disruption of regular operations. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strengthen the slope stability protection projects by concerned agencies. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

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AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Paradise Embac	<ul style="list-style-type: none"> • There is one spring source in the area. • The Degree of Impact is high. • The Adaptive Capacity is low. • The water facility is highly vulnerable. 	<ul style="list-style-type: none"> • There will be disruption of regular operations. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strengthen the slope stability protection projects by concerned agencies. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Salapawan	<ul style="list-style-type: none"> • There is one spring source in the area. • The Degree of Impact is high. • The Adaptive Capacity is low. • The water facility is highly vulnerable. 	<ul style="list-style-type: none"> • There will be disruption of regular operations. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strengthen the slope stability protection projects by concerned agencies. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Salaysay	<ul style="list-style-type: none"> • There are two spring sources in the area. • The Degree of Impact is high. • The Adaptive Capacity is low. • The water facilities are highly vulnerable 	<ul style="list-style-type: none"> • There will be disruption of regular operations. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strengthen the slope stability protection projects by concerned agencies. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-165. Climate Change Vulnerability Assessment Summary Matrix Level II Water Supply for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Saloy	<ul style="list-style-type: none"> ● There is one spring source in the area. ● The Degree of Impact is high. ● The Adaptive Capacity is low. ● The water facility is highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Sibulan	<ul style="list-style-type: none"> ● There are four spring sources found in the area. ● The Degree of Impact is high. ● The Adaptive Capacity is low. ● The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Sirawan	<ul style="list-style-type: none"> ● There is one spring source in the area. ● The Degree of Impact is high. ● The Adaptive Capacity is low. ● The water facility is highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-165. Climate Change Vulnerability Assessment Summary Matrix Level II Water Supply for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Suawan	<ul style="list-style-type: none"> ● There are four spring sources in this area. ● The Degree of Impact is high. ● The Adaptive Capacity is low ● The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Talandang	<ul style="list-style-type: none"> ● There is one spring source in the area. ● The Degree of Impact is high. ● The Adaptive Capacity is low. ● The water facility is highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Tambobong	<ul style="list-style-type: none"> ● There is one spring source that can be found in the area. ● The Degree of Impact is high. ● The Adaptive Capacity is low. ● The water facility is highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-165. Climate Change Vulnerability Assessment Summary Matrix Level II Water Supply for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Tapak	<ul style="list-style-type: none"> ● There is one spring source found in the area. ● The Degree of Impact is high. ● The Adaptive Capacity is low. ● The water facility is highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code forBuildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Tibungco	<ul style="list-style-type: none"> ● There are 2 units of (2HP) deep well found in the area. ● The Degree of Impact is high ● The Adaptive Capacity is low ● The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code forBuildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Tungkalan	<ul style="list-style-type: none"> ● There are four spring sources found in the area. ● The degree of Impact is high ● The adaptive Capacity is low ● The water facilities are highly vulnerable. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Vulnerability of Level III Water System to Landslide

A total of 52 mainline pipes with a total length of 1, 1138.01 meters located in barangays 19-B, Buhangin, Cabantian, Catalunan Grande, Langub, Ma-a, Magtuod, Matina Crossing, Matina Pangi, Panacan, Talomo Tibungco which are moderately and highly susceptible to landslide have low vulnerability.

Table LU-166. Lifeline Utilities, Level III Water Supply System for Landslide, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
19-B	MLCSP	600	₱40,100.00	23.31	₱934,731.00	1	1	1	LOW
MA-A	MLCSP	800	₱52,800.00	0.72	₱38,016.00	2	1	2	LOW
BUHANGIN	MLCSP	600	₱40,100.00	338.29	₱13,565,429.00	1	1	1	LOW
19-B	MLCSP	600	₱40,100.00	15.04	₱603,104.00	1	1	1	LOW
MA-A	MLCSP	150	₱11,200.00	158.36	₱1,773,632.00	2	1	2	LOW
MATINA PANGI	MLCSP	150	₱11,200.00	546.53	₱6,121,136.00	2	1	2	LOW
MATINA PANGI	MLCSP	150	₱11,200.00	378.56	₱4,239,872.00	2	1	2	LOW
BUHANGIN	MLCSP	600	₱40,100.00	41.27	₱1,654,927.00	1	1	1	LOW
BUHANGIN	MLCSP	600	₱40,100.00	60.97	₱2,444,897.00	1	1	1	LOW
MA-A	MLCSP	800	₱52,800.00	1,153.29	₱60,893,712.00	2	1	2	LOW
MA-A	MLCSP	800	₱52,800.00	294.93	₱15,572,304.00	2	1	2	LOW
MATINA PANGI	MLCSP	800	₱52,800.00	62.67	₱3,308,976.00	2	1	2	LOW
MATINA PANGI	MLCSP	800	₱52,800.00	804.92	₱42,499,776.00	2	1	2	LOW
LANGUB	MLCSP	800	₱52,800.00	551.65	₱29,127,120.00	2	1	2	LOW
MATINA PANGI	MLCSP	800	₱52,800.00	144.78	₱7,644,384.00	2	1	2	LOW
MA-A	MLCSP	800	₱52,800.00	33.58	₱1,773,024.00	2	1	2	LOW
MAGTUOD	MLCSP	800	₱52,800.00	97.35	₱5,140,080.00	2	1	2	LOW
MAGTUOD	MLCSP	800	₱52,800.00	22.24	₱1,174,272.00	2	1	2	LOW
TALOMO	MLCSP	800	₱52,800.00	20.23	₱1,068,144.00	2	1	2	LOW
PANACAN	MLCSP	350	₱20,800.00	67.56	₱1,405,248.00	2	1	2	LOW
TIBUNGCO	MLCSP	350	₱20,800.00	268.19	₱5,578,352.00	2	1	2	LOW
CABANTIAN	MLCSP	450	₱24,300.00	354.52	₱8,614,836.00	1	1	1	LOW
CABANTIAN	MLCSP	450	₱24,300.00	10.65	₱258,795.00	1	1	1	LOW
CABANTIAN	MLCSP	450	₱24,300.00	10.88	₱264,384.00	1	1	1	LOW

Table LU-166. Lifeline Utilities, Level III Water Supply System for Landslide, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
CABANTIAN	MLCSP	450	₱24,300.00	150.43	₱3,655,449.00	1	1	1	LOW
CABANTIAN	MLCSP	450	₱24,300.00	90.51	₱2,199,393.00	1	1	1	LOW
CABANTIAN	MLCSP	450	₱24,300.00	53.14	₱1,291,302.00	1	1	1	LOW
CABANTIAN	MLCSP	450	₱24,300.00	42.79	₱1,039,797.00	1	1	1	LOW
BUHANGIN	MLCSP	1000	₱62,400.00	113.1	₱7,057,440.00	1	1	1	LOW
BUHANGIN	MLCSP	1000	₱62,400.00	19.25	₱1,201,200.00	1	1	1	LOW
CATALUNAN GRANDE	MLCSP	250	₱17,700.00	474.8	₱8,403,960.00	2	1	2	LOW
CATALUNAN GRANDE	MLCSP	250	₱17,700.00	479.85	₱8,493,345.00	2	1	2	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	1.97	₱22,064.00	2	1	2	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	282.18	₱3,160,416.00	2	1	2	LOW
CABANTIAN	MLCSP	450	₱24,300.00	0.89	₱21,627.00	1	1	1	LOW
TALOMO	MLCSP	250	₱17,700.00	649.36	₱11,493,672.00	2	1	2	LOW
MATINA PANGI	MLCSP	250	₱17,700.00	94.92	₱1,680,084.00	2	1	2	LOW
CATALUNAN GRANDE	MLCSP	250	₱17,700.00	29.34	₱519,318.00	2	1	2	LOW
MATINA PANGI	MLCSP	150	₱11,200.00	174.12	₱1,950,144.00	2	1	2	LOW
MATINA PANGI	MLCSP	150	₱11,200.00	402.42	₱4,507,104.00	2	1	2	LOW
MATINA PANGI	MLCSP	150	₱11,200.00	8.16	₱91,392.00	2	1	2	LOW
MA-A	MLCSP	150	₱11,200.00	644.74	₱7,221,088.00	2	1	2	LOW
MA-A	MLCSP	150	₱11,200.00	333.65	₱3,736,880.00	2	1	2	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	346.67	₱3,882,704.00	2	1	2	LOW
TIGATTO	MLCSP	400	₱23,600.00	18.87	₱445,332.00	2	1	2	LOW
PANACAN	MLCSP	300	₱19,100.00	125.15	₱2,390,365.00	2	1	2	LOW
PANACAN	MLCSP	300	₱19,100.00	398.24	₱7,606,384.00	2	1	2	LOW
MA-A	MLCSP	800	₱52,800.00	36.2	₱1,911,360.00	2	1	2	LOW
MA-A	MLCSP	800	₱52,800.00	50.01	₱2,640,528.00	2	1	2	LOW
BUHANGIN	MLCSP	800	₱52,800.00	148.86	₱7,859,808.00	1	1	1	LOW
CABANTIAN	MLCSP	350	₱20,800.00	207.79	₱4,322,032.00	1	1	1	LOW

Table LU-167. Climate Change Vulnerability Assessment Summary Matrix of Level III Water Supply System for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Ma-a	<ul style="list-style-type: none"> ● There are nine mainlines with 300, 350, 800, and 750 mm diameter located in this area. ● A total of 2,705 m are exposed to moderate and high landslide. ● There is a moderate degree of impact, because the possibility of being hit by debris in the event of high flood. However the adaptive capacity is high since DCWD is compliant to all applied standards. ● The area however has low vulnerability. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● Though the pipes are embedded, there will be difficulties in excavation in cases of leak repairs. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies.
Matina Pang	<ul style="list-style-type: none"> ● Three mainlines with 150 mm diameter located in this area. ● A total of 630.82 m are exposed to high landslide. ● There is a moderate degree of impact, because the possibility of being hit by debris in the event of high flood. However the adaptive capacity is high since DCWD is compliant to all applied standards. ● The area however has low vulnerability. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Magtuod	<ul style="list-style-type: none"> ● There are two mainlines with 800 mm diameter are located in this area. ● A total of 119.68 m are exposed to high landslide. ● There is a moderate degree of impact, because the possibility of being hit by debris in the event of high flood. However the adaptive capacity is high since DCWD is compliant to all applied standards. ● The area however has low vulnerability. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-167. Climate Change Vulnerability Assessment Summary Matrix of Level III Water Supply System for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Langub	<ul style="list-style-type: none"> ● One 800 mm diameter mainline is located in this area. ● A total of 551.65 m are exposed to high landslide. ● There is a moderate degree of impact, because the possibility of being hit by debris in the event of high flood. However the adaptive capacity is high since DCWD is compliant to all applied standards. ● The area however has low vulnerability. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Talomo	<ul style="list-style-type: none"> ● Two mainlines with 800 and 250 mm diameter are located in this area. ● A total of 665.59 m are exposed to high landslide. ● There is a moderate degree of impact, because the possibility of being hit by debris in the event of high flood. However the adaptive capacity is high since DCWD is compliant to all applied standards. ● The area however has low vulnerability. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-167. Climate Change Vulnerability Assessment Summary Matrix of Level III Water Supply System for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Panacan	<ul style="list-style-type: none"> ● Three mainlines with 300 and 350 mm diameter mainline are exposed to high and moderate landslide. ● A total of 590.95 m are exposed to high landslide. ● There is a moderate degree of impact, because the possibility of being hit by debris in the event of high flood. However the adaptive capacity is high since DCWD is compliant to all applied standards. ● The area however has low vulnerability. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Catalunan Grande	<ul style="list-style-type: none"> ● Three mainlines where one mainline is 250 mm exposed to moderate and high flood. ● A total of 983.99 m are exposed to high landslide. ● There is a moderate degree of impact, because the possibility of being hit by debris in the event of high flood. However the adaptive capacity is high since DCWD is compliant to all applied standards. ● The area however has low vulnerability. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ●
Tigatto	<ul style="list-style-type: none"> ● One mainline with 400 mm diameter is exposed to high landslide. ● A total of 18.87 m are exposed to high landslide. ● There is a moderate degree of impact, because the possibility of being hit by debris in the event of high flood. However the adaptive capacity is high since DCWD is compliant to all applied standards. ● The area however has low vulnerability. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-167. Climate Change Vulnerability Assessment Summary Matrix of Level III Water Supply System for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Tibungco	<ul style="list-style-type: none"> ● One mainline with 350 mm diameter is exposed to high landslide. ● A total of 628.19 m are exposed to moderate landslide. ● There is a moderate degree of impact, because the possibility of being hit by debris in the event of high flood. However the adaptive capacity is high since DCWD is compliant to all applied standards. ● The area however has low vulnerability. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Matina Crossing	<ul style="list-style-type: none"> ● Three mainline with 150 mm diameter is exposed to high landslide. ● A total of 630.82 m are exposed to moderate landslide. ● There is a moderate degree of impact, because the possibility of being hit by debris in the event of high flood. However the adaptive capacity is high since DCWD is compliant to all applied standards. ● The area however has low vulnerability. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strengthen the slope stability protection projects by concerned agencies. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

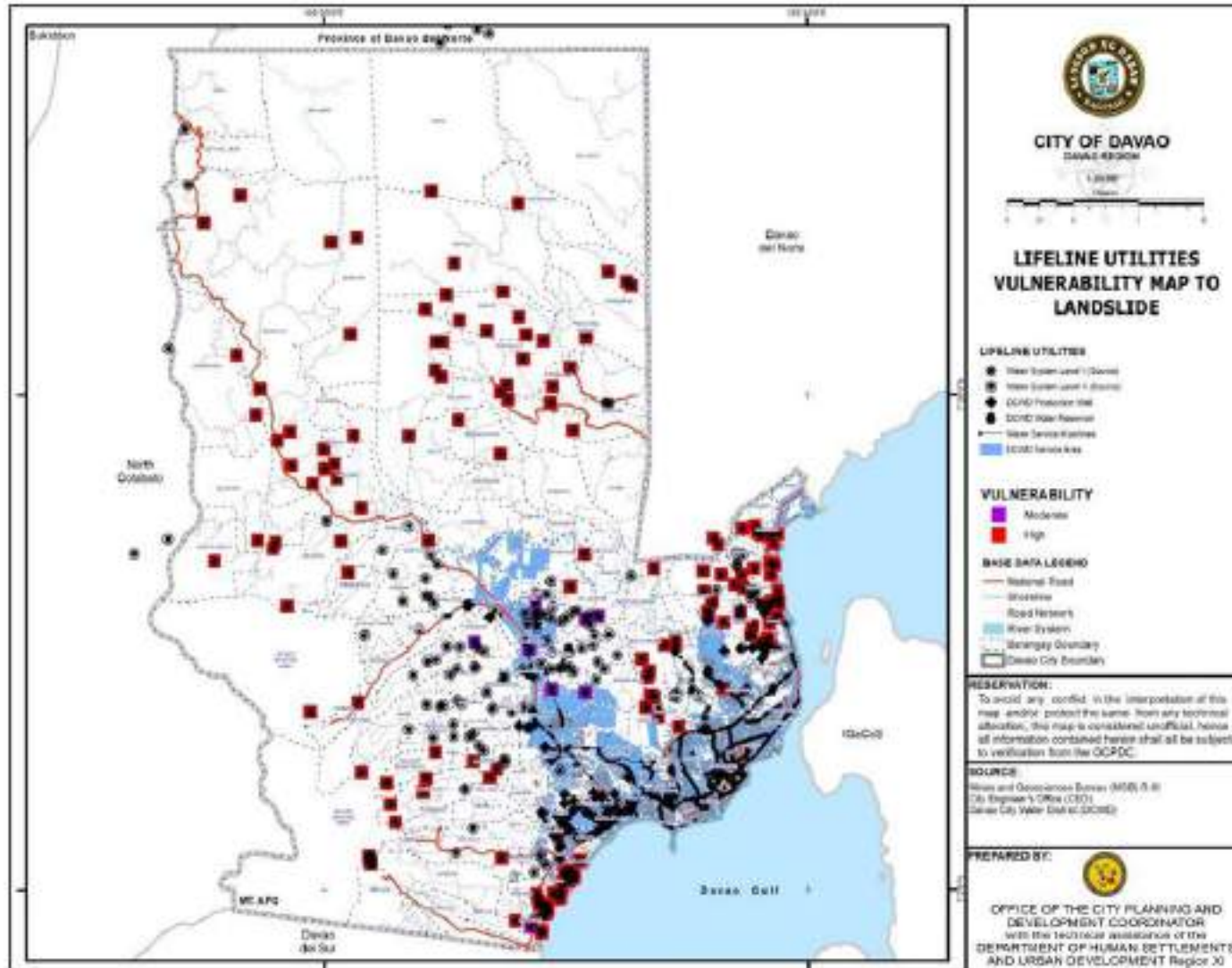
Vulnerability of DCWD wells to Landslides

Four(4) DCWD Wells found in Indangan, Panacan and Tibungco have low vulnerability.

Table LU-168. Lifeline Utilities, Level III, DCWD Production Wells, Vulnerability Table for Landslide, Davao City

EXPOSURE							
LOCATION	PUMP TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX SCORE	VULNERABILITY INDEX RATING
Davao Molave Homes, Brgy. Indangan	SUBMERSIBLE	6,500,000.00	6,500,000.00	3	1	3	LOW
Purok 27, Malagamot, Brgy. Panacan	SUBMERSIBLE	6,500,000.00	6,500,000.00	3	1	3	LOW
Purok 24, Malagamot, Brgy. Panacan	SUBMERSIBLE	6,500,000.00	6,500,000.00	3	1	3	LOW
Tibungco Relocation, Brgy. Tibungco	SUBMERSIBLE	6,500,000.00	6,500,000.00	3	1	3	LOW

Map 5.18 Lifeline Utilities, Water Supply, Vulnerability Map to Landslide



Vulnerability of Cell sites to Landslide

All cell sites which are moderately and highly susceptible to landslide have low vulnerability attributed to the moderate degree of impact and high adaptive capacity.

Table LU-169.Lifeline Utilities, Cell sites, Vulnerability Table for Landslide, Davao City

EXPOSURE					Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability
Name of Cell Site	Location	Area Occupied (ha)	Replacement Cost	Value of exposed Lifeline				
GLOBE TELECOM, INC.	Lloueras Bldg., McArthur Highway, Talomo (Pob.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Telstar St., GSIS Subdivision, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Diversion Road, Bangkal,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
GLOBE TELECOM, INC.	Matina Shrine, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Shrine Hill, Matina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Matina RS,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
GLOBE TELECOM, INC.	Lot 19 blk 17 Bacaca road El Rio Vista Buhangin (Pob.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	796 Tigatto, Buhangin	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Brgy. Panorama,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Diversion Road, Brgy. Catitipan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Communal Road, Buhangin District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Water Tank, Palos Verdes Golf Course & Subd., Mandug,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Brgy. Malabog, Paquibato District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	3	2	6	Moderate

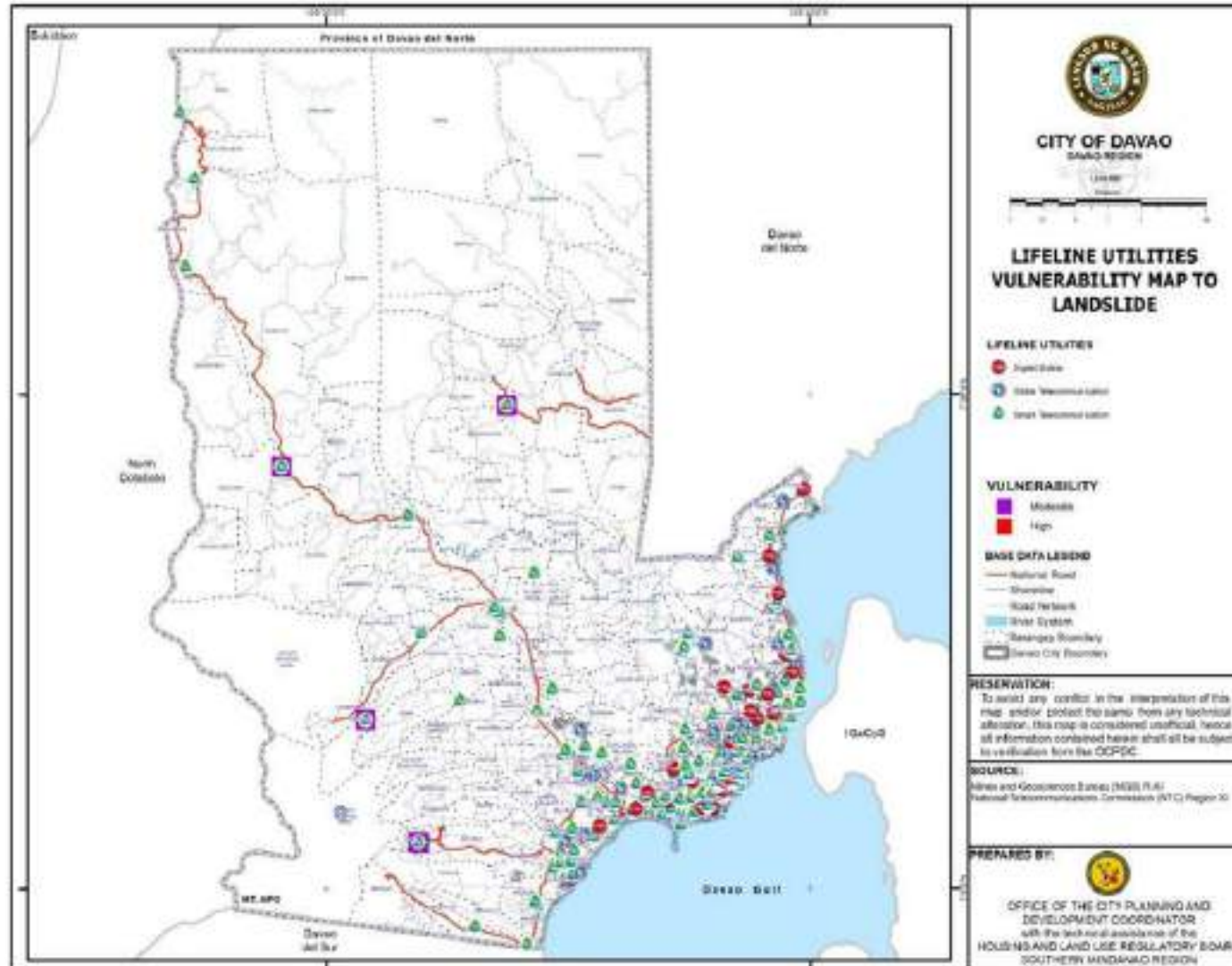
Table LU-169. Lifeline Utilities, Cell sites, Vulnerability Table for Landslide, Davao City

EXPOSURE					Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability
Name of Cell Site	Location	Area Occupied (ha)	Replacement Cost	Value of exposed Lifeline				
SMART COMMUNICATIONS, INC.	Eden Nature Park, Brgy. Eden, Toril District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	2	5	Moderate
SMART COMMUNICATIONS, INC.	Shrine Hill Matina RS	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Maa Rd., Sitio Bugac, Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Maa Rd., Sitio Bugac, Brgy. Maa,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Maa Rd., Sitio Bugac, Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Brgy. Sirib, Calinan District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	2	5	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	Brgy. Mandug,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Carnoustie St., Palos Verdes Compound Golf Club, Mandug	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	Buhisan St., Brgy. Tibungco,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	1.5	1	1.5	Low
SMART COMMUNICATIONS, INC.	Sitio Lumondao,, Brgy. Marilog Proper, Marilog District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	2	5	Moderate

Table LU-170. Climate Change Vulnerability Assessment Summary Matrix of Cell Sites for Landslide, Davao City

DECISION AREAS	TECHNICAL FINDINGS	PLANNING IMPLICATIONS	INTERVENTIONS
Brgy. Malabog	<ul style="list-style-type: none"> One cell site is within the high landslide susceptibility. This cell site has high degree of impact of landslide and has moderate adaptive capacity. One cell site is identified in moderate vulnerability of landslide. 	<ul style="list-style-type: none"> There will be possible drop down of communication signal. Mitigation measures are expensive. 	<ul style="list-style-type: none"> Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. Government interventions by way of securing these facilities from man-made hazards. Ensure structural mitigation to prevent landslide. Government should provide technical assistance relative to haz-
Brgy. Eden	<ul style="list-style-type: none"> One cell site is within the moderate landslide susceptibility. This cell site has moderate degree of impact of landslide and has moderate adaptive capacity. One cell site is identified in moderate vulnerability of landslide. 	<ul style="list-style-type: none"> There will be possible drop down of communication signal. Mitigation measures are expensive. 	<ul style="list-style-type: none"> Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. Government interventions by way of securing these facilities from man-made hazards. Ensure structural mitigation to prevent landslide. Government should provide technical assistance relative to haz-
Brgy. Sirib	<ul style="list-style-type: none"> One cell site is within the moderate landslide susceptibility. This cell site has moderate degree of impact of landslide and has moderate adaptive capacity. One cell site is identified in moderate vulnerability of landslide. 	<ul style="list-style-type: none"> There will be possible drop down of communication signal. Mitigation measures are expensive. 	<ul style="list-style-type: none"> Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. Government interventions by way of securing these facilities from man-made hazards. Ensure structural mitigation to prevent landslide. Government should provide technical assistance relative to haz-
Brgy. Marilog Proper	<ul style="list-style-type: none"> One cell site is within the moderate landslide susceptibility. This cell site has moderate degree of impact of landslide and has moderate adaptive capacity. One cell site is identified in moderate vulnerability of landslide. 	<ul style="list-style-type: none"> There will be possible drop down of communication signal. Mitigation measures are expensive. 	<ul style="list-style-type: none"> Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. Government interventions by way of securing these facilities from man-made hazards. Ensure structural mitigation to prevent landslide. Government should provide technical assistance relative to haz-

Map 5. 17. Lifeline Utilities, Cell Sites, Vulnerability Map to Landslide, Davao City



Vulnerability of Roads to Liquefaction

The Davao-Agusan Highway has the longest exposed site which is highly vulnerable with 14.4465 kilometers. This is followed by McArthur Highway with 13.2896 kilometers. There are a total of 5.9850526 kilometers moderately vulnerable to liquefaction and a total of 54.70583864 kilometers highly vulnerable to liquefaction

Table LU-171. Lifeline Utilities, Roads, Vulnerability Table for Liquefaction, Davao City

ROAD NAME	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	TOTAL COST PER HAZARD LENGTH	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
Agdao Flyover	0.4734	56,000,000	26,508,216	3.0	2.3	7.0	High
Bonifacio Rotonda	0.0839	56,000,000	4,697,403	3.0	2.3	7.0	High
Carlos P. Garcia Highway	0.9844	60,000,000	59,065,380	3.0	2.3	7.0	High
Carlos P. Garcia Highway	0.3141	60,000,000	18,847,080	3.0	2.3	7.0	High
Carlos P. Garcia Highway	0.6716	60,000,000	40,295,160	3.0	2.3	7.0	High
Claro M. Recto St.	1.2152	56,000,000	68,050,080	3.0	2.3	7.0	High
Dacudao Avenue	0.7526	56,000,000	42,144,480	3.0	2.3	7.0	High
Dacudao Avenue	0.7785	56,000,000	43,597,064	3.0	2.3	7.0	High
Davao-Bukidnon Road	0.0092	40,000,000	366,574	3.0	2.3	7.0	High

Table LU-171. Lifeline Utilities, Roads, Vulnerability Table for Liquefaction, Davao City

ROAD NAME	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	TOTAL COST PER HAZARD LENGTH	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
Davao - Agusan Highway	0.0202	56,000,000	1,131,284	3.0	2.3	7.0	High
Davao - Agusan Highway	11.3802	56,000,000	637,291,200	3.0	2.3	7.0	High
Davao - Agusan Highway	0.7390	56,000,000	41,383,216	3.0	2.3	7.0	High
Davao - Agusan Highway	1.0639	56,000,000	59,577,840	3.0	2.3	7.0	High
Davao - Agusan Highway	1.2081	56,000,000	67,654,720	3.0	2.3	7.0	High
Don Julian Rodriguez Ave. (Maa Road)	1.0931	28,000,000	30,607,080	3.0	2.3	7.0	High
Jose P. Laurel Avenue	2.4896	56,000,000	139,418,160	3.0	2.3	7.0	High
Jose P. Laurel Avenue	1.0490	56,000,000	58,741,760	3.0	2.3	7.0	High
Leon Garcia St.	0.6511	49,000,000	31,904,733	3.0	2.3	7.0	High
Mc. Arthur Highway	5.1120	56,000,000	286,273,680	3.0	2.3	7.0	High
Mc. Arthur Highway	8.1776	56,000,000	457,946,160	3.0	2.3	7.0	High
Quezon Boulevard	4.2215	86,000,000	363,048,140	3.0	2.3	7.0	High
Quimpo Boulevard	3.9110	50,000,000	195,551,000	3.0	2.3	7.0	High
Quimpo Boulevard	0.3944	50,000,000	19,720,750	3.0	2.3	7.0	High
Quirino Avenue	2.0325	40,000,000	81,299,200	3.0	2.3	7.0	High
Rafael Castillo St.	3.1795	86,000,000	273,439,580	3.0	2.3	7.0	High
Ramon Magsaysay Ave.	1.3741	60,000,000	82,446,600	3.0	2.3	7.0	High
Sta. Ana Ave.	1.2910	60,000,000	77,460,600	3.0	2.3	7.0	High
Davao - Agusan Highway	0.0351	56,000,000	1,967,594	3.0	2.3	7.0	High

Table LU-172. Climate Change Vulnerability Assessment Summary Matrix of Roads for Liquefaction, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Don Julian Rodriguez Ave.	<ul style="list-style-type: none"> ● This road network is moderately vulnerable ● The exposed length is 1.11 kilometers with the total value of P21,095,064. ● Ma-a is the only exposed barangay within the Don Julian Rodriguez Ave. (Maa Road). 	<ul style="list-style-type: none"> ● Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation.
(Maa Road) Florentino Torres St	<ul style="list-style-type: none"> ● This road network is moderately vulnerable. ● The exposed length is 1.34 kilometers with a total value of P 87,707,100.00 ● Brgy. 8-A, Brgy. 9-A, Brgy. 10-A, Brgy. 11-B, Brgy. 12-B, Brgy. 18-B and Brgy. 19-B are the exposed barangays within the Florentino Torres St. 	<ul style="list-style-type: none"> ● Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation.
P. Cabaguio Avenue	<ul style="list-style-type: none"> ● This road network is moderately vulnerable ● The total exposed length is 1.05 kilometers with a total value of P 58,765,392. ● Wilfredo Aquino and Agdao Proper are the exposed barangays within the J. P. Cabaguio Avenue. 	<ul style="list-style-type: none"> ● Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation.

Table LU-172. Climate Change Vulnerability Assessment Summary Matrix of Roads for Liquefaction, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Libby Road	<ul style="list-style-type: none"> • This road network is moderately vulnerable • The total exposed length is 0.37 kilometers with a total value of, 9,136,700, • Talomo and Bago Aplaya are the exposed barangays within the Libby Road. 	<ul style="list-style-type: none"> • Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. • There will be disruption for road access. • Traffic congestion (due re-routing). • Delay of delivery of goods and services. • There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation.
Maa Radio Station St.	<ul style="list-style-type: none"> • This road network is moderately vulnerable • The total exposed length is 0.37, with a total value of P 10,436,636.00. • Brgy. Ma-a is the only exposed barangay within the Maa Radio Station St. 	<ul style="list-style-type: none"> • Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. • There will be disruption for road access. • Traffic congestion (due re-routing). • Delay of delivery of goods and services. • There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation.
Old Airport Road	<ul style="list-style-type: none"> • This road network is moderately vulnerable • The total exposed length is 0.25 kilometers, with a total value of P15, 018,720. • Brgy. Buhangin is the only exposed barangay within the Old Airport Road. 	<ul style="list-style-type: none"> • Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. • There will be disruption for road access. • Traffic congestion (due re-routing). • Delay of delivery of goods and services. • There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation.

Table LU-172. Climate Change Vulnerability Assessment Summary Matrix of Roads for Liquefaction, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Pakiputan Wharf Road	<ul style="list-style-type: none"> • This road network is moderately vulnerable • The total exposed length is 0.51 kilometers with a total length of P28,345,632.00 • .Brgy. Sasa is the only exposed barangay within the Pakiputan Wharf Road. 	<ul style="list-style-type: none"> • Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. • There will be disruption for road access. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation.
Pichon St.	<ul style="list-style-type: none"> • This road network is moderately vulnerable • The total exposed length is 0.945968 kilometers. • Brgy. 6-A, Brgy. 5-A, Brgy. 2-A and Brgy. 39-D are the exposed barangays within the Pichon St. 	<ul style="list-style-type: none"> • Traffic congestion (due re-routing). • Delay of delivery of goods and services. • There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	
Davao - Agusan Highway	<ul style="list-style-type: none"> • This road network is moderately vulnerable • The total road length is 0.0351356 with a total value of P1,967,593.60. • Barangay Ilang is the only exposed barangay within the Davao - Agusan Highway. 	<ul style="list-style-type: none"> • Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. • There will be disruption for road access. • Traffic congestion (due re-routing). • Delay of delivery of goods and services. • There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation.
Agdao Flyover	<ul style="list-style-type: none"> • This road network is highly vulnerable to liquefaction. • The total exposed length is 0.47 kilometers with a value of P 26,508, 216.00 • Agdao Proper and Leon Garcia Sr. are the exposed barangays within the Agdao Flyover. 	<ul style="list-style-type: none"> • Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. • There will be disruption for road access. • Traffic congestion (due re-routing). • Delay of delivery of goods and services. • There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation.

Table LU-172. Climate Change Vulnerability Assessment Summary Matrix of Roads for Liquefaction, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Bonifacio Rotonda	<ul style="list-style-type: none"> This road network is highly vulnerable to liquefaction. The total exposed length is 0.08 kilometers with a total value of P 4,697,403.00. Brgy. 39-D is the only exposed barangay within the Bonifacio Rotonda. 	<ul style="list-style-type: none"> Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. There will be disruption for road access. Traffic congestion (due re-routing). Delay of delivery of goods and services. There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation.
Carlos P. Garcia Highway	<ul style="list-style-type: none"> This road network is highly vulnerable to liquefaction. The total exposed length is 1.97 kilometers with a total value of P118,207,620.00. Ma-a, Matina Crossing, Panacan, Tigatto and Buhangin are the exposed barangays within the Carlos P. Garcia Highway. 	<ul style="list-style-type: none"> Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. There will be disruption for road access. Traffic congestion (due re-routing). Delay of delivery of goods and services. There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation.
Claro M. Recto St.	<ul style="list-style-type: none"> This road network is highly vulnerable to liquefaction. The total exposed length is 1.22 kilometers with a total value of P68,050,080. Brgy. 38-D, Brgy. 35-D, Brgy. 34-D, Brgy. 32-D and Brgy. 39-D are the exposed barangays within the Claro M. Recto St. 	<ul style="list-style-type: none"> Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. There will be disruption for road access. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation.
Dacudao Avenue	<ul style="list-style-type: none"> This road network is highly vulnerable to liquefaction. The total exposed length is 1.53 kilometers with a total value of P 85,741,544. Paciano Bangoy, Agdao Proper and Brgy. 20-B are the exposed barangays within the Dacudao Avenue. 	<ul style="list-style-type: none"> Traffic congestion (due re-routing). Delay of delivery of goods and services. There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation.

Table LU-172. Climate Change Vulnerability Assessment Summary Matrix of Roads for Liquefaction, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Davao-Bukidnon Road	<ul style="list-style-type: none"> This road network is highly vulnerable to liquefaction. The total exposed length is 0.009 kilometers with a total value of P 366,573.60. Talomo is the only exposed barangay within the Davao-Bukidnon Road. 	<ul style="list-style-type: none"> Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. 	
Don Julian Rodriguez Ave.	<ul style="list-style-type: none"> This road network is highly vulnerable to liquefaction. The total exposed length is 1.09 kilometers with a total value of P30,607,080. Ma-a and Matina Crossing are the exposed barangays within the Don Julian Rodriguez Ave. (Maa Road) 	<ul style="list-style-type: none"> There will be disruption for road access. Traffic congestion (due re-routing). Delay of delivery of goods and services. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation.
Jose P. Laurel	<ul style="list-style-type: none"> This road network is highly vulnerable to liquefaction. The total exposed length is 3.54 kilometers with a total value of P198,159,920.00. San Antonio, Wilfredo Aquino, 18-B, 32-D, 30-C, 13-B, 12-B, V. Hizon, A. Angliongto, Rafael Castillo and 19-B are the exposed barangays within the Jose P. Laurel Avenue. 	<ul style="list-style-type: none"> There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	
Leon Garcia St.	<ul style="list-style-type: none"> This road network is highly vulnerable to liquefaction. The total exposed length is 0.65 kilometers, with a total value of P 31,904,733.00 Brgy. 27-C and Leon Garcia Sr. are the exposed barangays within the Leon Garcia St. 	<ul style="list-style-type: none"> Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. There will be disruption for road access. Traffic congestion (due re-routing). Delay of delivery of goods and services. There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation.

Table LU-172. Climate Change Vulnerability Assessment Summary Matrix of Roads for Liquefaction, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Mc. Arthur Highway	<ul style="list-style-type: none"> ● This road network is highly vulnerable to liquefaction. ● The total exposed length is 13.28 kilometers with a total value of P 744,219,840.00. ● Ma-a, Talomo, Matina Crossing, Dumoy, Bucana, Bago Aplaya, Sirawan, Lizada, Binugao and Crossing Bayabas are the exposed barangays within the Mc. Arthur Highway. 	<ul style="list-style-type: none"> ● Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation.
Quezon Boulevard	<ul style="list-style-type: none"> ● This road network is highly vulnerable to liquefaction. ● The total exposed length is 4.22 kilometers with a total value of P 363,048,140.00 ● 27-C, 31-D, 37-D, 21-C, 22-C, 23-C are the exposed barangays within the Quezon Boulevard. 		
Quimpo Boulevard	<ul style="list-style-type: none"> ● This road network is highly vulnerable to liquefaction. ● The total exposed length is 4.30 kilometers with a total value of P215,271,750.00. ● Matina Crossing, Bucana, 40-D, 37-D and 39-D are the exposed barangays within the Quimpo Boulevard. 	<ul style="list-style-type: none"> ● Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. 	
Quirino Avenue	<ul style="list-style-type: none"> ● This road network is highly vulnerable to liquefaction. ● The total exposed length is 2.03 kilometers with a total value of P81,299,200.00. ● 32-D, 30-C, 12-B, 10-A, 7-A, 6-A, 5-A and 4-A are the exposed barangays within the Quirino Avenue. 	<ul style="list-style-type: none"> ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. ● There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation.
Rafael Castillo St.	<ul style="list-style-type: none"> ● This road network is highly vulnerable to liquefaction. ● The total exposed length is 3.18 kilometers with a total exposed value of P 273,439,580.00. ● Agdao Proper, Ubalde, A. Angliongto, Lapu-lapu, Gov. Vicente Duterte and Centro are the exposed barangays within the Rafael Castillo St. 		

Table LU-172. Climate Change Vulnerability Assessment Summary Matrix of Roads for Liquefaction, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Ramon Magsaysay Ave	<ul style="list-style-type: none"> This road network is highly vulnerable to liquefaction. The total exposed length is 1.37 kilometers with a total value of P82,446,600. 26-C, 27-C, 32-D, 29-C and 28-C are the exposed baran- 	<ul style="list-style-type: none"> Saturated loose soil that would compromise the strength and stability of the road's sub-grade which affects the concrete pavement and may lead to damage. There will be disruption for road access. Traffic congestion (due re-routing). Delay of delivery of goods and services. There will be an appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation.
Sta. Ana Ave.	<ul style="list-style-type: none"> This road network is highly vulnerable. The total exposed length is 1.29 kilometers with a total value of P 77,460,600. 30-C, 14-B, Tomas Monteverde and Leon Garcia Sr. are the exposed barangays within the Sta. Ana Ave. 		
. Davao - Agusan Highway	<ul style="list-style-type: none"> This road network is highly vulnerable. The total exposed length is 14.44 kilometers with a total value of P809,005, 853.60 Panacan, Lasang, Ilang, Bunawan, V. Hizon, Sasa and Pampanga are the exposed barangays within the Davao - 		

Vulnerability for Bridges– Agdao Flyover and Pangí Bridge are moderately vulnerable to liquefaction with the vulnerability index score of 6. The exposed length of these bridges are 382.98, and 121.69 meters, respectively.

Table LU-173. Lifeline Utilities, Bridges, Vulnerability Table for Liquefaction, Davao City

ROAD NAME	REPLACEMENT COST PER (LINEAR METER)	EXPOSED LENGTH (LINEAR METERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
Agdao Flyover	1,200,000	382.98	459,576,000	3.0	2.0	6.0	Moderate
Bago Br.	1,200,000	31.21	37,452,000	3.0	1.0	3.0	Low
Baracatan Br.	1,200,000	22.20	26,640,000	3.0	1.0	3.0	Low
Bunawan Br. 1	1,200,000	49.76	59,712,000	3.0	1.0	3.0	Low
Bunawan Br. 2	1,200,000	47.79	57,348,000	3.0	1.0	3.0	Low

Table LU-173. Lifeline Utilities, Bridges, Vulnerability Table for Liquefaction, Davao City

ROAD NAME	REPLACEMENT COST PER (LINEAR METER)	EXPOSED LENGTH (LINEAR METERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
Crossing Malabog Br.	1,200,000	41.02	49,224,000	2.0	1.0	2.0	Low
Ilang Br.	1,200,000	25.70	30,840,000	2.0	1.0	2.0	Low
Lipadas Br. I	1,200,000	37.80	45,360,000	2.0	1.0	2.0	Low
Lipadas Br. II	1,200,000	40.00	48,000,000	2.0	1.0	2.0	Low
Matina Br.	1,200,000	38.66	46,392,000	3.0	1.0	3.0	Low
Panacan Br.	1,200,000	23.53	28,236,000	3.0	1.0	3.0	Low
Pangi Br.	1,200,000	121.69	146,028,000	2.0	2.0	4.0	Moderate
Sasa Br.	1,200,000	18.43	22,116,000	3.0	1.0	3.0	Low
Tagurano Br.	1,200,000	12.46	14,952,000	3.0	1.0	3.0	Low

Table LU-174. Climate Change Vulnerability Assessment Summary Matrix of Bridges for Liquefaction, Davao City

BRIDGE NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Agdao Flyover	<ul style="list-style-type: none"> This bridge is located at Barangay Agdao Proper. Exposed length is 382.98 meters. Degree of impact is high. Adaptive capacity is moderate. Total value of exposed length is 459,576,000. 	<ul style="list-style-type: none"> Saturated loose soil that would compromise the strength and stability of the foundation which affects the concrete and may lead to damage. A portion of the bridge maybe damaged or totally. Connecting roads cannot traverse due to maintenance/ replacement activity. There will be disruption for road access. Traffic congestion (due re-routing). Delay of delivery of goods and services. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.
Pangi Br.	<ul style="list-style-type: none"> This bridge is located at Barangay Matina Crossing Exposed length is 121.69 meters. Degree of impact is moderate. Adaptive capacity is moderate. Total value of exposed length is 146,028,000. 	<ul style="list-style-type: none"> Saturated loose soil that would compromise the strength and stability of the foundation which affects the concrete and may lead to damage. A portion of the bridge maybe damaged or totally. Connecting roads cannot traverse due to maintenance/ replacement activity. There will be disruption for road access . Traffic congestion (due re-routing). Delay of delivery of goods and services. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.

Table LU-174. Climate Change Vulnerability Assessment Summary Matrix of Bridges for Liquefaction, Davao City

BRIDGE NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Bunawan Br. 2	<ul style="list-style-type: none"> ● This bridge is located at Barangay Bunawan ● Exposed length is 47.79 meters. ● Degree of impact is moderate. ● Adaptive capacity is high. ● Total value of exposed length is 57,348,000. 	<ul style="list-style-type: none"> ● Saturated loose soil that would compromise the strength and stability of the foundation which affects the concrete and may lead to damage. ● A portion of the bridge maybe damaged or totally. ● Connecting roads cannot traverse due to maintenance/ replacement activity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.
Lipadas Br. I	<ul style="list-style-type: none"> ● This bridge is located at Barangay Lizada. ● Exposed length is 37.80 meters. ● Degree of impact is moderate. ● Adaptive capacity is high. ● Total value of exposed length is 45,360,000. 	<ul style="list-style-type: none"> ● Saturated loose soil that would compromise the strength and stability of the foundation which affects the concrete and may lead to damage. ● A portion of the bridge maybe damaged or totally. ● Connecting roads cannot traverse due to maintenance/ replacement activity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.
Lipadas Br. II	<ul style="list-style-type: none"> ● This bridge is located at Barangay Lipadaz ● Exposed length is 40.00 meters. ● Degree of impact is moderate. ● Adaptive capacity is high. ● Total value of exposed length is 48,000,000. 	<ul style="list-style-type: none"> ● Saturated loose soil that would compromise the strength and stability of the foundation which affects the concrete and may lead to damage. ● A portion of the bridge maybe damaged or totally. ● Connecting roads cannot traverse due to maintenance/ replacement activity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.

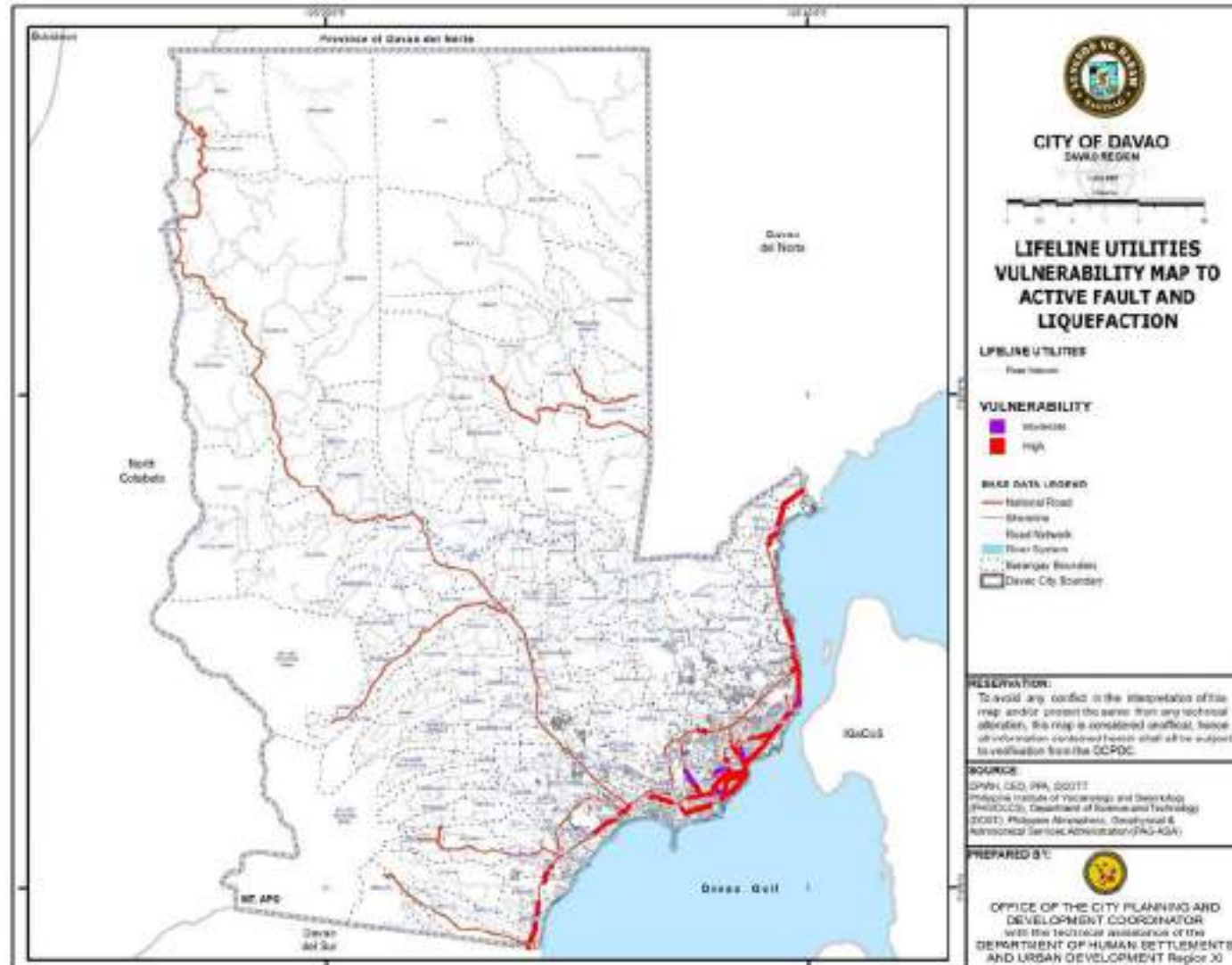
Table LU-174. Climate Change Vulnerability Assessment Summary Matrix of Bridges for Liquefaction, Davao City

BRIDGE NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Bago Br.	<ul style="list-style-type: none"> ● This bridge is located at Barangay Bago Apla-ya ● Exposed length is 31.21 meters. ● Degree of impact is high. ● Adaptive capacity is high. ● Total value of exposed length is 37,452,000. 	<ul style="list-style-type: none"> ● Saturated loose soil that would compromise the strength and stability of the foundation which affects the concrete and may lead to damage. ● A portion of the bridge maybe damaged or totally. ● Connecting roads cannot traverse due to maintenance/ replacement activity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.
Bunawan Br. 1	<ul style="list-style-type: none"> ● This bridge is located at Barangay Bunawan. ● Exposed length is 49.76 meters. ● Degree of impact is high. ● Adaptive capacity is high. ● Total value of exposed length is 59,712,000 	<ul style="list-style-type: none"> ● Saturated loose soil that would compromise the strength and stability of the foundation which affects the concrete and may lead to damage. ● A portion of the bridge maybe damaged or totally. ● Connecting roads cannot traverse due to maintenance/ replacement activity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.
Ilang Br.	<ul style="list-style-type: none"> ● This bridge is located at Barangay Ilang. ● Exposed length is 25.70 meters. ● Degree of impact is high. ● Adaptive capacity is moderate. ● Total value of exposed length is 30,840,000. 	<ul style="list-style-type: none"> ● Saturated loose soil that would compromise the strength and stability of the foundation which affects the concrete and may lead to damage. ● A portion of the bridge maybe damaged or totally. ● Connecting roads cannot traverse due to maintenance/ replacement activity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). ● Delay of delivery of goods and services. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Re-routing scheme within the affected areas.

Table LU-174. Climate Change Vulnerability Assessment Summary Matrix of Bridges for Liquefaction, Davao City

BRIDGE NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Matina Br.	<ul style="list-style-type: none"> • This bridge is located at Barangay Matina Crossing • Exposed length is 38.66 meters. • Degree of impact is high. • Adaptive capacity is high. • Total value of exposed length is 46,392,000 	<ul style="list-style-type: none"> • Saturated loose soil that would compromise the strength and stability of the foundation which affects the concrete and may lead to damage. • A portion of the bridge maybe damaged or totally. • Connecting roads cannot traverse due to maintenance/ replacement activity. • There will be disruption for road access. • Traffic congestion (due re-routing). • Delay of delivery of goods and services. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Re-routing scheme within the affected areas.
Panacan Br.	<ul style="list-style-type: none"> • This bridge is located at Barangay Bunawan • Exposed length is 23.53 meters. • Degree of impact is high. • Adaptive capacity is moderate. • Total value of exposed length is 28,236,000. 	<ul style="list-style-type: none"> • Saturated loose soil that would compromise the strength and stability of the foundation which affects the concrete and may lead to damage. • A portion of the bridge maybe damaged or totally. • Connecting roads cannot traverse due to maintenance/ replacement activity. • There will be disruption for road access. • Traffic congestion (due re-routing). • Delay of delivery of goods and services. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Re-routing scheme within the affected areas.
Sasa Br.	<ul style="list-style-type: none"> • This bridge is located at Barangay Buhangin. • Exposed length is 18.43 meters. • Degree of impact is high. • Adaptive capacity is high. • Total value of exposed length is 22,116,000. 	<ul style="list-style-type: none"> • Saturated loose soil that would compromise the strength and stability of the foundation which affects the concrete and may lead to damage. • A portion of the bridge maybe damaged or totally. • Connecting roads cannot traverse due to maintenance/ replacement activity. • There will be disruption for road access. • Traffic congestion (due re-routing). • Delay of delivery of goods and services. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Re-routing scheme within the affected areas.

Map 5.18. Lifeline Utilities, Vulnerability Map to Active Fault and Liquefaction, Davao City



Vulnerability for Power Substations

A total of 13 Substations have low vulnerability to liquefaction this is due to the high adaptive capacity of the substations.

Table LU-175. Lifeline Utilities, Power Substations, Vulnerability Table for Liquefaction, Davao City

NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EX-POSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY CATEGORY
Dumoy Substation	1,322	118 Million	118 Million	2	1	2	LOW
Puan Substation	803	85 Million	85 Million	2	1	2	LOW
Matina Substation	1,000.00	120 Million	120 Million	1.5	1	1.5	LOW
Ecoland Substation	1,547.00	120 Million	120 Million	1.5	1	1.5	LOW
P.Reyes Substation	825.86	85 Million	85 Million	2	1	2	LOW
Gaisano Substation	454.00	85 Million	85 Million	2	1	2	LOW
Sta Ana Substation	607.00	135 Million	135 Million	2	1	2	LOW
Victoria Substation	595.00	120 Million	120 Million	1.5	1	1.5	LOW
R.Castillo Substation	852.00	125 Million	125 Million	2	1	2	LOW
Pampanga Substation	1,031.00	118 Million	118 Million	2	1	2	LOW
Panacan Substation	858.00	85 Million	85 Million	2	1	2	LOW
Don Ramon Substation	15,540.00	570 Million	570 Million	1.5	1	1.5	LOW
Bunawan Substation	1,085.00	110 Million	110 Million	1.5	1	1.5	LOW

Table LU-176. Climate Change Vulnerability Assessment Summary Matrix of Power Substations for Liquefaction, Davao City

DECISION AREAS	TECHNICAL FINDINGS	PLANNING IMPLICATIONS	INTERVENTIONS
Brgy. Dumoy (Dumoy Substation) Brgy. Talomo Proper (Puan Substation) Brgy. 4-A (P. Reyes Substation) Brgy. 13-B (Gaisano Substation) Brgy. 15-B (Sta Ana Substation) Brgy. R. Castillo (R. Castillo Substation) Brgy. Pampanga (Pampanga Substation) Brgy. Panacan (Panacan Substation)	<ul style="list-style-type: none"> The location of these power substations are within the high liquefaction susceptibility. These power substations have moderate degree of impact of liquefaction but have high adaptive capacity. These power substations are identified in low vulnerability of liquefaction. All power substations are designed as resilient to hazards and properly managed by DLPC. 	<ul style="list-style-type: none"> Minimal to negligible implications 	<ul style="list-style-type: none"> Maintain/Upgrade all power utilities from time to time in order to cope with the current climate change. Government interventions by way of securing these facilities from man-made hazards.

Vulnerability of Level I Water System Sources

A total of 52 spring sources in Binugao, Bunawan, Mahayag, Mandug, Panacan, Daliao, Bunawan, Lizada are moderately vulnerable to liquefaction.

Table LU-177. Lifeline Utilities, Level I Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY CATEGORY
BUNAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
MAHAYAG	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
MAHAYAG	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
BUNAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
MANDUG	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
BUNAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
BUNAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
LIZADA	SPRING	41,586.32	41,586.32	2	2	4	MODERATE

Table LU-177. Lifeline Utilities, Level I Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY CATEGORY
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
DALIAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
LIZADA	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
LIZADA	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
LIZADA	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
LIZADA	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
LIZADA	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
LIZADA	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
LIZADA	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
SIRAWAN	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
BINUGAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE
BINUGAO	SPRING	41,586.32	41,586.32	2	2	4	MODERATE

LU-178. Climate Change Vulnerability Assessment of Level Water Supply System for Liquefaction, Davao City

BARANGAY	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
BUNAWAN	No: 4 Hazard Susceptibility :4-High Type: SPRING Replacement Cost :41586.32 Total Value of exposed lifeline: 166,345.28 Degree of Impact:2 (Moderate) Adaptive Capacity :2 (Moderate) Vulnerability rating: 4 Vulnerability Category :MODERATE	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of wells. • There will be replacement cost/ repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas.
MAHAYAG	No: 2 Hazard Susceptibility :1-High, 1-moderate Type: SPRING Replacement Cost :41586.32 Total Value of Exposed Lifeline: 83,172.64 Degree of Impact:2 (Moderate) Adaptive Capacity :2 (Moderate) Vulnerability Rating: 4 Vulnerability Category :MODERATE	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of wells. • There will be replacement cost/ repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas.
MANDUG	No: 1 Hazard Susceptibility :1-Moderate Type: SPRING Replacement Cost :41586.32 Total Value of Exposed Lifeline:41,586.32 Degree of Impact:2 Adaptive Capacity :2 Vulnerability Rating:4 Vulnerability Category :MODERATE	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of wells. • There will be replacement cost/ repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas.

LU-178. Climate Change Vulnerability Assessment of Level Water Supply System for Liquefaction, Davao City

BARANGAY	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
DALIAO	No: 24 Hazard Susceptibility :1-Moderate, 23-High Type: SPRING Replacement Cost :41586.32 Total Value of Exposed Lifeline: 998,071.68 Degree of Impact:2 Adaptive Capacity :2 Vulnerability Rating:4 Vulnerability Category :MODERATE	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of wells. ● There will be replacement cost/ repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas.
LIZADA	No: 8 Hazard Susceptibility :8-High Type: SPRING Replacement Cost :41586.32 Total Replacement Cost: 332,690.56 Degree of Impact:2 Adaptive Capacity :2 Vulnerability Rating: 4 Vulnerability Category :MODERATE	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of wells. ● There will be replacement cost/ repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas.
SIRAWAN	No: 11 Hazard Susceptibility :9-H, 3-M Type: SPRING Replacement Cost :41586.32 Total Value of Exposed Lifeline: 457,449.52 Degree of Impact:2 Adaptive Capacity :2 Vulnerability Rating: 4 Vulnerability Category :MODERATE	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of wells. ● There will be replacement cost/ repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas.
BINUGAO	No: 2 Hazard Susceptibility :2-H Type: SPRING Replacement Cost :41586.32 Total Replacement Cost: 83172.64 Degree of Impact:2 Adaptive Capacity :2 Vulnerability Rating: 4 Vulnerability Category :MODERATE	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of wells. ● There will be replacement cost/ repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas.

Vulnerability of Level II Water System Sources

Wells in Sirawan, Bunawan, and Waan all have low liquefaction susceptibility

Table LU-179. Lifeline Utilities, Level II Water System, Vulnerability Table for Liquefaction, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
BINUGAO	2HP	46,200	46,200	2	1	2	LOW
SIRAWAN	2HP	46200	46200	2	1	2	LOW
SIRAWAN	2HP	46200	46200	2	1	2	LOW
SIRAWAN	2HP	46200	46200	2	1	2	LOW
WAAN	18GS20	46200	46200	2	1	2	LOW
WAAN	2HP	46200	46200	2	1	2	LOW

Table LU-180. Climate Change Vulnerability Assessment Summary Matrix of Level II Water Supply System for Liquefaction, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Binugao	<ul style="list-style-type: none"> 1 unit of (2HP) deep well The Degree of Impact is Moderate The Adaptive Capacity is High 	<ul style="list-style-type: none"> There will be disruption of regular operations due to damage of wells. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Sirawan	<ul style="list-style-type: none"> 3 units of (2HP) deep well The Degree of Impact is Moderate The Adaptive Capacity is High 	<ul style="list-style-type: none"> There will be disruption of regular operations due to damage of wells. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Waan	<ul style="list-style-type: none"> 1 unit of (2HP) deep well and 1 unit of (18GS20) The Degree of Impact is Moderate 	<ul style="list-style-type: none"> There will be disruption of regular operations due to damage of wells. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Vulnerability of Level III Water System

A total of 433 mainline pipes are moderately vulnerable to liquefaction. These are found in 59 Barangays namely 5-A,10-A, 12-B, 11-B, 39-D, 37-D, 32-D, 24-C, 30-C, 28-C, 15-B, 14-B, 18-B, 19-B, 13-B, Paciano Bangoy, 26-C, Tomas Monteverde, Agdao Proper, Wilfredo Aquino, Matina Crossing, Bucana, 2-A, Bago Aplaya, Dumoy, Talomo, Matina Aplaya, Bago Gallera, 7-A, Ma-A, 17-B, 16-B, 9-A, 6-A, 4-A, 27-C, 38-D, Leon Garcia Sr., 20-B, 31-D, 38-D, Gov. Vicente Duterte, Ubalde, San Antonio, Lapu – Lapu, Centro, Sasa, V. Hizon, A. Angliongto, Rafael Castillo, 40-D, 35-D, Matina Pangi, 23-C, Tigatto, Panacan, Catalunan Grande, Ilang, And Buhangin.

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	TYPE	SIZE	EXPOSURE			IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
			REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
5-A	MLCSP	300	₱19,100.00	42.36	₱809,076.00	2	2	4	MODERATE
10-A	MLCSP	150	₱11,200.00	160.52	₱1,797,824.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	162.51	₱1,820,112.00	1	1	1	LOW
12-B	MLCSP	150	₱11,200.00	365.93	₱4,098,416.00	1	1	1	LOW
11-B	MLCSP	150	₱11,200.00	164.29	₱1,840,048.00	1	1	1	LOW
39-D	MLCSP	300	₱19,100.00	156.23	₱2,983,993.00	2	2	4	MODERATE
37-D	MLCSP	300	₱19,100.00	76.08	₱1,453,128.00	2	2	4	MODERATE
32-D	MLCSP	300	₱19,100.00	236.99	₱4,526,509.00	2	2	4	MODERATE
24-C	MLCSP	300	₱19,100.00	2.96	₱56,536.00	2	2	4	MODERATE
24-C	MLCSP	150	₱11,200.00	187.67	₱2,101,904.00	2	2	4	MODERATE
32-D	MLCSP	300	₱19,100.00	222.24	₱4,244,784.00	2	2	4	MODERATE
30-C	MLCSP	300	₱19,100.00	10.29	₱196,539.00	2	2	4	MODERATE
11-B	MLCSP	300	₱19,100.00	117.3	₱2,240,430.00	2	2	4	MODERATE
28-C	MLCSP	150	₱11,200.00	165.94	₱1,858,528.00	2	2	4	MODERATE
28-C	MLCSP	150	₱11,200.00	164.76	₱1,845,312.00	2	2	4	MODERATE
30-C	MLCSP	150	₱11,200.00	117.93	₱1,320,816.00	2	2	4	MODERATE
28-C	MLCSP	150	₱11,200.00	6.71	₱75,152.00	2	2	4	MODERATE
32-D	MLCSP	300	₱19,100.00	67.83	₱1,295,553.00	2	2	4	MODERATE
32-D	MLCSP	400	₱20,600.00	31.07	₱640,042.00	2	2	4	MODERATE
30-C	MLCSP	400	₱20,600.00	500.92	₱10,318,952.00	2	2	4	MODERATE
12-B	MLCSP	400	₱20,600.00	40.79	₱840,274.00	2	2	4	MODERATE
30-C	MLCSP	150	₱11,200.00	34.82	₱389,984.00	2	2	4	MODERATE
11-B	MLCSP	300	₱19,100.00	91.64	₱1,750,324.00	2	2	4	MODERATE

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
15-B	MLCSP	400	₱20,600.00	8.27	₱170,362.00	2	2	4	MODERATE
14-B	MLCSP	400	₱20,600.00	63.08	₱1,299,448.00	2	2	4	MODERATE
18-B	MLCSP	300	₱19,100.00	194.44	₱3,713,804.00	1	1	1	LOW
19-B	MLCSP	300	₱19,100.00	2.43	₱46,413.00	1	1	1	LOW
18-B	MLCSP	300	₱19,100.00	3.62	₱69,142.00	1	1	1	LOW
19-B	MLCSP	300	₱19,100.00	115.53	₱2,206,623.00	1	1	1	LOW
12-B	MLCSP	150	₱11,200.00	58.01	₱649,712.00	1	1	1	LOW
19-B	MLCSP	150	₱11,200.00	37.77	₱423,024.00	1	1	1	LOW
18-B	MLCSP	300	₱19,100.00	13.35	₱254,985.00	1	1	1	LOW
13-B	MLCSP	300	₱19,100.00	42.75	₱816,525.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	18.93	₱212,016.00	1	1	1	LOW
18-B	MLCSP	150	₱11,200.00	34.32	₱384,384.00	1	1	1	LOW
18-B	MLCSP	150	₱11,200.00	10.91	₱122,192.00	1	1	1	LOW
32-D	MLCSP	300	₱19,100.00	26.31	₱502,521.00	2	2	4	MODERATE
30-C	MLCSP	300	₱19,100.00	12.67	₱241,997.00	2	2	4	MODERATE
28-C	MLCSP	150	₱11,200.00	8.52	₱95,424.00	2	2	4	MODERATE
28-C	MLCSP	150	₱11,200.00	110.26	₱1,234,912.00	2	2	4	MODERATE
28-C	MLCSP	150	₱11,200.00	59.34	₱664,608.00	2	2	4	MODERATE
28-C	MLCSP	150	₱11,200.00	15.83	₱177,296.00	2	2	4	MODERATE
28-C	MLCSP	150	₱11,200.00	54.8	₱613,760.00	2	2	4	MODERATE
26-C	MLCSP	150	₱11,200.00	6.5	₱72,800.00	2	2	4	MODERATE
28-C	MLCSP	150	₱11,200.00	59.36	₱664,832.00	2	2	4	MODERATE
30-C	MLCSP	150	₱11,200.00	114.89	₱1,286,768.00	2	2	4	MODERATE
14-B	MLCSP	150	₱11,200.00	0.45	₱5,040.00	2	2	4	MODERATE
14-B	MLCSP	150	₱11,200.00	100.83	₱1,129,296.00	2	2	4	MODERATE
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	2.87	₱32,144.00	2	2	4	MODERATE
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	123.65	₱1,384,880.00	2	2	4	MODERATE
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	119.84	₱1,342,208.00	2	2	4	MODERATE
15-B	MLCSP	400	₱20,600.00	160.75	₱3,311,450.00	2	2	4	MODERATE
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	11.5	₱128,800.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	400	₱20,600.00	175.51	₱3,615,506.00	2	2	4	MODERATE

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
AGDAO PROPER	MLCSP	150	₱11,200.00	57.96	₱649,152.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	150	₱11,200.00	131.04	₱1,467,648.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	150	₱11,200.00	25	₱280,000.00	2	2	4	MODERATE
15-B	MLCSP	150	₱11,200.00	39.81	₱445,872.00	2	2	4	MODERATE
WILFREDO AQUINO	MLCSP	300	₱19,100.00	49.8	₱951,180.00	2	2	4	MODERATE
WILFREDO AQUINO	MLCSP	300	₱19,100.00	51.94	₱992,054.00	2	2	4	MODERATE
WILFREDO AQUINO	MLCSP	300	₱19,100.00	111.4	₱2,127,740.00	2	2	4	MODERATE
PACIANO BANGOY	MLCSP	150	₱11,200.00	2.57	₱28,784.00	1	1	1	LOW
18-B	MLCSP	150	₱11,200.00	213.68	₱2,393,216.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	58.49	₱1,117,159.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	255.23	₱2,858,576.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	54.75	₱613,200.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	69.38	₱777,056.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	67.38	₱754,656.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	72.51	₱812,112.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	750	₱48,500.00	8.42	₱408,370.00	2	2	4	MODERATE
BUCANA	MLCSP	150	₱11,200.00	67.51	₱756,112.00	2	2	4	MODERATE
BUCANA	MLCSP	150	₱11,200.00	69.38	₱777,056.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	246.01	₱2,755,312.00	2	2	4	MODERATE
BUCANA	MLCSP	150	₱11,200.00	2.79	₱31,248.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	73.68	₱825,216.00	2	2	4	MODERATE
BUCANA	MLCSP	150	₱11,200.00	8.29	₱92,848.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	300	₱19,100.00	7.81	₱149,171.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	69	₱772,800.00	2	2	4	MODERATE
11-B	MLCSP	300	₱19,100.00	65.48	₱1,250,668.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	8.09	₱154,519.00	2	2	4	MODERATE
19-B	MLCSP	300	₱19,100.00	38.01	₱725,991.00	1	1	1	LOW
10-A	MLCSP	300	₱19,100.00	13.62	₱260,142.00	1	1	1	LOW
19-B	MLCSP	300	₱19,100.00	39.23	₱749,293.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	50.7	₱968,370.00	1	1	1	LOW
2-A	MLCSP	300	₱19,100.00	113.84	₱2,174,344.00	2	2	4	MODERATE

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
32-D	MLCSP	300	₱19,100.00	201.85	₱3,855,335.00	2	2	4	MODERATE
WILFREDO AQUINO	MLCSP	300	₱19,100.00	64.28	₱1,227,748.00	2	2	4	MODERATE
5-A	MLCSP	150	₱11,200.00	171.57	₱1,921,584.00	2	2	4	MODERATE
19-B	MLCSP	300	₱19,100.00	96.96	₱1,851,936.00	1	1	1	LOW
AGDAO PROPER	MLCSP	400	₱20,600.00	17.76	₱365,856.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	400	₱20,600.00	63.34	₱1,304,804.00	2	2	4	MODERATE
5-A	MLCSP	300	₱19,100.00	107.3	₱2,049,430.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	300	₱19,100.00	55.49	₱1,059,859.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	300	₱19,100.00	141.31	₱2,699,021.00	1	1	1	LOW
DUMOY	MLCSP	300	₱19,100.00	529.87	₱10,120,517.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	300	₱19,100.00	69.16	₱1,320,956.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	87.34	₱978,208.00	1	1	1	LOW
TALOMO	MLCSP	900	₱56,500.00	36.87	₱2,083,155.00	1	1	1	LOW
TALOMO	MLCSP	900	₱56,500.00	96.56	₱5,455,640.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	61.88	₱693,056.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	750	₱48,500.00	66.72	₱3,235,920.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	750	₱48,500.00	212.13	₱10,288,305.00	1	1	1	LOW
MATINA CROSSING	MLCSP	750	₱48,500.00	146.85	₱7,122,225.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	750	₱48,500.00	108.73	₱5,273,405.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	96.58	₱1,081,696.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	38.24	₱428,288.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	154.2	₱1,727,040.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	150	₱11,200.00	149.77	₱1,677,424.00	2	2	4	MODERATE
TALOMO	MLCSP	750	₱48,500.00	177.49	₱8,608,265.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	227.31	₱2,545,872.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	74.65	₱836,080.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	174.49	₱1,954,288.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	109.92	₱1,231,104.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	750	₱48,500.00	265.8	₱12,891,300.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	326.59	₱3,657,808.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	750	₱48,500.00	9.95	₱482,575.00	2	2	4	MODERATE

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
MATINA CROSSING	MLCSP	250	₱17,000.00	89.61	₱1,523,370.00	1	1	1	LOW
MATINA CROSSING	MLCSP	750	₱48,500.00	132.25	₱6,414,125.00	1	1	1	LOW
MATINA CROSSING	MLCSP	250	₱17,000.00	62.3	₱1,059,100.00	1	1	1	LOW
MATINA CROSSING	MLCSP	250	₱17,000.00	61.15	₱1,039,550.00	1	1	1	LOW
TALOMO	MLCSP	600	₱40,100.00	560.6	₱22,480,060.00	1	1	1	LOW
BAGO APLAYA	MLCSP	500	₱33,200.00	134.63	₱4,469,716.00	2	2	4	MODERATE
TALOMO	MLCSP	900	₱56,500.00	44.85	₱2,534,025.00	1	1	1	LOW
TALOMO	MLCSP	900	₱56,500.00	128.39	₱7,254,035.00	1	1	1	LOW
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	125.17	₱1,401,904.00	2	2	4	MODERATE
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	124.31	₱1,392,272.00	2	2	4	MODERATE
BUCANA	MLCSP	150	₱11,200.00	69.95	₱783,440.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	400	₱20,600.00	90.43	₱1,862,858.00	2	2	4	MODERATE
BAGO GALLERA	MLCSP	250	₱17,000.00	86.86	₱1,476,620.00	1	1	1	LOW
BAGO APLAYA	MLCSP	250	₱17,000.00	11.53	₱196,010.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	250	₱17,000.00	231.91	₱3,942,470.00	1	1	1	LOW
BAGO APLAYA	MLCSP	400	₱20,600.00	407.29	₱8,390,174.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	750	₱48,500.00	301.54	₱14,624,690.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	500	₱33,200.00	140.03	₱4,648,996.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	474.04	₱5,309,248.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	60.62	₱678,944.00	1	1	1	LOW
39-D	MLCSP	300	₱19,100.00	23.9	₱456,490.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	150	₱11,200.00	95.18	₱1,066,016.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	111.11	₱1,244,432.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	163.4	₱1,830,080.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	79	₱884,800.00	2	2	4	MODERATE
BUCANA	MLCSP	150	₱11,200.00	12.02	₱134,624.00	2	2	4	MODERATE
BUCANA	MLCSP	150	₱11,200.00	14.21	₱159,152.00	2	2	4	MODERATE
BUCANA	MLCSP	150	₱11,200.00	95.76	₱1,072,512.00	2	2	4	MODERATE
BUCANA	MLCSP	150	₱11,200.00	37.24	₱417,088.00	2	2	4	MODERATE
7-A	MLCSP	600	₱40,100.00	59.9	₱2,401,990.00	2	2	4	MODERATE
2-A	MLCSP	350	₱20,800.00	214.03	₱4,451,824.00	2	2	4	MODERATE

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
BUCANA	MLCSP	150	₱11,200.00	80.03	₱896,336.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	1.01	₱11,312.00	2	2	4	MODERATE
BUCANA	MLCSP	150	₱11,200.00	78.94	₱884,128.00	2	2	4	MODERATE
18-B	MLCSP	150	₱11,200.00	175.92	₱1,970,304.00	1	1	1	LOW
AGDAO PROPER	MLCSP	400	₱20,600.00	9.02	₱185,812.00	2	2	4	MODERATE
15-B	MLCSP	400	₱20,600.00	339.5	₱6,993,700.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	62.93	₱704,816.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	71.1	₱796,320.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	67.73	₱758,576.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	456.04	₱5,107,648.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	750	₱48,500.00	346.36	₱16,798,460.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	750	₱48,500.00	78.22	₱3,793,670.00	1	1	1	LOW
MA-A	MLCSP	700	₱44,200.00	97.5	₱4,309,500.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	700	₱44,200.00	7.4	₱327,080.00	2	2	4	MODERATE
MA-A	MLCSP	750	₱48,500.00	249.82	₱12,116,270.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	750	₱48,500.00	424.59	₱20,592,615.00	2	2	4	MODERATE
MA-A	MLCSP	150	₱11,200.00	229.1	₱2,565,920.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	8.13	₱91,056.00	2	2	4	MODERATE
MA-A	MLCSP	150	₱11,200.00	137.9	₱1,544,480.00	2	2	4	MODERATE
17-B	MLCSP	300	₱19,100.00	13.23	₱252,693.00	1	1	1	LOW
16-B	MLCSP	300	₱19,100.00	3.58	₱68,378.00	2	2	4	MODERATE
16-B	MLCSP	300	₱19,100.00	34.1	₱651,310.00	1	1	1	LOW
13-B	MLCSP	300	₱19,100.00	2.1	₱40,110.00	1	1	1	LOW
13-B	MLCSP	300	₱19,100.00	49.44	₱944,304.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	101.35	₱1,135,120.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	71.97	₱806,064.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	70.12	₱785,344.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	123.94	₱1,388,128.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	70.95	₱794,640.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	75.38	₱844,256.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	74.97	₱839,664.00	2	2	4	MODERATE

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
MATINA CROSSING	MLCSP	150	₱11,200.00	62.8	₱703,360.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	74.07	₱829,584.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	65.52	₱733,824.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	76.59	₱857,808.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	96.92	₱1,085,504.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	200.67	₱2,247,504.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	62.98	₱705,376.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	169.54	₱1,898,848.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	56.27	₱630,224.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	64.45	₱721,840.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	69.02	₱773,024.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	116.06	₱1,299,872.00	1	1	1	LOW
MATINA CROSSING	MLCSP	750	₱48,500.00	25.53	₱1,238,205.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	750	₱48,500.00	47.07	₱2,282,895.00	1	1	1	LOW
TALOMO	MLCSP	750	₱48,500.00	4.59	₱222,615.00	1	1	1	LOW
MATINA CROSSING	MLCSP	750	₱48,500.00	221.24	₱10,730,140.00	1	1	1	LOW
11-B	MLCSP	150	₱11,200.00	13.05	₱146,160.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	142.32	₱1,593,984.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	54.95	₱1,049,545.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	64.27	₱1,227,557.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	12.45	₱237,795.00	2	2	4	MODERATE
11-B	MLCSP	300	₱19,100.00	39.02	₱745,282.00	1	1	1	LOW
7-A	MLCSP	600	₱40,100.00	57.59	₱2,309,359.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	20.09	₱225,008.00	2	2	4	MODERATE
9-A	MLCSP	600	₱40,100.00	11.89	₱476,789.00	1	1	1	LOW
7-A	MLCSP	600	₱40,100.00	47.21	₱1,893,121.00	1	1	1	LOW
7-A	MLCSP	600	₱40,100.00	40.64	₱1,629,664.00	2	2	4	MODERATE
7-A	MLCSP	600	₱40,100.00	17.51	₱702,151.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	47.41	₱530,992.00	2	2	4	MODERATE
10-A	MLCSP	150	₱11,200.00	13.28	₱148,736.00	2	2	4	MODERATE
10-A	MLCSP	150	₱11,200.00	98.24	₱1,100,288.00	1	1	1	LOW

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	TYPE	EXPOSURE				IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
		SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
9-A	MLCSP	150	₱11,200.00	78.36	₱877,632.00	1	1	1	LOW
9-A	MLCSP	150	₱11,200.00	46.61	₱522,032.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	2.36	₱26,432.00	1	1	1	LOW
9-A	MLCSP	150	₱11,200.00	190.27	₱2,131,024.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	9.56	₱107,072.00	1	1	1	LOW
9-A	MLCSP	150	₱11,200.00	183.82	₱2,058,784.00	1	1	1	LOW
7-A	MLCSP	600	₱40,100.00	150.53	₱6,036,253.00	2	2	4	MODERATE
7-A	MLCSP	500	₱33,200.00	140.13	₱4,652,316.00	2	2	4	MODERATE
7-A	MLCSP	600	₱40,100.00	7.69	₱308,369.00	2	2	4	MODERATE
6-A	MLCSP	600	₱40,100.00	80.98	₱3,247,298.00	2	2	4	MODERATE
7-A	MLCSP	500	₱33,200.00	3.52	₱116,864.00	2	2	4	MODERATE
4-A	MLCSP	500	₱33,200.00	182.25	₱6,050,700.00	2	2	4	MODERATE
6-A	MLCSP	350	₱20,800.00	1.74	₱36,192.00	2	2	4	MODERATE
5-A	MLCSP	350	₱20,800.00	11.53	₱239,824.00	2	2	4	MODERATE
2-A	MLCSP	350	₱20,800.00	100.23	₱2,084,784.00	2	2	4	MODERATE
WILFREDO AQUINO	MLCSP	300	₱19,100.00	169.74	₱3,242,034.00	2	2	4	MODERATE
WILFREDO AQUINO	MLCSP	300	₱19,100.00	64.29	₱1,227,939.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	47.99	₱537,488.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	150	₱11,200.00	14.63	₱163,856.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	150	₱11,200.00	38.75	₱434,000.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	150	₱11,200.00	87.81	₱983,472.00	2	2	4	MODERATE
2-A	MLCSP	300	₱19,100.00	39.19	₱748,529.00	2	2	4	MODERATE
2-A	MLCSP	350	₱20,800.00	173.02	₱3,598,816.00	2	2	4	MODERATE
TALOMO	MLCSP	900	₱56,500.00	73.84	₱4,171,960.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	28.56	₱319,872.00	2	2	4	MODERATE
28-C	MLCSP	150	₱11,200.00	0.83	₱9,296.00	2	2	4	MODERATE
24-C	MLCSP	150	₱11,200.00	84.43	₱945,616.00	2	2	4	MODERATE
30-C	MLCSP	400	₱20,600.00	65.86	₱1,356,716.00	2	2	4	MODERATE
32-D	MLCSP	300	₱19,100.00	47.65	₱910,115.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	150	₱11,200.00	34.89	₱390,768.00	2	2	4	MODERATE
11-B	MLCSP	150	₱11,200.00	12.97	₱145,264.00	1	1	1	LOW

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
10-A	MLCSP	150	₱11,200.00	142.86	₱1,600,032.00	1	1	1	LOW
BAGO APLAYA	MLCSP	300	₱19,100.00	307.29	₱5,869,239.00	1	1	1	LOW
26-C	MLCSP	150	₱11,200.00	3.71	₱41,552.00	2	2	4	MODERATE
27-C	MLCSP	150	₱11,200.00	155.64	₱1,743,168.00	2	2	4	MODERATE
27-C	MLCSP	150	₱11,200.00	150.89	₱1,689,968.00	2	2	4	MODERATE
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	10.44	₱116,928.00	2	2	4	MODERATE
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	56.38	₱631,456.00	2	2	4	MODERATE
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	51.4	₱575,680.00	2	2	4	MODERATE
LEON GARCIA SR.	MLCSP	150	₱11,200.00	9.75	₱109,200.00	2	2	4	MODERATE
32-D	MLCSP	300	₱19,100.00	118.33	₱2,260,103.00	2	2	4	MODERATE
32-D	MLCSP	300	₱19,100.00	86.96	₱1,660,936.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	600	₱40,100.00	148.22	₱5,943,622.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	600	₱40,100.00	198.94	₱7,977,494.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	600	₱40,100.00	411.37	₱16,495,937.00	1	1	1	LOW
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	177.11	₱1,983,632.00	2	2	4	MODERATE
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	169.1	₱1,893,920.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	150	₱11,200.00	6.83	₱76,496.00	2	2	4	MODERATE
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	46.1	₱516,320.00	2	2	4	MODERATE
20-B	MLCSP	150	₱11,200.00	52.02	₱582,624.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	12.1	₱135,520.00	1	1	1	LOW
20-B	MLCSP	150	₱11,200.00	41.11	₱460,432.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	1.2	₱13,440.00	1	1	1	LOW
18-B	MLCSP	150	₱11,200.00	48.43	₱542,416.00	1	1	1	LOW
20-B	MLCSP	150	₱11,200.00	1.49	₱16,688.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	5.98	₱66,976.00	1	1	1	LOW
18-B	MLCSP	150	₱11,200.00	170.17	₱1,905,904.00	1	1	1	LOW
18-B	MLCSP	150	₱11,200.00	278.99	₱3,124,688.00	1	1	1	LOW
19-B	MLCSP	150	₱11,200.00	2.77	₱31,024.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	37.07	₱708,037.00	2	2	4	MODERATE
2-A	MLCSP	300	₱19,100.00	127.25	₱2,430,475.00	2	2	4	MODERATE
39-D	MLCSP	300	₱19,100.00	5.37	₱102,567.00	2	2	4	MODERATE

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
DUMOY	MLCSP	600	₱40,100.00	461.42	₱18,502,942.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	600	₱40,100.00	513.65	₱20,597,365.00	2	2	4	MODERATE
31-D	MLCSP	300	₱19,100.00	9.14	₱174,574.00	2	2	4	MODERATE
37-D	MLCSP	300	₱19,100.00	63.83	₱1,219,153.00	2	2	4	MODERATE
9-A	MLCSP	150	₱11,200.00	26.58	₱297,696.00	1	1	1	LOW
7-A	MLCSP	150	₱11,200.00	6.79	₱76,048.00	1	1	1	LOW
9-A	MLCSP	150	₱11,200.00	156.68	₱1,754,816.00	1	1	1	LOW
9-A	MLCSP	600	₱40,100.00	59.42	₱2,382,742.00	1	1	1	LOW
7-A	MLCSP	600	₱40,100.00	32.72	₱1,312,072.00	1	1	1	LOW
7-A	MLCSP	600	₱40,100.00	131.91	₱5,289,591.00	1	1	1	LOW
7-A	MLCSP	600	₱40,100.00	78.89	₱3,163,489.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	600	₱40,100.00	570.45	₱22,875,045.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	600	₱40,100.00	436.83	₱17,516,883.00	1	1	1	LOW
TALOMO	MLCSP	250	₱17,000.00	59.24	₱1,007,080.00	1	1	1	LOW
BAGO APLAYA	MLCSP	500	₱33,200.00	65.78	₱2,183,896.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	400	₱20,600.00	96.4	₱1,985,840.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	400	₱20,600.00	47.27	₱973,762.00	2	2	4	MODERATE
6-A	MLCSP	600	₱40,100.00	101.25	₱4,060,125.00	2	2	4	MODERATE
BUCANA	MLCSP	150	₱11,200.00	124.24	₱1,391,488.00	2	2	4	MODERATE
DUMOY	MLCSP	500	₱33,200.00	404.49	₱13,429,068.00	1	1	1	LOW
DUMOY	MLCSP	500	₱33,200.00	421.94	₱14,008,408.00	2	2	4	MODERATE
DUMOY	MLCSP	500	₱33,200.00	94.17	₱3,126,444.00	1	1	1	LOW
DUMOY	MLCSP	250	₱17,000.00	27.3	₱464,100.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	39.52	₱754,832.00	2	2	4	MODERATE
WILFREDO AQUINO	MLCSP	300	₱19,100.00	42.46	₱810,986.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	31.66	₱354,592.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	150	₱11,200.00	91.74	₱1,027,488.00	2	2	4	MODERATE
TALOMO	MLCSP	450	₱24,300.00	8.64	₱209,952.00	1	1	1	LOW
BAGO APLAYA	MLCSP	450	₱24,300.00	39.25	₱953,775.00	1	1	1	LOW
TALOMO	MLCSP	600	₱40,100.00	4.63	₱185,663.00	1	1	1	LOW
BAGO APLAYA	MLCSP	600	₱40,100.00	41.6	₱1,668,160.00	1	1	1	LOW

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
BUCANA	MLCSP	150	₱11,200.00	360.06	₱4,032,672.00	2	2	4	MODERATE
BUCANA	MLCSP	150	₱11,200.00	61.17	₱685,104.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	13.1	₱146,720.00	2	2	4	MODERATE
BUCANA	MLCSP	150	₱11,200.00	1.49	₱16,688.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	358.81	₱4,018,672.00	2	2	4	MODERATE
5-A	MLCSP	150	₱11,200.00	49.36	₱552,832.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	450	₱24,300.00	645.07	₱15,675,201.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	450	₱24,300.00	388.51	₱9,440,793.00	1	1	1	LOW
BAGO APLAYA	MLCSP	700	₱44,200.00	13.77	₱608,634.00	1	1	1	LOW
TALOMO	MLCSP	700	₱44,200.00	219.87	₱9,718,254.00	1	1	1	LOW
BAGO APLAYA	MLCSP	700	₱44,200.00	7.87	₱347,854.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	63.07	₱706,384.00	2	2	4	MODERATE
7-A	MLCSP	600	₱40,100.00	74.86	₱3,001,886.00	2	2	4	MODERATE
31-D	MLCSP	300	₱19,100.00	33.02	₱630,682.00	2	2	4	MODERATE
37-D	MLCSP	300	₱19,100.00	104.48	₱1,995,568.00	2	2	4	MODERATE
31-D	MLCSP	300	₱19,100.00	12.87	₱245,817.00	2	2	4	MODERATE
37-D	MLCSP	300	₱19,100.00	97.71	₱1,866,261.00	2	2	4	MODERATE
38-D	MLCSP	300	₱19,100.00	13.57	₱259,187.00	2	2	4	MODERATE
37-D	MLCSP	300	₱19,100.00	227.02	₱4,336,082.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	300	₱19,100.00	239.57	₱4,575,787.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	400	₱20,600.00	53.67	₱1,105,602.00	2	2	4	MODERATE
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	206.29	₱4,249,574.00	2	2	4	MODERATE
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	116.45	₱2,398,870.00	2	2	4	MODERATE
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	20.82	₱428,892.00	2	2	4	MODERATE
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	66.75	₱1,375,050.00	2	2	4	MODERATE
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	124.74	₱2,569,644.00	2	2	4	MODERATE
UBALDE	MLCSP	400	₱20,600.00	173.79	₱3,580,074.00	2	2	4	MODERATE
UBALDE	MLCSP	400	₱20,600.00	21.83	₱449,698.00	2	2	4	MODERATE
GOV. VICENTE DUTERTE	MLCSP	400	₱20,600.00	368.65	₱7,594,190.00	2	2	4	MODERATE
SAN ANTONIO	MLCSP	400	₱20,600.00	196.92	₱4,056,552.00	2	2	4	MODERATE
UBALDE	MLCSP	400	₱20,600.00	9.54	₱196,524.00	2	2	4	MODERATE

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
LAPU - LAPU	MLCSP	400	₱20,600.00	180.35	₱3,715,210.00	2	2	4	MODERATE
LAPU - LAPU	MLCSP	400	₱20,600.00	490.41	₱10,102,446.00	2	2	4	MODERATE
WILFREDO AQUINO	MLCSP	300	₱19,100.00	37.02	₱707,082.00	2	2	4	MODERATE
WILFREDO AQUINO	MLCSP	300	₱19,100.00	39.11	₱747,001.00	2	2	4	MODERATE
32-D	MLCSP	500	₱33,200.00	19.37	₱643,084.00	2	2	4	MODERATE
10-A	MLCSP	500	₱33,200.00	173.65	₱5,765,180.00	2	2	4	MODERATE
4-A	MLCSP	500	₱33,200.00	147.97	₱4,912,604.00	2	2	4	MODERATE
10-A	MLCSP	150	₱11,200.00	169.02	₱1,893,024.00	2	2	4	MODERATE
4-A	MLCSP	150	₱11,200.00	2.89	₱32,368.00	2	2	4	MODERATE
4-A	MLCSP	500	₱33,200.00	263.63	₱8,752,516.00	2	2	4	MODERATE
4-A	MLCSP	500	₱33,200.00	36.32	₱1,205,824.00	2	2	4	MODERATE
UBALDE	MLCSP	400	₱20,600.00	56.8	₱1,170,080.00	2	2	4	MODERATE
LAPU - LAPU	MLCSP	400	₱20,600.00	162.28	₱3,342,968.00	2	2	4	MODERATE
CENTRO	MLCSP	400	₱20,600.00	93.79	₱1,932,074.00	2	2	4	MODERATE
MA-A	MLCSP	100	₱11,000.00	11.77	₱129,470.00	2	2	4	MODERATE
MA-A	MLCSP	750	₱48,500.00	117.14	₱5,681,290.00	1	1	1	LOW
MATINA CROSSING	MLCSP	750	₱48,500.00	228.64	₱11,089,040.00	1	1	1	LOW
MATINA CROSSING	MLCSP	750	₱48,500.00	134.23	₱6,510,155.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	16.87	₱188,944.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	150	₱11,200.00	32.12	₱359,744.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	11.21	₱125,552.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	21.56	₱241,472.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	150	₱11,200.00	143.01	₱1,601,712.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	42.88	₱480,256.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	224.73	₱2,516,976.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	69.27	₱775,824.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	40.6	₱454,720.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	300	₱19,100.00	72.23	₱1,379,593.00	1	1	1	LOW
MATINA CROSSING	MLCSP	300	₱19,100.00	76.88	₱1,468,408.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	67.98	₱761,376.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	98.64	₱1,104,768.00	1	1	1	LOW

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
MATINA CROSSING	MLCSP	150	₱11,200.00	66.4	₱743,680.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	73.05	₱818,160.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	150	₱11,200.00	38.45	₱430,640.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	150	₱11,200.00	42.39	₱474,768.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	150	₱11,200.00	43.58	₱488,096.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	150	₱11,200.00	52.77	₱591,024.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	150	₱11,200.00	72.06	₱807,072.00	2	2	4	MODERATE
SASA	MLCSP	200	₱12,500.00	172.47	₱2,155,875.00	2	2	4	MODERATE
SASA	MLCSP	200	₱12,500.00	287.63	₱3,595,375.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	158.22	₱1,977,750.00	2	2	4	MODERATE
SASA	MLCSP	200	₱12,500.00	116.91	₱1,461,375.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	706.36	₱8,829,500.00	2	2	4	MODERATE
V. HIZON	MLCSP	250	₱17,000.00	130.5	₱2,218,500.00	2	2	4	MODERATE
A. ANGLIONGTO	MLCSP	250	₱17,000.00	45.55	₱774,350.00	2	2	4	MODERATE
V. HIZON	MLCSP	300	₱19,100.00	15.35	₱293,185.00	2	2	4	MODERATE
PAMPANGA	MLCSP	300	₱19,100.00	118.53	₱2,263,923.00	2	2	4	MODERATE
PAMPANGA	MLCSP	300	₱19,100.00	45.71	₱873,061.00	2	2	4	MODERATE
V. HIZON	MLCSP	250	₱17,000.00	2.88	₱48,960.00	2	2	4	MODERATE
PAMPANGA	MLCSP	250	₱17,000.00	12.43	₱211,310.00	2	2	4	MODERATE
SASA	MLCSP	250	₱17,000.00	75.16	₱1,277,720.00	2	2	4	MODERATE
PAMPANGA	MLCSP	250	₱17,000.00	223.75	₱3,803,750.00	2	2	4	MODERATE
SASA	MLCSP	200	₱12,500.00	96.35	₱1,204,375.00	2	2	4	MODERATE
SASA	MLCSP	200	₱12,500.00	14.44	₱180,500.00	1	1	1	LOW
SASA	MLCSP	250	₱17,000.00	261.04	₱4,437,680.00	2	2	4	MODERATE
SASA	MLCSP	250	₱17,000.00	167.7	₱2,850,900.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	15.76	₱197,000.00	2	2	4	MODERATE
SASA	MLCSP	200	₱12,500.00	178.68	₱2,233,500.00	2	2	4	MODERATE
SASA	MLCSP	200	₱12,500.00	55.47	₱693,375.00	2	2	4	MODERATE
SASA	MLCSP	200	₱12,500.00	15.42	₱192,750.00	2	2	4	MODERATE
V. HIZON	MLCSP	250	₱17,000.00	386.97	₱6,578,490.00	2	2	4	MODERATE
PAMPANGA	MLCSP	250	₱17,000.00	23.61	₱401,370.00	2	2	4	MODERATE

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
PAMPANGA	MLCSP	250	₱17,000.00	23.06	₱392,020.00	2	2	4	MODERATE
PAMPANGA	MLCSP	300	₱19,100.00	336.36	₱6,424,476.00	2	2	4	MODERATE
MA-A	MLCSP	300	₱19,100.00	22.52	₱430,132.00	1	1	1	LOW
SASA	MLCSP	250	₱17,000.00	178.44	₱3,033,480.00	2	2	4	MODERATE
SASA	MLCSP	250	₱17,000.00	328.88	₱5,590,960.00	1	1	1	LOW
V. HIZON	MLCSP	250	₱17,000.00	664.01	₱11,288,170.00	2	2	4	MODERATE
V. HIZON	MLCSP	250	₱17,000.00	107.3	₱1,824,100.00	2	2	4	MODERATE
SASA	MLCSP	200	₱12,500.00	149.99	₱1,874,875.00	2	2	4	MODERATE
SASA	MLCSP	200	₱12,500.00	155.39	₱1,942,375.00	2	2	4	MODERATE
BAGO GALLERA	MLCSP	350	₱20,800.00	447.09	₱9,299,472.00	1	1	1	LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	101.39	₱2,108,912.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	350	₱20,800.00	180.67	₱3,757,936.00	1	1	1	LOW
BAGO GALLERA	MLCSP	350	₱20,800.00	161.78	₱3,365,024.00	1	1	1	LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	86.72	₱1,803,776.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	350	₱20,800.00	468.81	₱9,751,248.00	1	1	1	LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	444.08	₱9,236,864.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	250	₱17,000.00	14.99	₱254,830.00	2	2	4	MODERATE
BAGO GALLERA	MLCSP	350	₱20,800.00	434.15	₱9,030,320.00	1	1	1	LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	88.28	₱1,836,224.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	350	₱20,800.00	193.82	₱4,031,456.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	60.43	₱1,154,213.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	190.87	₱3,645,617.00	2	2	4	MODERATE
V. HIZON	MLCSP	300	₱19,100.00	576.33	₱11,007,903.00	2	2	4	MODERATE
PAMPANGA	MLCSP	300	₱19,100.00	73.97	₱1,412,827.00	2	2	4	MODERATE
V. HIZON	MLCSP	300	₱19,100.00	10.52	₱200,932.00	2	2	4	MODERATE
16-B	MLCSP	300	₱19,100.00	13.62	₱260,142.00	2	2	4	MODERATE
15-B	MLCSP	300	₱19,100.00	481.76	₱9,201,616.00	2	2	4	MODERATE
16-B	MLCSP	300	₱19,100.00	50.22	₱959,202.00	2	2	4	MODERATE
16-B	MLCSP	150	₱11,200.00	176.25	₱1,974,000.00	2	2	4	MODERATE
16-B	MLCSP	150	₱11,200.00	174.06	₱1,949,472.00	2	2	4	MODERATE
16-B	MLCSP	150	₱11,200.00	172.8	₱1,935,360.00	2	2	4	MODERATE

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
PACIANO BANGOY	MLCSP	150	₱11,200.00	25.58	₱286,496.00	2	2	4	MODERATE
PACIANO BANGOY	MLCSP	150	₱11,200.00	82.2	₱920,640.00	2	2	4	MODERATE
PACIANO BANGOY	MLCSP	150	₱11,200.00	264.25	₱2,959,600.00	2	2	4	MODERATE
16-B	MLCSP	150	₱11,200.00	0.97	₱10,864.00	2	2	4	MODERATE
PACIANO BANGOY	MLCSP	150	₱11,200.00	171.17	₱1,917,104.00	2	2	4	MODERATE
WILFREDO AQUINO	MLCSP	300	₱19,100.00	3.66	₱69,906.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	300	₱19,100.00	111.52	₱2,130,032.00	2	2	4	MODERATE
A. ANGLIONGTO	MLCSP	250	₱17,000.00	498.54	₱8,475,180.00	2	2	4	MODERATE
A. ANGLIONGTO	MLCSP	400	₱20,600.00	16.33	₱336,398.00	2	2	4	MODERATE
A. ANGLIONGTO	MLCSP	400	₱20,600.00	7.1	₱146,260.00	2	2	4	MODERATE
RAFAEL CASTILLO	MLCSP	400	₱20,600.00	203.98	₱4,201,988.00	2	2	4	MODERATE
RAFAEL CASTILLO	MLCSP	400	₱20,600.00	134.22	₱2,764,932.00	2	2	4	MODERATE
WILFREDO AQUINO	MLCSP	400	₱20,600.00	84.33	₱1,737,198.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	400	₱20,600.00	32.46	₱668,676.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	136.87	₱2,614,217.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	37.85	₱423,920.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	107.71	₱1,206,352.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	140.58	₱1,574,496.00	1	1	1	LOW
SAN ANTONIO	MLCSP	400	₱20,600.00	227.24	₱4,681,144.00	2	2	4	MODERATE
RAFAEL CASTILLO	MLCSP	400	₱20,600.00	157.1	₱3,236,260.00	2	2	4	MODERATE
28-C	MLCSP	150	₱11,200.00	41.08	₱460,096.00	2	2	4	MODERATE
30-C	MLCSP	400	₱20,600.00	85.55	₱1,762,330.00	2	2	4	MODERATE
30-C	MLCSP	150	₱11,200.00	159.98	₱1,791,776.00	2	2	4	MODERATE
14-B	MLCSP	400	₱20,600.00	71.45	₱1,471,870.00	2	2	4	MODERATE
30-C	MLCSP	400	₱20,600.00	7.64	₱157,384.00	2	2	4	MODERATE
14-B	MLCSP	400	₱20,600.00	59.98	₱1,235,588.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	200	₱12,500.00	20.1	₱251,250.00	2	2	4	MODERATE
40-D	MLCSP	250	₱17,000.00	283.77	₱4,824,090.00	2	2	4	MODERATE
2-A	MLCSP	250	₱17,000.00	7.32	₱124,440.00	2	2	4	MODERATE
39-D	MLCSP	250	₱17,000.00	196.26	₱3,336,420.00	2	2	4	MODERATE
19-B	MLCSP	300	₱19,100.00	254.95	₱4,869,545.00	1	1	1	LOW

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
WILFREDO AQUINO	MLCSP	150	₱11,200.00	15.86	₱177,632.00	2	2	4	MODERATE
PACIANO BANGOY	MLCSP	150	₱11,200.00	5.45	₱61,040.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	400	₱20,600.00	421.48	₱8,682,488.00	2	2	4	MODERATE
MA-A	MLCSP	750	₱48,500.00	163.35	₱7,922,475.00	2	2	4	MODERATE
MA-A	MLCSP	750	₱48,500.00	16.15	₱783,275.00	2	2	4	MODERATE
5-A	MLCSP	750	₱48,500.00	196.61	₱9,535,585.00	2	2	4	MODERATE
2-A	MLCSP	750	₱48,500.00	103.21	₱5,005,685.00	2	2	4	MODERATE
BUCANA	MLCSP	750	₱48,500.00	224.13	₱10,870,305.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	150	₱11,200.00	208.98	₱2,340,576.00	1	1	1	LOW
BAGO GALLERA	MLCSP	350	₱20,800.00	23.71	₱493,168.00	1	1	1	LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	493.05	₱10,255,440.00	1	1	1	LOW
BAGO GALLERA	MLCSP	300	₱19,100.00	4.41	₱84,231.00	1	1	1	LOW
BAGO APLAYA	MLCSP	300	₱19,100.00	8.71	₱166,361.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	294	₱3,292,800.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	400	₱20,600.00	7.72	₱159,032.00	1	1	1	LOW
MA-A	MLCSP	350	₱20,800.00	224.84	₱4,676,672.00	2	2	4	MODERATE
MA-A	MLCSP	400	₱20,600.00	40.19	₱827,914.00	2	2	4	MODERATE
MA-A	MLCSP	450	₱24,300.00	35.26	₱856,818.00	2	2	4	MODERATE
MA-A	MLCSP	500	₱33,200.00	22.76	₱755,632.00	2	2	4	MODERATE
MA-A	MLCSP	600	₱40,100.00	319.83	₱12,825,183.00	2	2	4	MODERATE
MA-A	MLCSP	600	₱40,100.00	137.98	₱5,532,998.00	2	2	4	MODERATE
MA-A	MLCSP	600	₱40,100.00	132.34	₱5,306,834.00	2	2	4	MODERATE
MA-A	MLCSP	300	₱19,100.00	2.23	₱42,593.00	1	1	1	LOW
MA-A	MLCSP	300	₱19,100.00	336.29	₱6,423,139.00	1	1	1	LOW
MA-A	MLCSP	300	₱19,100.00	13.96	₱266,636.00	1	1	1	LOW
MA-A	MLCSP	300	₱19,100.00	46.39	₱886,049.00	2	2	4	MODERATE
MA-A	MLCSP	300	₱19,100.00	175.78	₱3,357,398.00	1	1	1	LOW
MA-A	MLCSP	300	₱19,100.00	118.72	₱2,267,552.00	1	1	1	LOW
MA-A	MLCSP	300	₱19,100.00	32.27	₱616,357.00	1	1	1	LOW
MA-A	MLCSP	300	₱19,100.00	63.45	₱1,211,895.00	1	1	1	LOW
MA-A	MLCSP	150	₱11,200.00	33.21	₱371,952.00	2	2	4	MODERATE

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
2-A	MLCSP	300	₱19,100.00	13.62	₱260,142.00	2	2	4	MODERATE
SASA	MLCSP	250	₱17,000.00	317.51	₱5,397,670.00	2	2	4	MODERATE
31-D	MLCSP	300	₱19,100.00	105.93	₱2,023,263.00	2	2	4	MODERATE
31-D	MLCSP	150	₱11,200.00	16.42	₱183,904.00	2	2	4	MODERATE
35-D	MLCSP	200	₱12,500.00	10.88	₱136,000.00	2	2	4	MODERATE
MATINA PANGI	MLCSP	800	₱52,800.00	710.84	₱37,532,352.00	1	1	1	LOW
MATINA PANGI	MLCSP	800	₱52,800.00	168.64	₱8,904,192.00	1	1	1	LOW
MATINA PANGI	MLCSP	800	₱52,800.00	71.59	₱3,779,952.00	1	1	1	LOW
18-B	MLCSP	150	₱11,200.00	347.83	₱3,895,696.00	1	1	1	LOW
39-D	MLCSP	300	₱19,100.00	135.63	₱2,590,533.00	2	2	4	MODERATE
38-D	MLCSP	300	₱19,100.00	7.79	₱148,789.00	2	2	4	MODERATE
39-D	MLCSP	300	₱19,100.00	18.93	₱361,563.00	2	2	4	MODERATE
26-C	MLCSP	150	₱11,200.00	156.73	₱1,755,376.00	2	2	4	MODERATE
23-C	MLCSP	150	₱11,200.00	4.57	₱51,184.00	2	2	4	MODERATE
26-C	MLCSP	150	₱11,200.00	3.84	₱43,008.00	2	2	4	MODERATE
23-C	MLCSP	150	₱11,200.00	3.9	₱43,680.00	2	2	4	MODERATE
32-D	MLCSP	300	₱19,100.00	10.2	₱194,820.00	2	2	4	MODERATE
31-D	MLCSP	300	₱19,100.00	8.38	₱160,058.00	2	2	4	MODERATE
31-D	MLCSP	300	₱19,100.00	150.78	₱2,879,898.00	2	2	4	MODERATE
32-D	MLCSP	300	₱19,100.00	85.03	₱1,624,073.00	2	2	4	MODERATE
24-C	MLCSP	300	₱19,100.00	18.13	₱346,283.00	2	2	4	MODERATE
31-D	MLCSP	300	₱19,100.00	3.56	₱67,996.00	2	2	4	MODERATE
27-C	MLCSP	200	₱12,500.00	18.97	₱237,125.00	2	2	4	MODERATE
MA-A	MLCSP	300	₱19,100.00	233.32	₱4,456,412.00	1	1	1	LOW
SASA	MLCSP	250	₱17,000.00	178.33	₱3,031,610.00	2	2	4	MODERATE
12-B	MLCSP	100	₱11,000.00	0.78	₱8,580.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	350	₱20,800.00	625.57	₱13,011,856.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	350	₱20,800.00	98.18	₱2,042,144.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	300	₱19,100.00	665.27	₱12,706,657.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	350	₱20,800.00	7.81	₱162,448.00	2	2	4	MODERATE
TIGATTO	MLCSP	400	₱20,600.00	823.75	₱16,969,250.00	2	2	4	MODERATE

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
BAGO APLAYA	MLCSP	250	₱17,000.00	7.69	₱130,730.00	2	2	4	MODERATE
DUMOY	MLCSP	250	₱17,000.00	15	₱255,000.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	250	₱17,000.00	5.64	₱95,880.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	250	₱17,000.00	28.02	₱476,340.00	2	2	4	MODERATE
BAGO GALLERA	MLCSP	250	₱17,000.00	6.99	₱118,830.00	1	1	1	LOW
PAMPANGA	MLCSP	300	₱19,100.00	3.45	₱65,895.00	2	2	4	MODERATE
V. HIZON	MLCSP	250	₱17,000.00	2.68	₱45,560.00	2	2	4	MODERATE
V. HIZON	MLCSP	250	₱17,000.00	8.89	₱151,130.00	2	2	4	MODERATE
PANACAN	MLCSP	250	₱17,000.00	43.61	₱741,370.00	2	2	4	MODERATE
PANACAN	MLCSP	250	₱17,000.00	182.18	₱3,097,060.00	2	2	4	MODERATE
PANACAN	MLCSP	250	₱17,000.00	359.55	₱6,112,350.00	2	2	4	MODERATE
PANACAN	MLCSP	250	₱17,000.00	313.82	₱5,334,940.00	1	1	1	LOW
PANACAN	MLCSP	250	₱17,000.00	505.5	₱8,593,500.00	2	2	4	MODERATE
MATINA CROSSING	MLCSP	300	₱19,100.00	182.35	₱3,482,885.00	1	1	1	LOW
TIGATTO	MLCSP	400	₱20,600.00	796.06	₱16,398,836.00	2	2	4	MODERATE
TIGATTO	MLCSP	400	₱20,600.00	280.23	₱5,772,738.00	1	1	1	LOW
PANACAN	MLCSP	250	₱17,000.00	40.33	₱685,610.00	2	2	4	MODERATE
PANACAN	MLCSP	250	₱17,000.00	1,040.48	₱17,688,160.00	1	1	1	LOW
SASA	MLCSP	300	₱19,100.00	79.92	₱1,526,472.00	2	2	4	MODERATE
6-A	MLCSP	600	₱40,100.00	90.17	₱3,615,817.00	2	2	4	MODERATE
5-A	MLCSP	600	₱40,100.00	9.16	₱367,316.00	2	2	4	MODERATE
6-A	MLCSP	600	₱40,100.00	9.89	₱396,589.00	2	2	4	MODERATE
PAMPANGA	MLCSP	300	₱19,100.00	18.37	₱350,867.00	2	2	4	MODERATE
SASA	MLCSP	300	₱19,100.00	169.79	₱3,242,989.00	2	2	4	MODERATE
PAMPANGA	MLCSP	300	₱19,100.00	276.83	₱5,287,453.00	2	2	4	MODERATE
TALOMO	MLCSP	450	₱24,300.00	34.79	₱845,397.00	1	1	1	LOW
BAGO APLAYA	MLCSP	450	₱24,300.00	199.17	₱4,839,831.00	1	1	1	LOW
BAGO APLAYA	MLCSP	450	₱24,300.00	62.16	₱1,510,488.00	1	1	1	LOW
PANACAN	MLCSP	250	₱17,000.00	180.38	₱3,066,460.00	2	2	4	MODERATE
PANACAN	MLCSP	250	₱17,000.00	0.71	₱12,070.00	2	2	4	MODERATE
MATINA PANGI	MLCSP	250	₱17,000.00	455.49	₱7,743,330.00	1	1	1	LOW

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
CATALUNAN GRANDE	MLCSP	250	₱17,000.00	243.39	₱4,137,630.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	11.72	₱223,852.00	1	1	1	LOW
19-B	MLCSP	300	₱19,100.00	108.19	₱2,066,429.00	1	1	1	LOW
19-B	MLCSP	300	₱19,100.00	45.56	₱870,196.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	18.07	₱202,384.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	150	₱11,200.00	24.03	₱269,136.00	2	2	4	MODERATE
TIGATTO	MLCSP	400	₱20,600.00	979.68	₱20,181,408.00	1	1	1	LOW
TIGATTO	MLCSP	400	₱20,600.00	465.86	₱9,596,716.00	1	1	1	LOW
TIGATTO	MLCSP	400	₱20,600.00	495.13	₱10,199,678.00	1	1	1	LOW
BAGO APLAYA	MLCSP	400	₱20,600.00	215.2	₱4,433,120.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	400	₱20,600.00	458.49	₱9,444,894.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	250	₱17,000.00	39.3	₱668,100.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	600	₱40,100.00	223.51	₱8,962,751.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	600	₱40,100.00	463.42	₱18,583,142.00	2	2	4	MODERATE
BUCANA	MLCSP	250	₱17,000.00	184.63	₱3,138,710.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	250	₱17,000.00	922.6	₱15,684,200.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	250	₱17,000.00	1,041.85	₱17,711,450.00	2	2	4	MODERATE
20-B	MLCSP	150	₱11,200.00	82.14	₱919,968.00	1	1	1	LOW
20-B	MLCSP	150	₱11,200.00	41.02	₱459,424.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	3.91	₱43,792.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	58.32	₱653,184.00	1	1	1	LOW
PANACAN	MLCSP	400	₱20,600.00	118.38	₱2,438,628.00	2	2	4	MODERATE
PANACAN	MLCSP	400	₱20,600.00	532.14	₱10,962,084.00	1	1	1	LOW
ILANG	MLCSP	400	₱20,600.00	407.33	₱8,390,998.00	2	2	4	MODERATE
ILANG	MLCSP	400	₱20,600.00	31.69	₱652,814.00	1	1	1	LOW
ILANG	MLCSP	400	₱20,600.00	988.28	₱20,358,568.00	1	1	1	LOW
ILANG	MLCSP	400	₱20,600.00	268.48	₱5,530,688.00	1	1	1	LOW
MATINA CROSSING	MLCSP	250	₱17,000.00	92.29	₱1,568,930.00	1	1	1	LOW
TIGATTO	MLCSP	400	₱20,600.00	333.61	₱6,872,366.00	2	2	4	MODERATE
TIGATTO	MLCSP	400	₱20,600.00	654.51	₱13,482,906.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	54.26	₱1,036,366.00	2	2	4	MODERATE

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
WILFREDO AQUINO	MLCSP	300	₱19,100.00	59.75	₱1,141,225.00	2	2	4	MODERATE
TALOMO	MLCSP	350	₱20,800.00	70.52	₱1,466,816.00	2	2	4	MODERATE
TALOMO	MLCSP	350	₱20,800.00	479.16	₱9,966,528.00	1	1	1	LOW
TALOMO	MLCSP	250	₱17,000.00	16.21	₱275,570.00	2	2	4	MODERATE
TALOMO	MLCSP	350	₱20,800.00	5.75	₱119,600.00	2	2	4	MODERATE
TALOMO	MLCSP	350	₱20,800.00	437.34	₱9,096,672.00	2	2	4	MODERATE
TALOMO	MLCSP	250	₱17,000.00	328	₱5,576,000.00	2	2	4	MODERATE
TALOMO	MLCSP	250	₱17,000.00	0.61	₱10,370.00	2	2	4	MODERATE
MA-A	MLCSP	800	₱52,800.00	157.45	₱8,313,360.00	2	2	4	MODERATE
TIGATTO	MLCSP	800	₱52,800.00	397.12	₱20,967,936.00	2	2	4	MODERATE
BUHANGIN	MLCSP	800	₱52,800.00	19.46	₱1,027,488.00	2	2	4	MODERATE
MA-A	MLCSP	800	₱52,800.00	55.05	₱2,906,640.00	2	2	4	MODERATE
TALOMO	MLCSP	700	₱44,200.00	353.39	₱15,619,838.00	1	1	1	LOW
TALOMO	MLCSP	700	₱44,200.00	28.93	₱1,278,706.00	1	1	1	LOW
TALOMO	MLCSP	350	₱20,800.00	5.19	₱107,952.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	400	₱20,600.00	12.17	₱250,702.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	71.18	₱797,216.00	2	2	4	MODERATE
PACIANO BANGOY	MLCSP	150	₱11,200.00	2.02	₱22,624.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	400	₱20,600.00	24.87	₱512,322.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	400	₱20,600.00	5.86	₱120,716.00	2	2	4	MODERATE
SAN ANTONIO	MLCSP	400	₱20,600.00	3.88	₱79,928.00	2	2	4	MODERATE
A. ANGLIONGTO	MLCSP	300	₱19,100.00	348.93	₱6,664,563.00	2	2	4	MODERATE
LAPU - LAPU	MLCSP	300	₱19,100.00	5.08	₱97,028.00	2	2	4	MODERATE
V. HIZON	MLCSP	300	₱19,100.00	162.74	₱3,108,334.00	2	2	4	MODERATE
A. ANGLIONGTO	MLCSP	300	₱19,100.00	23.08	₱440,828.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	250	₱17,000.00	341.23	₱5,800,910.00	2	2	4	MODERATE
MATINA APLAYA	MLCSP	250	₱17,000.00	266.89	₱4,537,130.00	2	2	4	MODERATE
BUCANA	MLCSP	250	₱17,000.00	434.23	₱7,381,910.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	150	₱11,200.00	55.96	₱626,752.00	2	2	4	MODERATE
PACIANO BANGOY	MLCSP	150	₱11,200.00	8.86	₱99,232.00	2	2	4	MODERATE
AGDAO PROPER	MLCSP	150	₱11,200.00	37.93	₱424,816.00	2	2	4	MODERATE

Table LU-181. Lifeline Utilities, Level III Water Supply System, Vulnerability Table for Liquefaction, Davao City

BARANGAY	TYPE	SIZE	EXPOSURE			IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
			REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
15-B	MLCSP	150	₱11,200.00	19.13	₱214,256.00	2	2	4	MODERATE
SAN ANTONIO	MLCSP	400	₱20,600.00	78.61	₱1,619,366.00	2	2	4	MODERATE
WILFREDO AQUINO	MLCSP	400	₱20,600.00	58.48	₱1,204,688.00	2	2	4	MODERATE
WILFREDO AQUINO	MLCSP	400	₱20,600.00	64.24	₱1,323,344.00	1	1	1	LOW
SAN ANTONIO	MLCSP	400	₱20,600.00	367.39	₱7,568,234.00	2	2	4	MODERATE
ILANG	MLCSP	400	₱20,600.00	21.96	₱452,376.00	2	2	4	MODERATE
ILANG	MLCSP	400	₱20,600.00	21.96	₱452,376.00	1	1	1	LOW

Table LU-182. Climate Change Vulnerability Assessment Summary Matrix of Level III Water Supply System for Liquefaction, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
5-A	<ul style="list-style-type: none"> A total of 7 lines with diameters: 300, 150, 350, 750, 600 mm are exposed to high liquefaction. The total length exposed to liquefaction is 587. 89 m. The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> There will be disruption of regular operations due to damage of pipes. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
39-D	<ul style="list-style-type: none"> A total of 7 lines with diameters: 300, 150, 350, 750, 600 mm are exposed to high liquefaction. The total length exposed to liquefaction is 587. 89 m. The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> There will be disruption of regular operations due to damage of pipes. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-182. Climate Change Vulnerability Assessment Summary Matrix of Level III Water Supply System for Liquefaction, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
37-D	<ul style="list-style-type: none"> ● A total of 5 lines with diameter: 300 mm. ● The total length exposed to liquefaction is 569.128 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
32-D	<ul style="list-style-type: none"> ● A total of 12 lines with diameters: 300, 400, 500 mm. ● The total length exposed to liquefaction is 1153.82 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
24-C	<ul style="list-style-type: none"> ● A total of 4 lines with diameters: 300, and 150 mm. ● The total length exposed to liquefaction is 293.20 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. ● 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
30-C	<ul style="list-style-type: none"> ● A total of 10 lines with diameters: 150, 300 and 400 mm. ● The total length exposed to liquefaction is 1110.56 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-182. Climate Change Vulnerability Assessment Summary Matrix of Level III Water Supply System for Liquefaction, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
11-B	<ul style="list-style-type: none"> • A total of 3 lines with diameters:300 mm. • The total length exposed to liquefaction is 221.39 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
28-C	<ul style="list-style-type: none"> • A total of 11 lines with diameter: 150mm. • The total length exposed to liquefaction is 687.44 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
12-B	<ul style="list-style-type: none"> • A total of 2 lines with diameters: 100 and 400 mm. • The total length exposed to liquefaction is 41.57 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. • 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
15-B	<ul style="list-style-type: none"> • A total of 6 lines with diameters: 400, 150, and 300 mm. • The total length exposed to liquefaction is 149.22 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-182. Climate Change Vulnerability Assessment Summary Matrix of Level III Water Supply System for Liquefaction, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
14-B	<ul style="list-style-type: none"> • A total of 5 lines with diameters: 150, and 400 mm. • The total length exposed to liquefaction is 299.79 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
26-C	<ul style="list-style-type: none"> • A total of 4 lines with diameters: 150, and 300. • The total length exposed to liquefaction is 293.20 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
MATINA CROSS-ING	<ul style="list-style-type: none"> • A total of 60 lines with diameters: 150, 350, 700 and 750 mm. • The total length exposed to liquefaction is 8,049.46 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
BUCANA	<ul style="list-style-type: none"> • A total of 20 lines with diameters: 150, 250, and 750 mm. • The total length exposed to liquefaction is 2068.16 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

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AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
2-A	<ul style="list-style-type: none"> • A total of 9 lines with diameters: 300, 250, and 750 mm. • The total length exposed to liquefaction is 891.72 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
BAGO APLAYA	<ul style="list-style-type: none"> • A total of 28 lines with diameters: 250, 300, 350, 400, 450, 500, and 600. • The total length exposed to liquefaction is 5288.47 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
DUMOY	<ul style="list-style-type: none"> • A total of 4 lines with diameters: 250, 300, 500, and 600. • The total length exposed to liquefaction is 1428.23 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
MATINA APLAYA	<ul style="list-style-type: none"> • A total of 26 lines with diameters: 150, 250, 300, and 350. • The total length exposed to liquefaction is 4665.30 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

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AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
7-A	<ul style="list-style-type: none"> ● A total of 8 lines with diameters: 500, and 600. ● The total length exposed to liquefaction is 556.15 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
MA-A	<ul style="list-style-type: none"> ● A total of 18 lines with diameters: 100, 150, 300, 350, 400, 450, 500, 600, 700, 750 and 800. ● The total length exposed to liquefaction is 2,110.85 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
16-B	<ul style="list-style-type: none"> ● A total of 7 lines with diameters: 150 and 300. ● The total length exposed to liquefaction is 591.50 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
10-A	<ul style="list-style-type: none"> ● A total of 4 lines with diameters: 150 and 500. ● The total length exposed to liquefaction is 403.36 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-182. Climate Change Vulnerability Assessment Summary Matrix of Level III Water Supply System for Liquefaction, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
6-A	<ul style="list-style-type: none"> •A total of 5 lines with diameters: 350, 600. •The total length exposed to liquefaction is 284.03 m. •The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> •There will be disruption of regular operations due to damage of pipes. •There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> •Strengthen contingency plans for alternative methods of water supply delivery to affected areas. •Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
4-A	<ul style="list-style-type: none"> •A total of 5 lines with diameters: 150 and 500. •The total length exposed to liquefaction is 633.06 m. •The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> •There will be disruption of regular operations due to damage of pipes. •There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> •Strengthen contingency plans for alternative methods of water supply delivery to affected areas. •Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
27-C	<ul style="list-style-type: none"> •A total of 3 lines with diameters: 150 and 200. •The total length exposed to liquefaction is 325.50 m. •The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> •There will be disruption of regular operations due to damage of pipes. •There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> •Strengthen contingency plans for alternative methods of water supply delivery to affected areas. •Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
31-D	<ul style="list-style-type: none"> •A total of 8 lines with diameters: 150 and 300. •The total length exposed to liquefaction is 340.10 m. •The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> •There will be disruption of regular operations due to damage of pipes. •There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> •Strengthen contingency plans for alternative methods of water supply delivery to affected areas. •Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

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AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
38-D	<ul style="list-style-type: none"> ● A total of 2 lines with diameter:300. ● The total length exposed to liquefaction is 21.36 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
40-D	<ul style="list-style-type: none"> ● A total of 1 lines with diameters: 150. ● The total length exposed to liquefaction is 283.77 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
35-D	<ul style="list-style-type: none"> ● A total of 1 line with diameters: 200. ● The total length exposed to liquefaction is 10.88 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
23-C	<ul style="list-style-type: none"> ● A total of 2 lines with diameters: 150. ● The total length exposed to liquefaction is 8.46 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

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AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
TALOMO	<ul style="list-style-type: none"> ● A total of 6 lines with diameters: 250 and 350 mm. ● The total length exposed to liquefaction is 858.44 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Angliongto	<ul style="list-style-type: none"> ● A total of 6 lines with diameters: 250, 300, and 400. ● The total length exposed to liquefaction is 939.53 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Agdao Proper	<ul style="list-style-type: none"> ● A total of 19 lines with diameters: 150, 200, 300 and 400. ● The total length exposed to liquefaction is 1619.91 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Buhangin	<ul style="list-style-type: none"> ● A total of 1 lines with diameters: 800. ● The total length exposed to liquefaction is 19.46 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

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AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Centro (Agdao)	<ul style="list-style-type: none"> ● A total of 1 lines with diameters: 400. ● The total length exposed to liquefaction is 93.79 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Vicente Duterte	<ul style="list-style-type: none"> ● A total of 6 lines with diameters: 400. ● The total length exposed to liquefaction is 903.70 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Ilang	<ul style="list-style-type: none"> ● A total of 2 lines with diameters: 400 mm. ● The total length exposed to liquefaction is 29.29 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Lapu-Lapu	<ul style="list-style-type: none"> ● A total of 4 lines with diameters: ● The total length exposed to liquefaction is 5288.47 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-182. Climate Change Vulnerability Assessment Summary Matrix of Level III Water Supply System for Liquefaction, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Leon Garcia	<ul style="list-style-type: none"> ● A total of 1 lines with diameters: 150. ● The total length exposed to liquefaction is 9.75 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Paciano Bangoy	<ul style="list-style-type: none"> ● A total of 8 lines with diameters: 150 mm. ● The total length exposed to liquefaction is 630.71 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Pampanga	<ul style="list-style-type: none"> ● A total of 11 lines with diameters: 250 300. ● The total length exposed to liquefaction is 1156.08 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Panacan	<ul style="list-style-type: none"> ● A total of 8 lines with diameters: 250,400. ● The total length exposed to liquefaction is 1430.65 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-182. Climate Change Vulnerability Assessment Summary Matrix of Level III Water Supply System for Liquefaction, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Castillo	<ul style="list-style-type: none"> ● A total of 3 lines with diameters: 400. ● The total length exposed to liquefaction is 495.30 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
San Antonio	<ul style="list-style-type: none"> ● A total of 5 lines with diameters: 400. ● The total length exposed to liquefaction is 874.04 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Sasa	<ul style="list-style-type: none"> ● A total of 17 lines with diameters: 200,250, 300 ● The total length exposed to liquefaction is 2964.29 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Tigatto	<ul style="list-style-type: none"> ● A total of 4 lines with diameters: 200 and 400. ● The total length exposed to liquefaction is 2350.63 m. ● The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-182. Climate Change Vulnerability Assessment Summary Matrix of Level III Water Supply System for Liquefaction, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Tomas Monte-verde	<ul style="list-style-type: none"> • A total of 13 lines with diameters: 150. • The total length exposed to liquefaction is 1017.87 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Ubalde	<ul style="list-style-type: none"> • A total of 4 lines with diameters: 400. • The total length exposed to liquefaction is 261.96 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Hizon	<ul style="list-style-type: none"> • A total of 11 lines with diameters: 250, 300, • The total length exposed to liquefaction is 2068.16 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Wilfredo Aquino	<ul style="list-style-type: none"> • A total of 18 lines with diameters: 150,300 and 400 • The total length exposed to liquefaction is 1091.80 m. • The degree of impact is moderate, the adaptive capacity is moderate as DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

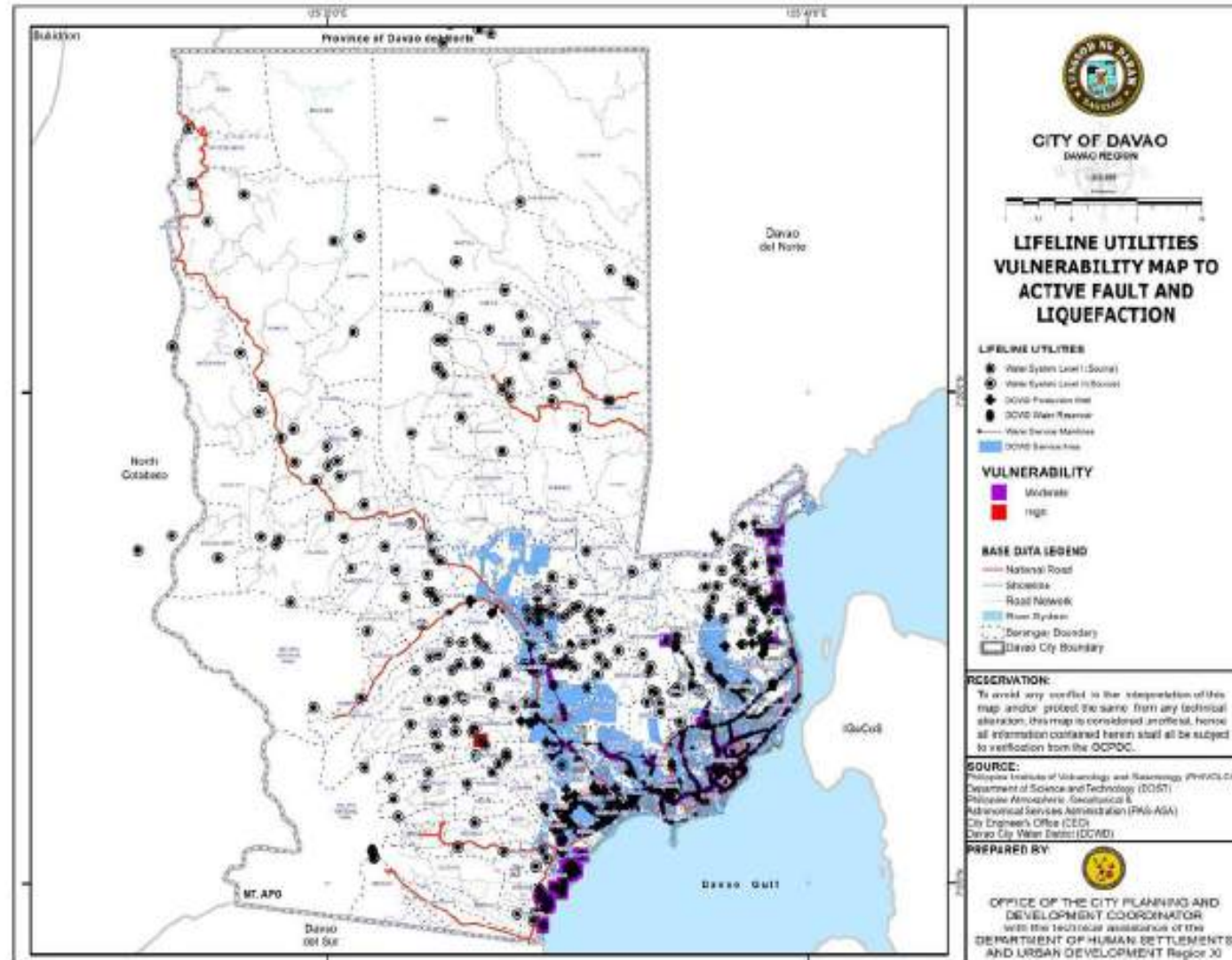
Vulnerability of DCWD Wells

All four wells susceptible to liquefaction have low vulnerability. This is attributed to high adaptive capacity of wells.

Table LU-183. Lifeline Utilities, DCWD Production Wells, Vulnerability Table for Liquefaction, Davao City

EXPOSURE								
LOCATION	LIQUEFACTION	PUMP TYPE	REPLACEMENT COST	VALUE OF EXISTING	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX SCORE	VULNERABILITY INDEX RATING
UUHSA, Brgy. Talomo	Moderate	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Km. 8 Ulas, Brgy. Talomo	Moderate	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Puan Junction, Brgy. Talomo	Moderate	SUBMERSIBLE	6,500,000.00	6,500,000.00	2	1	2	LOW
Lower Rapnaga, Puan, Brgy. Bago Aplaya	Moderate	SUBMERSIBLE	6,500,000.00	6,500,000.00	2	1	2	LOW
Lower Rapnaga, Puan, Brgy. Bago Aplaya	High	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Lower Rapnaga, Puan, Brgy. Bago Aplaya	High	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Crossing Bago Aplaya, Brgy. Bago Aplaya	High	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Km. 10 Bago Aplaya fronting Ideal Subdivision, Brgy. Bago Aplaya	High	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	High	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Km. 11 Dumoy near the entrance to Dusnai, Bago Gallera Road near Gallera De Oro Subd., Brgy. Bago Gallera	High	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Km. 9, Puan along Davao Cotabato Road Brgy. Bago Aplaya	Moderate	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Catotal Subdivision near Block 22, Brgy. Entrance to Greenland Subdivision, along Davao Cotabato Road, Brgy. Dumoy	Moderate	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW

Map 5.19 Lifeline Utilities, Water Supply, Vulnerability Map to Active Fault and Liquefaction



Vulnerability of Cell sites

A total of 13 cellsites are moderately vulnerable to liquefaction these are found in Brgy. Daliao, Toril, Brgy. Lizada, Lorenzo Manuel St., San Vicente, Brgy. Daliao, Toril, Davao City, Brgy. Daliao, Toril, Badak Beach Resort, Brgy. Daliao, Toril (Pob.), Lasang, Barilio Lasang, Hao Property, Bariio Lasang, Corner National Highway-Lim Street, Brgy. Lizada, Ferriols Compound, Brgy. Toril Proper, Sto. Cristo St., cor. Rasay St., Brgy. Toril Proper, Brgy. Bunawan, Purok 3, (near Market site), Brgy. Bunawan, and Crossing Licanan, Brgy. Alejandra Navarro (Lasang).

Table LU-184. Lifeline Utilities, Cell Sites, Vulnerability Table for Liquefaction, Davao City

EXPOSURE					DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE				
GLOBE TELECOM, INC.	Brgy. Daliao, Toril, Brgy. Lizada	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	2	5	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	Lorenzo Manuel St., San Vicente, Brgy. Daliao, Toril, Davao City,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	2	5	Moderate
SMART COMMUNICATIONS, INC.	Brgy. Daliao, Toril	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	2	5	Moderate
GLOBE TELECOM, INC.	Badak Beach Resort, Brgy. Daliao, Toril (Pob.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	2	5	Moderate
SMART COMMUNICATIONS, INC.	Mac Arthur Highway, Dumoy,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Barangay Bago Aplaya, Talomo District, Davao City Golf Country Club	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	Doña Luisa Subdivision, Phase 2, Brgy. Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low

Table LU-184. Lifeline Utilities, Cell Sites, Vulnerability Table for Liquefaction, Davao City

EXPOSURE					DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE				
SMART COMMUNICATIONS, INC.	Matina Aplaya Road, Brgy. Pagasa, Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Matina Aplaya (near Lanzano Subd.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	JMS Bldg., #88 Maya Street, Barangay 76A, Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	University Ave., Juna Subd., Martina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Abarquez Prop., University Ave., Juna Subd., Martina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Matina Aplaya	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low

Table LU-184. Lifeline Utilities, Cell Sites, Vulnerability Table for Liquefaction, Davao City

EXPOSURE					DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE				
DIGITEL MOBILE PHILIPPINES, INC.	Mc Arthur Hiway, Brgy. 74-A, Matina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	NCC Mall Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Centerpoint Mall, Brgy. Matina Crossing,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Magno Prop., No. 64 V. Mapa St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	No. 64 V. Mapa St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	JVALL Bldg., McArthur Hi-way, (Maa Crossing)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Sandawa, McArthur Hi-Way, Matina,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Sandawa, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	Magallanes St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro corner Quimpo Blvd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	NCCC Mall, Maa,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Matina Hi-way cor. MAA Rd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	#88 Maya St., Brgy. 76A, Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro cor. Quimpo Blvd.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Ponciano Reyes St. (crooked Rd.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low

Table LU-184. Lifeline Utilities, Cell Sites, Vulnerability Table for Liquefaction, Davao City

EXPOSURE					DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE				
DIGITEL MOBILE PHILIPPINES, INC.	Magno Bldg., Ponciano Reyes St. (crooked rd.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	Bonifacio St., cor M.L. Quezon Blvd	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	109 Piapi, Quezon Blvd,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Santiago's Lot, Brgy. Sasa Buhangin,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Erlinda Reyes Bldg., 19-Piapi Quezon Blvd.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	5/F Gaisano Ilustre St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Ilustre St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	J.S. Gaisano Mall, Ilustre St., cor. Gen. Luna St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	General Malvar St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	D. Ponce St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Chippens Bldg., 368 Padre Gomez St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Chippens Bldg., 368 Padre Gomez St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Davao Doctors Hospital, Malvar St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Legaspi St. Cor. Bonifacio St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low

Table LU-184. Lifeline Utilities, Cell Sites, Vulnerability Table for Liquefaction, Davao City

EXPOSURE					DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE				
SMART COMMUNICATIONS, INC.	Baguio (Pob.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Km.12, National Highway, Barangay Catalunan Pe-	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	PLDT Ponciano, PLDT Bldg., Ponciano St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Regency Inn, Villa Abrille St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Gov. Sales St., Brgy. 27	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Jose Co Bldg., Gov. Sales St., Brgy. 27,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	NCC Mall Uyanguren	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	NCC Mall Unaguren	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	PBCOM Bldg., Monteverde cor. Bangoy St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	PLDT Post fronting Chimes Store, Sales St.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Holy Cross College, Sta. Ana Ave. Cor Guerero	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	J.P Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	San Pedro Hospital Guzman St., Brgy. Gov. Vicente	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Tábrgy. Gov. Vicente Duterte,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low

Table LU-184. Lifeline Utilities, Cell Sites, Vulnerability Table for Liquefaction, Davao City

EXPOSURE					DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE				
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Lapu Lapu corner Bangoy Sts., Agdao,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Lapu-lapu St., cor. Bangoy Agdao,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Banco Filipino Bldg., Lapu-lapu St., cor. Dacudao Ave.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	Wescon Suites Cmpd., R. Castillo, Agdao	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Peralta Property, Seminary Rd., Brgy Catalunan Grande Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Llanes Prop 1, Cabaguio Ave., Agdao,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Cabaguio Ave., Agdao	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	R. Castillo St., Otero Compound, Lapu-Lapu	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Leonor Property, Camia-áSt., áUbalde-áSu	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Camia St., Ubalde Subd., Brgy. Ubalde	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 mil-	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang,	300 sq. m	₱12 -₱15 mil-	₱12 -₱15 million	2.5	1	2.5	Low

Table LU-184. Lifeline Utilities, Cell Sites, Vulnerability Table for Liquefaction, Davao City

EXPOSURE					DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE				
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	SM Lanang, Km. 6 Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	SM Lanang, Km 6, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	SM Lanang Former Lanang Golf and Country Club, J.P. Laurel Ave., Lanang District, Brgy. San Antonio	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	J.P. Laurel Ave., Monark Compound, Brgy. Rafael	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	SM Davao Ecoland	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	SM Davao Ecoland,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low

Table LU-184. Lifeline Utilities, Cell Sites, Vulnerability Table for Liquefaction, Davao City

EXPOSURE					DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE				
SMART COMMUNICATIONS, INC.	Waterfront Hotel, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Doña Asuncion Road, Brgy. Pampang, Lanang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Km. 9, KMA, Brgy. Sasa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Sitio Nahul, Barangay Baliok,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Sitio Nahul, Brgy. Baliok	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	National Highway Panacan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Lasang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	2	5	Moderate
SMART COMMUNICATIONS, INC.	Barilio Lasang	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	2	5	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	Hao Property, Barilio Lasang,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2.5	2	5	Moderate
SMART COMMUNICATIONS, INC.	Corner National Highway-Lim Street, Brgy. Lizada	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	2	4	Moderate
SMART COMMUNICATIONS,	Ferriols Compound, Brgy.	300 sq. m	₱12 -₱15 mil-	₱12 -₱15 million	2	2	4	Moderate
SMART COMMUNICATIONS, INC.	Sto. Cristo St., cor. Rasay St., Brgy. Toril Proper	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	2	4	Moderate
SMART COMMUNICATIONS, INC.	Along National Highway, Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Commandante Property, Along National Highway, Brgy. Bago Aplaya, Talomo District,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Telstar St., GSIS Subdivision, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low

Table LU-184. Lifeline Utilities, Cell Sites, Vulnerability Table for Liquefaction, Davao City

EXPOSURE					DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE				
SMART COMMUNICATIONS, INC.	Crossing Puan, McArthur Highway	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Bago Aplaya, Talomo	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Vega Property, Cariñosa St. corner Balitaw St., Lanzona Subd., Matina.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Carinosa St., cor. Balitaw St., Lanzona Subd., Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Ortis Road, Brgy. Ulas	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Ortis Road, Brgy. Ulas	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Golden Hardware Bldg.,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Golden Hardware Bldg., Km. 5 McArthur Highway, Matina	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Guardsman, AGT Bldg., Nacilla Street, Brgy. Ma-a	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Guardsman AGT Bldg., Nacilla Street, Brgy. Ma-a,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	PLDT Maa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
GLOBE TELECOM, INC.	Torres St., Brgy. 9-A (Pob.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	PLDT Maa,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Infront of Luisa Avenue Square Bldg., B. Jacinto Ext. St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low

Table LU-184. Lifeline Utilities, Cell Sites, Vulnerability Table for Liquefaction, Davao City

EXPOSURE					DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE				
SMART COMMUNICATIONS, INC.	Landco Bldg., JP Laurel St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
GLOBE TELECOM, INC.	Corner Palma Gil & Cervantes St.	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Billboard on Synchar Hotel, J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	J.P. Laurel Avenue, Bajada,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	University of Southern Philippines, Trade School Drive	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Opal St., Obrero,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Opal St., Obrero	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St., Barangay 20-B (Pob.)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St. Acacia,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
GLOBE TELECOM, INC.	JP Laurel St., Barangay 20-B (Pob.),	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Km10 Doña Salud Subd., Sasa	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Km10 Doña Salud Subd., Sasa,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Pres. Carlos P. Garcia Highway, Brgy. Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	President Carlos P. Garcia Highway (Diversion Road), Brgy. Panacan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low

Table LU-184. Lifeline Utilities, Cell Sites, Vulnerability Table for Liquefaction, Davao City

EXPOSURE					DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE				
DIGITEL MOBILE PHILIPPINES, INC.	Cruz Property, President. Carlos P. Garcia Highway (Diversion Road), Brgy. Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Malagamot Road, Bayani Diaz Compound, Panacan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Malagamot Road, Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway, Panacan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Tefasco Lot, Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Panacan,	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Brgy. Bunawan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	2	4	Moderate
SMART COMMUNICATIONS, INC.	Purok 3, (near Market site), Brgy. Bunawan	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	2	4	Moderate
GLOBE TELECOM, INC.	Crossing Licanan, Brgy. Alejandra Navarro (Lasang)	300 sq. m	₱12 -₱15 million	₱12 -₱15 million	2	2	4	Moderate

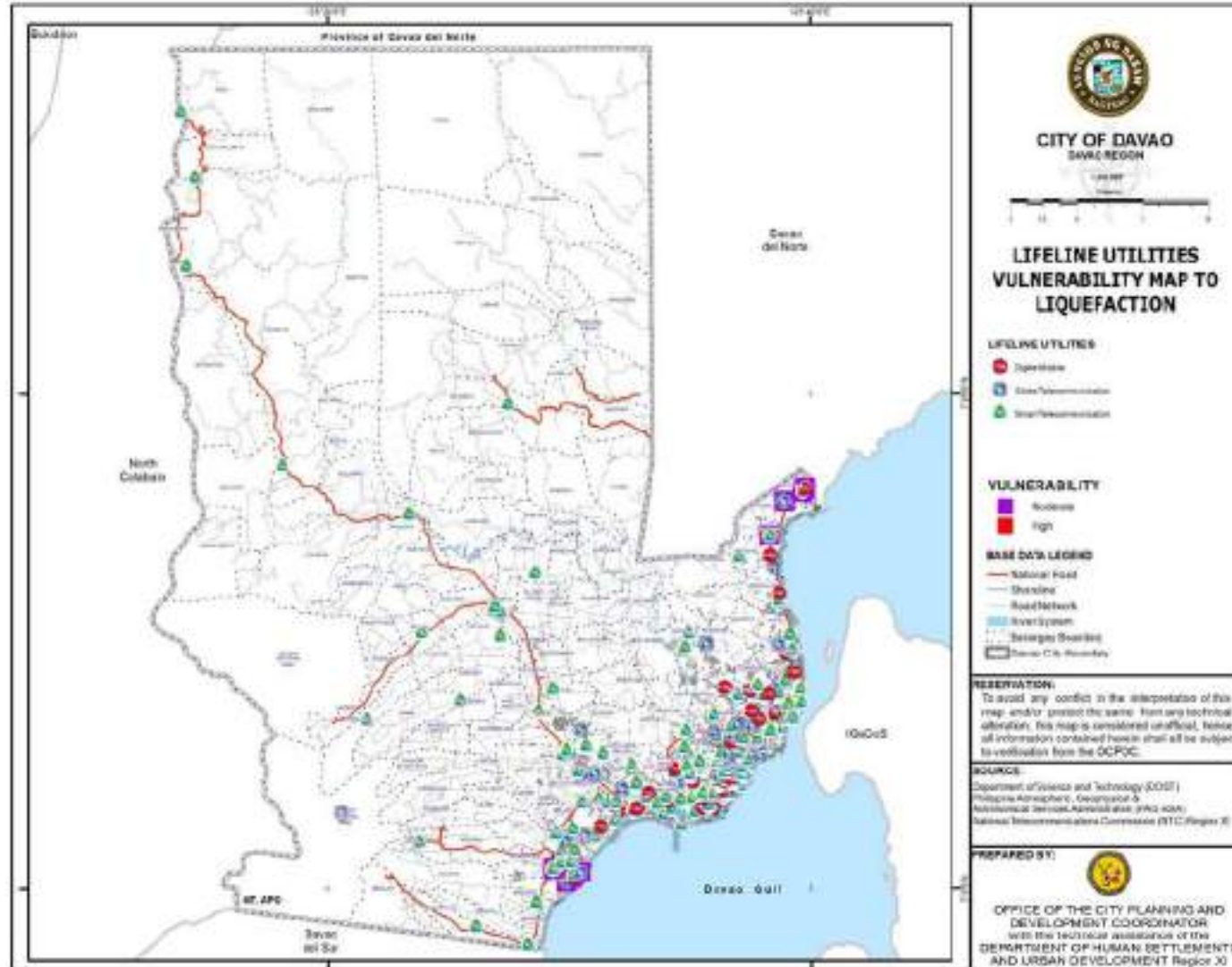
Table LU-185. Change Vulnerability Assessment Summary Matrix of Cell Sites for Liquefaction, Davao City

DECISION AREAS	TECHNICAL FINDINGS	PLANNING IMPLICATIONS	INTERVENTIONS
Brgy. Daliao	<ul style="list-style-type: none"> ● There are 3 cell sites which are within the high liquefaction susceptibility. ● These cell sites have moderate degree of impact of liquefaction and have moderate adaptive capacity. ● 3 cell sites are identified in moderate vulnerability of liquefaction. 	<ul style="list-style-type: none"> ● There will be possible drop down of communication signal. ● Mitigation measures are expensive 	<ul style="list-style-type: none"> ● Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. ● Government interventions by way of securing these facilities from man-made hazards. ● Ensure structural mitigation to withstand the impact of the identified hazards. ● Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.
Brgy. Lizada	<ul style="list-style-type: none"> ● One cell site is within the high liquefaction susceptibility. One cell site is within the moderate liquefaction susceptibility. ● These cell sites have moderate degree of impact of liquefaction and have moderate adaptive capacity. ● 2 cell sites are identified in moderate vulnerability of liquefaction. 	<ul style="list-style-type: none"> ● There will be possible drop down of communication signal. ● Mitigation measures are expensive. 	<ul style="list-style-type: none"> ● Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. ● Government interventions by way of securing these facilities from man-made hazards. ● Ensure structural mitigation to withstand the impact of the identified hazards. ● Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.
Brgy. Toril Proper	<ul style="list-style-type: none"> ● 2 cell sites are within the moderate liquefaction susceptibility. ● These cell sites have moderate degree of impact of liquefaction and have moderate adaptive capacity. ● 2 cell sites are identified in moderate vulnerability of liquefaction. 	<ul style="list-style-type: none"> ● There will be possible drop down of communication signal. ● Mitigation measures are expensive. 	<ul style="list-style-type: none"> ● Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. ● Government interventions by way of securing these facilities from man-made hazards. ● Ensure structural mitigation to withstand the impact of the identified hazards. ● Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.

Table LU-185. Change Vulnerability Assessment Summary Matrix of Cell Sites for Liquefaction, Davao City

DECISION AREAS	TECHNICAL FINDINGS	PLANNING IMPLICATIONS	INTERVENTIONS
Bgry. Lasang	<ul style="list-style-type: none"> ● There are 3 cell sites which are within the high liquefaction susceptibility. 1 cell site is within the high liquefaction susceptibility. ● These cell sites have moderate degree of impact of liquefaction and have moderate adaptive capacity. ● 4 cell sites are identified in moderate vulnerability of liquefaction. 	<ul style="list-style-type: none"> ● There will be possible drop down of communication signal. ● Mitigation measures are expensive. 	<ul style="list-style-type: none"> ● Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. ● Government interventions by way of securing these facilities from man-made hazards. ● Ensure structural mitigation to withstand the impact of the identified hazards. ● Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.
Brgy. Bunawan	<ul style="list-style-type: none"> ● There are 2 cell sites which are within the moderate liquefaction susceptibility. ● These cell sites have moderate degree of impact of liquefaction and have moderate adaptive capacity. ● 2 cell sites are identified in moderate vulnerability of liquefaction. 	<ul style="list-style-type: none"> ● There will be possible drop down of communication signal. ● Mitigation measures are expensive. 	<ul style="list-style-type: none"> ● Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. ● Government interventions by way of securing these facilities from man-made hazards. ● Ensure structural mitigation to withstand the impact of the identified hazards. ● Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.

Map 5.20. Lifeline Utilities, Cell sites, Vulnerability Map to Liquefaction, Davao City



Vulnerability of National Roads to Storm Surge

Portions of C.P Garcia Highway, Dacudao Avenue, Davao-Agusan Highway, Florentino Torres St., J.P. Cabaguio, J.P Laurel, Libby Road, McArthur Highway, Old Airport, Pichon St., Quimpo Boulevard, Quimpo Avenue, and McArthur Highway are highly vulnerable to storm surge. This is due to high degree of impact and low adaptive capacity rating.

Table LU-186. Lifeline Utilities, Roads, Vulnerability Table for Storm Surge, Davao City

ROAD NAME	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
2nd Avenue	0.2056	60,000,000	12,337,800	2.0	2.0	4.0	Moderate
5th Ave.	0.1964	60,000,000	11,781,900	2.0	2.0	4.0	Moderate
5th Ave.	0.0080	60,000,000	478,753	2.0	1.0	2.0	Low
Agdao Flyover	0.3327	56,000,000	18,632,152	3.0	2.0	6.0	Moderate
Agdao Flyover	0.1406	56,000,000	7,876,064	3.0	2.0	6.0	Moderate
Bonifacio Rotonda	0.0839	56,000,000	4,697,403	2.0	2.0	4.0	Moderate
Carlos P. Garcia Highway	0.0067	60,000,000	401,819	3.0	3.0	9.0	High
Carlos P. Garcia Highway	0.0289	60,000,000	1,731,774	3.0	3.0	9.0	High
Carlos P. Garcia Highway	0.0015	60,000,000	91,175	3.0	1.0	3.0	Low
Carlos P. Garcia Highway	0.3565	60,000,000	21,391,800	3.0	2.0	6.0	Moderate
Carlos P. Garcia Highway	0.0289	60,000,000	1,731,720	3.0	2.0	6.0	Moderate
Claro M. Recto St.	0.2221	56,000,000	12,436,984	3.0	2.0	6.0	Moderate
Claro M. Recto St.	0.2052	56,000,000	11,491,424	3.0	2.0	6.0	Moderate
Claro M. Recto St.	0.5195	56,000,000	29,089,592	3.0	2.0	6.0	Moderate
Claro M. Recto St.	0.0260	56,000,000	1,457,512	2.0	2.0	4.0	Moderate
Claro M. Recto St.	0.1375	56,000,000	7,700,728	2.0	2.0	4.0	Moderate
Claro M. Recto St.	0.0158	56,000,000	887,303	3.0	2.0	6.0	Moderate
Claro M. Recto St.	0.0891	56,000,000	4,986,834	3.0	2.0	6.0	Moderate
Dacudao Avenue	0.2357	56,000,000	13,197,408	3.0	2.0	6.0	Moderate
Dacudao Avenue	0.4343	56,000,000	24,319,792	3.0	2.3	7.0	High
Dacudao Avenue	0.1959	56,000,000	10,967,936	3.0	3.0	9.0	High
Dacudao Avenue	0.3666	56,000,000	20,530,160	3.0	2.0	6.0	Moderate
Dacudao Avenue	0.0738	56,000,000	4,133,825	3.0	3.0	9.0	High
Dacudao Avenue	0.2062	56,000,000	11,547,872	3.0	3.0	9.0	High
Davao-Bukidnon Road	0.2152	40,000,000	8,608,040	3.0	3.0	9.0	High

Table LU-186. Lifeline Utilities, Roads, Vulnerability Table for Storm Surge, Davao City

ROAD NAME	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
Davao-Bukidnon Road	0.0154	40,000,000	616,092	3.0	2.0	6.0	Moderate
Davao - Agusan Highway	0.3174	56,000,000	17,772,104	3.0	3.0	9.0	High
Davao - Agusan Highway	0.0786	56,000,000	4,403,717	3.0	2.0	6.0	Moderate
Davao - Agusan Highway	0.8175	56,000,000	45,777,424	3.0	2.0	6.0	Moderate
Davao - Agusan Highway	0.8613	56,000,000	48,230,560	3.0	3.0	9.0	High
Davao - Agusan Highway	1.3049	56,000,000	73,071,600	3.0	3.0	9.0	High
Davao - Agusan Highway	1.0823	56,000,000	60,606,560	3.0	2.0	6.0	Moderate
Davao - Agusan Highway	0.0561	56,000,000	3,140,094	3.0	3.0	9.0	High
Davao - Agusan Highway	0.1872	56,000,000	10,481,408	3.0	3.0	9.0	High
Davao - Agusan Highway	0.4608	56,000,000	25,806,872	3.0	2.0	6.0	Moderate
Davao - Agusan Highway	0.2881	56,000,000	16,130,912	3.0	3.0	9.0	High
Davao - Agusan Highway	0.8330	56,000,000	46,649,176	3.0	3.0	9.0	High
Davao - Agusan Highway	0.4090	56,000,000	22,906,128	3.0	2.0	6.0	Moderate
Davao - Agusan Highway	0.9115	56,000,000	51,041,704	3.0	3.0	9.0	High
Davao - Agusan Highway	0.1423	56,000,000	7,967,736	3.0	3.0	9.0	High
Davao - Agusan Highway	0.2755	56,000,000	15,430,296	3.0	2.0	6.0	Moderate
Davao - Agusan Highway	1.9411	56,000,000	108,703,840	3.0	3.0	9.0	High
Davao - Agusan Highway	0.4573	56,000,000	25,608,072	3.0	3.0	9.0	High
Davao - Agusan Highway	0.5854	56,000,000	32,781,840	3.0	3.0	9.0	High
Davao - Agusan Highway	1.2341	56,000,000	69,110,720	3.0	3.0	9.0	High
Davao - Agusan Highway	1.5330	56,000,000	85,848,560	3.0	3.0	9.0	High
Davao - Agusan Highway	0.2874	56,000,000	16,095,184	3.0	3.0	9.0	High
Davao - Agusan Highway	0.5681	56,000,000	31,814,048	3.0	2.0	6.0	Moderate
Davao - Agusan Highway	0.5142	56,000,000	28,797,104	3.0	2.0	6.0	Moderate
Davao - Agusan Highway	0.4213	56,000,000	23,592,856	3.0	3.0	9.0	High
Davao - Agusan Highway	1.8633	56,000,000	104,342,000	3.0	3.0	9.0	High
Davao - Agusan Highway	0.7272	56,000,000	40,724,712	3.0	3.0	9.0	High
Davao - Agusan Highway	0.2430	56,000,000	13,608,168	3.0	3.0	9.0	High
Davao - Agusan Highway	0.4561	56,000,000	25,540,704	2.0	2.0	4.0	Moderate
Florentino Torres St	0.0015	65,000,000	98,565	2.0	2.0	4.0	Moderate
Florentino Torres St	0.0521	65,000,000	3,388,223	3.0	3.0	9.0	High
Florentino Torres St	0.0223	65,000,000	1,446,556	2.0	2.0	4.0	Moderate

Table LU-186. Lifeline Utilities, Roads, Vulnerability Table for Storm Surge, Davao City

ROAD NAME	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
Florentino Torres St	0.3497	65,000,000	22,733,490	3.0	3.0	9.0	High
Florentino Torres St	0.0095	65,000,000	618,499	3.0	2.0	6.0	Moderate
Florentino Torres St	0.1677	65,000,000	10,901,410	3.0	3.0	9.0	High
Florentino Torres St	0.1291	65,000,000	8,391,110	3.0	3.0	9.0	High
Florentino Torres St	0.1745	65,000,000	11,342,630	3.0	3.0	9.0	High
Florentino Torres St	0.0396	65,000,000	2,573,922	2.0	2.0	4.0	Moderate
J.P. Cabaguio Avenue	0.0846	56,000,000	4,739,330	3.0	3.0	9.0	High
J.P. Cabaguio Avenue	0.4031	56,000,000	22,571,248	2.0	2.0	4.0	Moderate
J.P. Cabaguio Avenue	0.1827	56,000,000	10,230,752	2.0	2.0	4.0	Moderate
J.P. Cabaguio Avenue	0.0910	56,000,000	5,096,890	3.0	3.0	9.0	High
J.P. Cabaguio Avenue	0.1908	56,000,000	10,682,000	2.0	2.0	4.0	Moderate
Jose P. Laurel Avenue	0.2920	56,000,000	16,353,736	2.0	2.0	4.0	Moderate
Jose P. Laurel Avenue	0.2001	56,000,000	11,203,528	2.0	2.0	4.0	Moderate
Jose P. Laurel Avenue	0.1927	56,000,000	10,790,304	3.0	3.0	9.0	High
Jose P. Laurel Avenue	0.1487	56,000,000	8,328,040	3.0	3.0	9.0	High
Jose P. Laurel Avenue	0.1453	56,000,000	8,135,120	3.0	3.0	9.0	High
Jose P. Laurel Avenue	0.1008	56,000,000	5,644,800	2.0	2.0	4.0	Moderate
Jose P. Laurel Avenue	0.0300	56,000,000	1,682,223	2.0	2.0	4.0	Moderate
Jose P. Laurel Avenue	0.3206	56,000,000	17,955,000	3.0	2.0	6.0	Moderate
Jose P. Laurel Avenue	0.1157	56,000,000	6,476,624	2.0	2.0	4.0	Moderate
Jose P. Laurel Avenue	0.1912	56,000,000	10,704,624	3.0	3.0	9.0	High
Jose P. Laurel Avenue	0.1200	56,000,000	6,717,424	2.0	2.0	4.0	Moderate
Jose P. Laurel Avenue	0.2159	56,000,000	12,091,016	3.0	3.0	9.0	High
Jose P. Laurel Avenue	0.0008	56,000,000	47,255	2.0	2.0	4.0	Moderate
Jose P. Laurel Avenue	0.2964	56,000,000	16,598,456	2.0	2.0	4.0	Moderate
Jose P. Laurel Avenue	0.2024	56,000,000	11,335,520	2.0	2.0	4.0	Moderate
Jose P. Laurel Avenue	0.0609	56,000,000	3,411,822	3.0	3.0	9.0	High
Jose P. Laurel Avenue	0.2931	56,000,000	16,416,232	2.0	2.0	4.0	Moderate
Jose P. Laurel Avenue	0.2108	56,000,000	11,805,920	2.0	2.0	4.0	Moderate
Jose P. Laurel Avenue	0.3861	56,000,000	21,621,376	3.0	3.0	9.0	High
Jose P. Laurel Avenue	0.2669	56,000,000	14,945,728	3.0	2.0	6.0	Moderate
Jose P. Laurel Avenue	0.0942	56,000,000	5,274,114	3.0	3.0	9.0	High

Table LU-186. Lifeline Utilities, Roads, Vulnerability Table for Storm Surge, Davao City

ROAD NAME	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
Leon Garcia St.	0.2148	49,000,000	10,523,681	2.0	2.0	4.0	Moderate
Leon Garcia St.	0.4363	49,000,000	21,381,052	2.0	2.0	4.0	Moderate
Libby Road	0.0062	25,000,000	154,660	3.0	2.0	6.0	Moderate
Libby Road	0.0605	25,000,000	1,512,675	3.0	3.0	9.0	High
Libby Road	0.2532	25,000,000	6,330,975	3.0	3.0	9.0	High
Mc. Arthur Highway	0.1441	56,000,000	8,071,896	3.0	3.0	9.0	High
Mc. Arthur Highway	0.0807	56,000,000	4,519,889	2.0	2.0	4.0	Moderate
Mc. Arthur Highway	0.1227	56,000,000	6,871,760	3.0	3.0	9.0	High
Mc. Arthur Highway	0.0201	56,000,000	1,124,990	3.0	3.0	9.0	High
Mc. Arthur Highway	0.0113	56,000,000	630,767	3.0	3.0	9.0	High
Mc. Arthur Highway	0.0200	56,000,000	1,122,274	3.0	3.0	9.0	High
Mc. Arthur Highway	0.0123	56,000,000	691,146	3.0	2.0	6.0	Moderate
Mc. Arthur Highway	0.0412	56,000,000	2,309,126	3.0	3.0	9.0	High
Mc. Arthur Highway	0.4789	56,000,000	26,815,712	3.0	3.0	9.0	High
Mc. Arthur Highway	0.0563	56,000,000	3,152,010	2.0	2.0	4.0	Moderate
Mc. Arthur Highway	0.8616	56,000,000	48,251,056	3.0	3.0	9.0	High
Mc. Arthur Highway	0.9282	56,000,000	51,977,576	3.0	3.0	9.0	High
Mc. Arthur Highway	0.0869	56,000,000	4,868,427	2.0	2.0	4.0	Moderate
Mc. Arthur Highway	0.2745	56,000,000	15,370,488	3.0	2.0	6.0	Moderate
Mc. Arthur Highway	0.4608	56,000,000	25,807,096	3.0	3.0	9.0	High
Mc. Arthur Highway	0.4339	56,000,000	24,296,720	3.0	2.0	6.0	Moderate
Mc. Arthur Highway	1.0214	56,000,000	57,199,520	3.0	3.0	9.0	High
Old Airport Road	0.0204	60,000,000	1,223,874	3.0	3.0	9.0	High
Old Airport Road	0.0616	60,000,000	3,697,902	2.0	2.0	4.0	Moderate
Old Airport Road	0.1224	60,000,000	7,343,220	2.0	2.0	4.0	Moderate
Old Airport Road	0.0408	60,000,000	2,447,808	3.0	3.0	9.0	High
Pakiputan Wharf Road	0.5062	56,000,000	28,345,632	2.0	2.0	4.0	Moderate
Pichon St.	0.0019	56,000,000	106,785	3.0	2.0	6.0	Moderate
Pichon St.	0.0102	56,000,000	569,285	3.0	2.0	6.0	Moderate
Pichon St.	0.0467	56,000,000	2,613,458	3.0	3.0	9.0	High
Pichon St.	0.4288	56,000,000	24,013,696	3.0	2.0	6.0	Moderate
Pichon St.	0.3063	56,000,000	17,152,744	3.0	3.0	9.0	High

Table LU-186. Lifeline Utilities, Roads, Vulnerability Table for Storm Surge, Davao City

ROAD NAME	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
Pichon St.	0.1521	56,000,000	8,516,032	3.0	2.0	6.0	Moderate
Quezon Boulevard	0.2429	86,000,000	20,892,582	2.0	2.0	4.0	Moderate
Quezon Boulevard	0.6597	86,000,000	56,732,222	2.0	2.0	4.0	Moderate
Quezon Boulevard	1.1526	86,000,000	99,119,300	3.0	3.0	9.0	High
Quezon Boulevard	0.4056	86,000,000	34,877,988	3.0	3.0	9.0	High
Quezon Boulevard	0.6372	86,000,000	54,801,006	3.0	3.0	9.0	High
Quezon Boulevard	1.1235	86,000,000	96,622,720	3.0	3.0	9.0	High
Quimpo Boulevard	0.4617	50,000,000	23,083,850	3.0	2.0	6.0	Moderate
Quimpo Boulevard	0.0002	50,000,000	11,396	2.0	1.0	2.0	Low
Quimpo Boulevard	0.1625	50,000,000	8,122,550	3.0	3.0	9.0	High
Quimpo Boulevard	0.1923	50,000,000	9,617,350	3.0	3.0	9.0	High
Quimpo Boulevard	0.3518	50,000,000	17,590,250	3.0	3.0	9.0	High
Quimpo Boulevard	1.2646	50,000,000	63,231,500	3.0	3.0	9.0	High
Quimpo Boulevard	0.2471	50,000,000	12,352,500	3.0	2.0	6.0	Moderate
Quimpo Boulevard	0.6000	50,000,000	29,999,050	3.0	3.0	9.0	High
Quimpo Boulevard	0.1951	50,000,000	9,755,650	2.0	2.0	4.0	Moderate
Quimpo Boulevard	0.0372	50,000,000	1,859,645	3.0	2.0	6.0	Moderate
Quirino Avenue	0.0546	40,000,000	2,183,380	3.0	2.0	6.0	Moderate
Quirino Avenue	0.2223	40,000,000	8,891,360	3.0	2.0	6.0	Moderate
Quirino Avenue	0.0084	40,000,000	334,358	3.0	2.0	6.0	Moderate
Quirino Avenue	0.2220	40,000,000	8,879,080	3.0	2.0	6.0	Moderate
Quirino Avenue	0.1508	40,000,000	6,031,840	3.0	3.0	9.0	High
Quirino Avenue	0.0763	40,000,000	3,053,348	3.0	3.0	9.0	High
Quirino Avenue	0.2063	40,000,000	8,253,280	3.0	3.0	9.0	High
Quirino Avenue	0.1959	40,000,000	7,835,560	3.0	3.0	9.0	High
Quirino Avenue	0.0633	40,000,000	2,531,616	3.0	2.0	6.0	Moderate
Quirino Avenue	0.1080	40,000,000	4,318,640	3.0	3.0	9.0	High
Quirino Avenue	0.3941	40,000,000	15,762,600	3.0	2.0	6.0	Moderate
Quirino Avenue	0.1893	40,000,000	7,570,120	3.0	3.0	9.0	High
Quirino Avenue	0.0145	40,000,000	579,612	3.0	2.0	6.0	Moderate
Quirino Avenue	0.0555	40,000,000	2,221,916	3.0	3.0	9.0	High
Rafael Castillo St.	0.4876	86,000,000	41,932,912	2.0	3.0	6.0	Moderate

Table LU-186. Lifeline Utilities, Roads, Vulnerability Table for Storm Surge, Davao City

ROAD NAME	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
Rafael Castillo St.	0.2671	86,000,000	22,968,966	2.0	2.0	4.0	Moderate
Rafael Castillo St.	0.0173	86,000,000	1,490,131	2.0	2.0	4.0	Moderate
Rafael Castillo St.	0.0009	86,000,000	74,717	3.0	2.0	6.0	Moderate
Rafael Castillo St.	0.3657	86,000,000	31,452,006	2.0	2.0	4.0	Moderate
Rafael Castillo St.	0.0016	86,000,000	136,849	3.0	2.0	6.0	Moderate
Rafael Castillo St.	0.8343	86,000,000	71,749,800	3.0	3.0	9.0	High
Rafael Castillo St.	0.9058	86,000,000	77,899,746	3.0	3.0	9.0	High
Rafael Castillo St.	0.2916	86,000,000	25,076,052	2.0	2.0	4.0	Moderate
Ramon Magsaysay Ave.	0.4384	60,000,000	26,304,960	2.0	2.0	4.0	Moderate
Ramon Magsaysay Ave.	0.0217	60,000,000	1,301,472	2.0	2.0	4.0	Moderate
Ramon Magsaysay Ave.	0.0195	60,000,000	1,170,942	2.0	2.0	4.0	Moderate
Ramon Magsaysay Ave.	0.0129	60,000,000	775,980	3.0	2.0	6.0	Moderate
Ramon Magsaysay Ave.	0.4035	60,000,000	24,208,140	2.0	2.0	4.0	Moderate
Ramon Magsaysay Ave.	0.4781	60,000,000	28,685,100	2.0	2.0	4.0	Moderate
Sta. Ana Ave.	0.3457	60,000,000	20,740,680	2.0	2.0	4.0	Moderate
Sta. Ana Ave.	0.2241	60,000,000	13,444,140	3.0	2.0	6.0	Moderate
Sta. Ana Ave.	0.0213	60,000,000	1,275,942	2.0	2.0	4.0	Moderate

Table LU-187. Climate Change Vulnerability Assessment Summary Matrix for Storm Surge, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
<p>2nd Avenue, 5th Ave., Agdao flyover, Bonifacio Rotonda, Carlos P. Garcia Highway, Claro M. Recto St., Dacudao Avenue, Davao - Bukidnon Road, Davao - Agusan Highway, Florentino Torres St., J.P Cabaguio Avenue, Jose P. Laurel Ave- nue, Leon Garcia St., Libby Road, Mc. Arthur Highway, Old Airport Road, Pakiputan Wharf Road, Pichon St., Quezon Boulevard, Quirino Avenue, Rafael Castillo St., Ramon Magsaysay Ave., Sta. Ana Ave.,</p>	<ul style="list-style-type: none"> ● These road networks are moderately vulnerable. ● For a 2-meter storm surge a total of 12.0117891 kilometers is exposed. ● For a 3-meter storm surge a total of 8.842366537 kilometers. is exposed. ● For a 4-meter storm surge a total of 0.06279258 kilometers is exposed. ● For a 5-meter storm surge a total of 0.021654509 kilometers is exposed. ● There are no recorded incidents of damage due to storm surge. 	<ul style="list-style-type: none"> ● A portion of the road maybe damaged or totally. ● An appropriation of fund for maintenance/replacement based on the degree of damage within those affected road network. 	
<p>Carlos P. Garcia Highway, Dacudao Avenue, Davao - Bukidnon Road, Davao - Agusan Highway, Florentino Torres St., P. Cabaguio Avenue, Jose P. Laurel Avenue, Libby Road, Mc. Arthur Highway, Old Airport Road, Pichon St., Quezon Boulevard, Quimpo Boulevard, Quirino Avenue, Rafael Castillo St</p>	<ul style="list-style-type: none"> ● These road networks are moderately vulnerable. ● For a 2-meter storm surge a total of 10.72581 kilometers is exposed. ● For a 3-meter storm surge a total of 4.635659 kilometers is exposed. ● For a 4-meter storm surge a total of 9.3092964 kilometers is exposed ● For a 5-meter storm surge a total of 6.61918318 kilometers is exposed. ● There are no recorded incidents of damage due to storm surge. 	<ul style="list-style-type: none"> ● Road access interruption due to maintenance/replacement of affected areas. ● Delay of delivery of goods and services 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation.

Vulnerability of Bridges

Almost all bridges have low vulnerability. This is due to the high adaptive capacity for storm surge.

Table LU-188. Lifeline Utilities, Bridges, Vulnerability Table for Storm Surge 2-meter wave, Davao City

ROAD NAME	REPLACEMENT COST PER (LINEAR METER)	EXPOSED LENGTH (LINEAR)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
Bunawan Br. 1	1,200,000	49.76	59,712,000	3.0	1.0	3.0	Low
Bunawan Br. 2	1,200,000	47.79	57,348,000	3.0	1.0	3.0	Low
Crossing Malabog Br.	1,200,000	41.02	49,224,000	2.0	1.0	2.0	Low
Ilang Br.	1,200,000	25.70	30,840,000	3.0	1.0	3.0	Low
Panacan Br.	1,200,000	23.53	28,236,000	3.0	1.0	3.0	Low
Sasa Br.	1,200,000	18.43	22,116,000	3.0	1.0	3.0	Low
Talomo Br. 1	2,053,000	48.10	98,749,300	3.0	1.0	3.0	Low
Talomo Br. 2	2,053,000	48.11	98,769,830	3.0	1.0	3.0	Low
Agdao Flyover	1,200,000	382.98	459,576,000	3.0	1.0	3.0	Low
Bago Br.	1,200,000	31.21	37,452,000	3.0	1.0	3.0	Low
Baracatan Br.	1,200,000	22.20	26,640,000	3.0	1.0	3.0	Low

Table LU-188. Lifeline Utilities, Bridges, Vulnerability Table for Storm Surge 3-meter wave, Davao City

ROAD NAME	REPLACEMENT COST PER (LINEAR)	EXPOSED LENGTH (LINEAR METERS)	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
Talomo Br. 2	2,053,000	48.11	98,769,830	2.00	1.00	2.00	Low
Bago Br.	1,200,000	31.21	37,452,000	2.00	1.00	2.00	Low
Ilang Br.	1,200,000	25.70	30,840,000	3.00	1.00	3.00	Low
Talomo Br. 1	2,053,000	48.10	98,749,300	2.00	1.00	2.00	Low

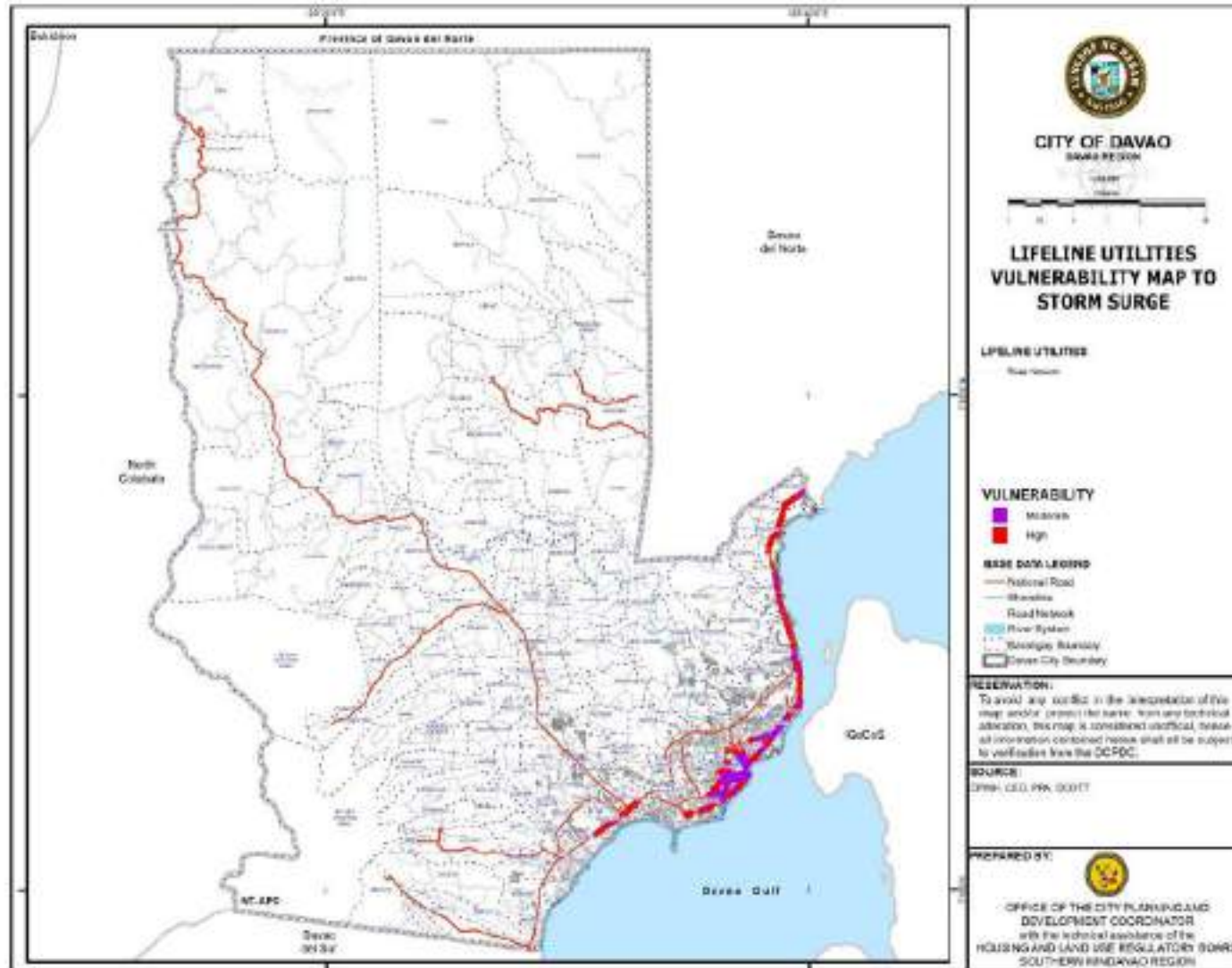
Table LU-189. Climate Change Vulnerability Assessment Summary Matrix, Davao City

BRIDGE NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Bago Br.	<ul style="list-style-type: none"> ● This bridge is located at Barangay Agdao Proper. ● Exposed length is 31.21 meters. ● Degree of impact is high. ● Adaptive capacity is high. ● Total value of exposed length is ₱ 37,452,000. 	<ul style="list-style-type: none"> ● Minimal to negligible implications. 	<ul style="list-style-type: none"> ● Government interventions by securing these utilities from man-made hazards. ● Maintain these utilities to cope with the current climate change impacts.
Ilang Br.	<ul style="list-style-type: none"> ● This bridge is located at Barangay Ilang. ● Exposed length is 25.70 meters. ● Degree of impact is high. ● Adaptive capacity is high. ● Total value of exposed length is ₱ 30,840,000. 	<ul style="list-style-type: none"> ● Minimal to negligible implications. 	<ul style="list-style-type: none"> ● Government interventions by securing these utilities from man-made hazards. ● Maintain these utilities to cope with the current climate change impacts.
Talomo Br. I	<ul style="list-style-type: none"> ● This bridge is located at Barangay Talomo Proper. ● Exposed length is 48.10 meters. ● Degree of impact is high. ● Adaptive capacity is high. ● Total value of exposed length is ₱ 98,749,300. 	<ul style="list-style-type: none"> ● Minimal to negligible implications. 	<ul style="list-style-type: none"> ● Government interventions by securing these utilities from man-made hazards. ● Maintain these utilities to cope with the current climate change impacts.
Talomo Br. II	<ul style="list-style-type: none"> ● This bridge is located at Barangay Talomo Proper. ● Exposed length is 48.11 meters. ● Degree of impact is high. ● Adaptive capacity is high. ● Total value of exposed length is ₱ 98,769,830. 	<ul style="list-style-type: none"> ● Minimal to negligible implications. 	<ul style="list-style-type: none"> ● Government interventions by securing these utilities from man-made hazards. ● Maintain these utilities to cope with the current climate change impacts.
Agdao Flyover,	<ul style="list-style-type: none"> ● This bridge is located at Barangay Agdao Proper. ● Exposed length is 382.98 meters. ● Degree of impact is high. ● Adaptive capacity is high. ● Total value of exposed length is ₱ 459,576,000. 	<ul style="list-style-type: none"> ● Minimal to negligible implications. 	<ul style="list-style-type: none"> ● Government interventions by securing these utilities from man-made hazards. ● Maintain these utilities to cope with the current climate change impacts.

Table LU-189. Climate Change Vulnerability Assessment Summary Matrix, Davao City

BRIDGE NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Bago Br.	<ul style="list-style-type: none"> ● This bridge is located at Barangay Bago Aplaya. ● Exposed length is 31.21 meters. ● Degree of impact is high. ● Adaptive capacity is high. ● Total value of exposed length is ₱ 37,452,000. 	<ul style="list-style-type: none"> ● Minimal to negligible implications. 	<ul style="list-style-type: none"> ● Government interventions by securing these utilities from man-made hazards. ● Maintain these utilities to cope with the current climate change impacts.
Bunawan Br. I	<ul style="list-style-type: none"> ● This bridge is located at Barangay Bunawan. ● Exposed length is 49.76 meters. ● Degree of impact is high. ● Adaptive capacity is high. ● Total value of exposed length is ₱ 59,712,000. 	<ul style="list-style-type: none"> ● Minimal to negligible implications. 	<ul style="list-style-type: none"> ● Government interventions by securing these utilities from man-made hazards. ● Maintain these utilities to cope with the current climate change impacts.
Bunawan Br. II	<ul style="list-style-type: none"> ● This bridge is located at Barangay Bunawan. ● Exposed length is 47.79 meters. ● Degree of impact is high. ● Adaptive capacity is high. ● Total value of exposed length is ₱ 57,348,000. 	<ul style="list-style-type: none"> ● Minimal to negligible implications. 	<ul style="list-style-type: none"> ● Government interventions by securing these utilities from man-made hazards. ● Maintain these utilities to cope with the current climate change impacts..
Panacan Br.	<ul style="list-style-type: none"> ● This bridge is located at Barangay Bunawan. ● Exposed length is 23.539 meters. ● Degree of impact is high. ● Adaptive capacity is high. ● Total value of exposed length ₱ 28,236,000. 	<ul style="list-style-type: none"> ● Minimal to negligible implications. 	<ul style="list-style-type: none"> ● Government interventions by securing these utilities from man-made hazards. ● Maintain these utilities to cope with the current climate change impacts.
Sasa Br.	<ul style="list-style-type: none"> ● This bridge is located at Barangay Buhangin. ● Exposed length is 18.43 meters. ● Degree of impact is high. ● Adaptive capacity is high. ● Total value of exposed length is ₱22,116,000. 	<ul style="list-style-type: none"> ● Minimal to negligible implications. 	<ul style="list-style-type: none"> ● Government interventions by securing these utilities from man-made hazards. ● Maintain these utilities to cope with the current climate change impacts.

Map 5.21 Lifeline Utilities, Vulnerability Map to Storm Surge, Davao City



Vulnerability of Power Substations

All power substations have low vulnerability. Such could be based to the high adaptive capacity of each substations with low degree of impact.

Table LU-190. Lifeline Utilities, Power Substations, Vulnerability Table for Storm Surge 2-meter wave, Davao City

NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY CATEGORY
Sta Ana Substation	607.00	135 Million	135 Million	1.5	1	1.5	LOW
R.Castillo Substation	852.00	125 Million	125 Million	1	1	1	LOW
Pampanga Substation	1031.00	118 Million	118 Million	2	1	2	LOW
Don Ramon Substation	15540.00	570 Million	570 Million	1.5	1	1.5	LOW

Table LU-190. Lifeline Utilities, Power Substations, Vulnerability Table for Storm Surge 3-meter wave, Davao City

NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFE-LINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY CATEGORY
P.Reyes Substation	825.86	85 Million	85 Million	1.5	1	1.5	LOW
Gaisano Substation	454.00	85 Million	85 Million	1.5	1	1.5	LOW
Victoria Substation	595.00	120 Million	120 Million	1.5	1	1.5	LOW
Panacan Substation	858.00	85 Million	85 Million	2	1	2	LOW
Don Ramon Substation	15,540.00	570 Million	570 Million	1.5	1	1	LOW
Bunawan Substation	1,085.00	110 Million	110 Million	1.5	1	1	LOW

Table LU-190. Lifeline Utilities, Power Substations, Vulnerability Table for Storm Surge 4-meter wave, Davao City

NAME OF POWER PLANT	EXPOSURE			IMPACT DEGREE OF IMPACT	ADAPTIVE CAPACITY		ADAPTIVE CAPACITY
	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE		INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	
Don Ramon Substation	15,540	570 Million	570 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1
Bunawan Substation	1085	110 Million	110 Million	1.5	a) Industrial All Risk Insurance b) Comprehensive General Liability	NONE	1

Table LU-190 Lifeline Utilities, Power Substations, Vulnerability Table for Storm Surge 5-meter wave, Davao City

NAME OF POWER PLANT	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY CATEGORY
Dumoy Substation	1,322	118 Million	118 Million	2	1	2	LOW
Bajada Substation		200 Million	200 Million	1	1	1	LOW
ERA Substation	11926	200 Million	200 Million	1	1	1	LOW
Don Ramon Substation	15,540	570 Million	570 Million	1.5	1	1.5	LOW

Table LU-191. Climate Change Vulnerability Assessment Summary Matrix of Power Substations for Lifeline Utilities, 2m, 3m & 5m Storm Surge

Decision Areas	Technical Findings	Planning Implications	Interventions
Brgy. Pampanga (Pampanga Substation)	<ul style="list-style-type: none"> This power substation is within the 2m storm surge susceptibility. It has moderate degree of impact of storm surge but have high adaptive capacity. This power substation is identified in low vulnerability of storm surge. All power substations are designed as resilient to hazards and properly managed by DLPC. 	<ul style="list-style-type: none"> Minimal to negligible implications 	<ul style="list-style-type: none"> Maintain/Upgrade all power utilities from time to time in order to cope with the current climate change. Government interventions by way of securing these facilities from man-made hazards.
Brgy. Panacan (Panacan Substation)	<ul style="list-style-type: none"> This power substation is within the 3m storm surge susceptibility. It has moderate degree of impact of storm surge but have high adaptive capacity. This power substation is identified in low vulnerability. All power substations are designed as resilient to hazards and properly managed by DLPC. 	<ul style="list-style-type: none"> Minimal to negligible implications 	<ul style="list-style-type: none"> Maintain/Upgrade all power utilities from time to time in order to cope with the current climate change. Government interventions by way of securing these facilities from man-made hazards.
Brgy. Dumoy (Dumoy Substation)	<ul style="list-style-type: none"> This power substation is within the 5m storm surge susceptibility. It has moderate degree of impact of storm surge but have high adaptive capacity. This power substation is identified in low vulnerability. All power substations are designed as resilient to hazards and properly managed by DLPC. 	<ul style="list-style-type: none"> Minimal to negligible implications 	<ul style="list-style-type: none"> Maintain/Upgrade all power utilities from time to time in order to cope with the current climate change. Government interventions by way of securing these facilities from man-made hazards.

Vulnerability of Level I Water Supply

All spring sources which are susceptible to storm surge have high vulnerability to storm surge. This is due to the high degree of impact and low adaptive capacity rating.

Table LU-192. Lifeline Utilities, Level I Water Supply System, Vulnerability Table for Storm Surge

EXPOSURE				DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF THE EXISTING LIFE-LINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY CATEGORY
BUNAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
MAHAYAG	SPRING	41,586.32	41,586.32	3	3	9	HIGH
BUNAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
TIBUNGCO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
TIBUNGCO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
LIZADA	SPRING	41,586.32	41,586.32	3	3	9	HIGH

Table LU-192. Lifeline Utilities, Level I Water Supply System, Vulnerability Table for Storm Surge

EXPOSURE				DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF THE EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY CATEGORY
LIZADA	SPRING	41,586.32	41,586.32	3	3	9	HIGH
LIZADA	SPRING	41,586.32	41,586.32	3	3	9	HIGH
LIZADA	SPRING	41,586.32	41,586.32	3	3	9	HIGH
LIZADA	SPRING	41,586.32	41,586.32	3	3	9	HIGH
SIRAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
SIRAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
SIRAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
SIRAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
SIRAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
SIRAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
SIRAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
SIRAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
SIRAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
BINUGAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
BINUGAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
MAHAYAG	SPRING	41,586.32	41,586.32	3	3	9	HIGH
TIBUNGCO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
BUNAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
BUNAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
LIZADA	SPRING	41,586.32	41,586.32	3	3	9	HIGH
LIZADA	SPRING	41,586.32	41,586.32	3	3	9	HIGH
LIZADA	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
DALIAO	SPRING	41,586.32	41,586.32	3	3	9	HIGH
SIRAWAN	SPRING	41,586.32	41,586.32	3	3	9	HIGH

Table LU-193. Climate Change Vulnerability Assessment of Level I Water System for Storm Surge, Davao City

BARANGAY	TECHNICAL FINDINGS	IMPLICATION	POLICY INTERVENTION
BINUGAO	<ul style="list-style-type: none"> No :2Type: SPRING Susceptibility:2mReplacement Cost :41586.32Total replacement cost :83172.64Degree of Impact :3Adaptive Capacity: 3Vulnerability: 9Vulnerability Category: HIGH 	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for
BUNAWAN	<ul style="list-style-type: none"> No :4Type: SPRING Susceptibility:2mReplacement Cost :41586.32Total replacement cost :166345.28Degree of Impact :3Adaptive Capacity: 3Vulnerability: 9Vulnerability Category: HIGH 	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for
DALIAO	<ul style="list-style-type: none"> No :24Type: SPRING Susceptibility:2m-10, 3m-3, 4m-4, 5m-6Replacement Cost :41586.32Total replacement cost :998071.68Degree of Impact :3Adaptive Capacity: 3Vulnerability: 9Vulnerability Category: HIGH 	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for
LIZADA	<ul style="list-style-type: none"> No :8Type: SPRING Susceptibility:2m-5, 3m-3 Replacement Cost :41586.32Total replacement cost :332690.56Degree of Impact :3Adaptive Capacity: 3Vulnerability: 9Vulnerability Category: HIGH 	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for

Table LU-193. Climate Change Vulnerability Assessment of Level I Water System for Storm Surge, Davao City

BARANGAY	TECHNICAL FINDINGS	IMPLICATION	POLICY INTERVENTION
MAHAYAG	<ul style="list-style-type: none"> No :4Type: SPRING Susceptibility:2m-1, 3m-1, Replacement Cost :41586.32Total replacement cost :166345.28Degree of Impact :3Adaptive Capacity: 3Vulnerability: 9Vulnerability Category: HIGH 	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
SIRAWAN	<ul style="list-style-type: none"> No :12Type: SPRING Susceptibility:5m-1, 2m-8Replacement Cost :41586.32Total replacement cost :499035.84Degree of Impact :3Adaptive Capacity: 3Vulnerability: 9Vulnerability Category: HIGH 	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
TIBUNGCO	<ul style="list-style-type: none"> No :6Type: SPRING Susceptibility:2m-2, 3m-1Replacement Cost :41586.32Total replacement cost :249517.92Degree of Impact :3Adaptive Capacity: 3Vulnerability: 9Vulnerability Category: HIGH 	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Vulnerability of Level II Water System

The two wells which are susceptible to 2-meter wave are moderately vulnerable this is due to the high degree of impact and low adaptive capacity.

Table LU-194. Lifeline Utilities Level II Water System Vulnerability Table for Storm Surge, Davao City

EXPOSURE				IMPACT	ADAPTIVE	VULNERABILITY	
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
SIRAWAN	2HP	46200	46200	2	2	4	MODERATE
SIRAWAN	2HP	46200	46200	2	2	4	MODERATE

Table LU-195. Climate Change Vulnerability Assessment Summary Matrix of Level II Water Supply for Storm Surge, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Sirawan	<p>2 units of (2HP) deep well</p> <p>The Degree of Impact is Moderate</p> <p>The Adaptive Capacity is High</p>	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of wells. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Vulnerability of Level III Water System to Storm Surge

A total of 361.61 meters of pipelines found in Bago Aplaya are moderately vulnerable to storm surge with 4-meter wave. Meanwhile, 529.87 meters of pipe in Dumoy, 815.86 meters of pipe in Bago Aplaya, 275.23 meters of pipe in Talomo, 180.4 meters of pipe in Ilang, and 56.03 meters of pipe found in Matina Aplaya are moderately vulnerable to storm surge with 5-meter wave.

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 2-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
37-D	MLCSP	300	₱19,100.00	76.08	₱1,453,128.00	1	1	1	LOW
32-D	MLCSP	300	₱19,100.00	236.99	₱4,526,509.00	1	1	1	LOW
24-C	MLCSP	300	₱19,100.00	2.96	₱56,536.00	1	1	1	LOW
24-C	MLCSP	150	₱11,200.00	187.67	₱2,101,904.00	1	1	1	LOW
28-C	MLCSP	150	₱11,200.00	165.94	₱1,858,528.00	1	1	1	LOW
28-C	MLCSP	150	₱11,200.00	164.76	₱1,845,312.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 2-meter wave, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY	VULNERABILITY		
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
30-C	MLCSP	150	₱11,200.00	117.93	₱1,320,816.00	1	1	1	LOW
28-C	MLCSP	150	₱11,200.00	6.71	₱75,152.00	1	1	1	LOW
32-D	MLCSP	300	₱19,100.00	67.83	₱1,295,553.00	1	1	1	LOW
30-C	MLCSP	400	₱23,600.00	81.18	₱1,915,848.00	1	1	1	LOW
30-C	MLCSP	150	₱11,200.00	34.82	₱389,984.00	1	1	1	LOW
15-B	MLCSP	400	₱23,600.00	8.27	₱195,172.00	1	1	1	LOW
14-B	MLCSP	400	₱23,600.00	63.08	₱1,488,688.00	1	1	1	LOW
32-D	MLCSP	300	₱19,100.00	25.83	₱493,353.00	1	1	1	LOW
28-C	MLCSP	150	₱11,200.00	8.52	₱95,424.00	1	1	1	LOW
28-C	MLCSP	150	₱11,200.00	110.26	₱1,234,912.00	1	1	1	LOW
28-C	MLCSP	150	₱11,200.00	59.34	₱664,608.00	1	1	1	LOW
28-C	MLCSP	150	₱11,200.00	15.83	₱177,296.00	1	1	1	LOW
28-C	MLCSP	150	₱11,200.00	54.8	₱613,760.00	1	1	1	LOW
26-C	MLCSP	150	₱11,200.00	6.5	₱72,800.00	1	1	1	LOW
28-C	MLCSP	150	₱11,200.00	59.36	₱664,832.00	1	1	1	LOW
30-C	MLCSP	150	₱11,200.00	114.89	₱1,286,768.00	1	1	1	LOW
14-B	MLCSP	150	₱11,200.00	0.45	₱5,040.00	1	1	1	LOW
14-B	MLCSP	150	₱11,200.00	100.83	₱1,129,296.00	1	1	1	LOW
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	2.87	₱32,144.00	1	1	1	LOW
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	123.65	₱1,384,880.00	1	1	1	LOW
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	119.84	₱1,342,208.00	1	1	1	LOW
15-B	MLCSP	400	₱23,600.00	160.75	₱3,793,700.00	1	1	1	LOW
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	11.5	₱128,800.00	1	1	1	LOW
AGDAO PROPER	MLCSP	400	₱23,600.00	175.51	₱4,142,036.00	1	1	1	LOW
AGDAO PROPER	MLCSP	150	₱11,200.00	57.96	₱649,152.00	1	1	1	LOW
AGDAO PROPER	MLCSP	150	₱11,200.00	131.04	₱1,467,648.00	1	1	1	LOW
AGDAO PROPER	MLCSP	150	₱11,200.00	25	₱280,000.00	1	1	1	LOW
15-B	MLCSP	150	₱11,200.00	39.81	₱445,872.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	49.8	₱951,180.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	51.94	₱992,054.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	111.4	₱2,127,740.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 2-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CA-PACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXIST-ING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CA-PACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGO-RY
WILFREDO AQUINO	MLCSP	300	₱19,100.00	58.49	₱1,117,159.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	8.09	₱154,519.00	1	1	1	LOW
32-D	MLCSP	300	₱19,100.00	201.85	₱3,855,335.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	64.28	₱1,227,748.00	1	1	1	LOW
AGDAO PROPER	MLCSP	400	₱23,600.00	17.76	₱419,136.00	1	1	1	LOW
AGDAO PROPER	MLCSP	400	₱23,600.00	63.34	₱1,494,824.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	154.2	₱1,727,040.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	149.77	₱1,677,424.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	174.49	₱1,954,288.00	1	1	1	LOW
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	125.17	₱1,401,904.00	1	1	1	LOW
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	124.31	₱1,392,272.00	1	1	1	LOW
AGDAO PROPER	MLCSP	400	₱23,600.00	90.43	₱2,134,148.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	95.18	₱1,066,016.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	23.38	₱261,856.00	1	1	1	LOW
AGDAO PROPER	MLCSP	400	₱23,600.00	9.02	₱212,872.00	1	1	1	LOW
15-B	MLCSP	400	₱23,600.00	339.5	₱8,012,200.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	38.75	₱434,000.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	87.81	₱983,472.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	28.56	₱319,872.00	1	1	1	LOW
28-C	MLCSP	150	₱11,200.00	0.83	₱9,296.00	1	1	1	LOW
24-C	MLCSP	150	₱11,200.00	84.43	₱945,616.00	1	1	1	LOW
30-C	MLCSP	400	₱23,600.00	65.86	₱1,554,296.00	1	1	1	LOW
32-D	MLCSP	300	₱19,100.00	47.65	₱910,115.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	34.89	₱390,768.00	1	1	1	LOW
26-C	MLCSP	150	₱11,200.00	3.71	₱41,552.00	1	1	1	LOW
27-C	MLCSP	150	₱11,200.00	155.64	₱1,743,168.00	1	1	1	LOW
27-C	MLCSP	150	₱11,200.00	150.89	₱1,689,968.00	1	1	1	LOW
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	10.44	₱116,928.00	1	1	1	LOW
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	56.38	₱631,456.00	1	1	1	LOW
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	51.4	₱575,680.00	1	1	1	LOW
LEON GARCIA SR.	MLCSP	150	₱11,200.00	9.75	₱109,200.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 2-meter wave,

EXPOSURE						IMPACT	ADAPTIVE CA-	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
32-D	MLCSP	300	₱19,100.00	118.33	₱2,260,103.00	1	1	1	LOW
32-D	MLCSP	300	₱19,100.00	86.96	₱1,660,936.00	1	1	1	LOW
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	177.11	₱1,983,632.00	1	1	1	LOW
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	169.1	₱1,893,920.00	1	1	1	LOW
AGDAO PROPER	MLCSP	150	₱11,200.00	6.83	₱76,496.00	1	1	1	LOW
TOMAS MONTEVERDE	MLCSP	150	₱11,200.00	46.1	₱516,320.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	37.07	₱708,037.00	1	1	1	LOW
31-D	MLCSP	300	₱19,100.00	9.14	₱174,574.00	1	1	1	LOW
37-D	MLCSP	300	₱19,100.00	63.83	₱1,219,153.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	39.52	₱754,832.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	42.46	₱810,986.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	15.67	₱175,504.00	1	1	1	LOW
31-D	MLCSP	300	₱19,100.00	33.02	₱630,682.00	1	1	1	LOW
37-D	MLCSP	300	₱19,100.00	104.48	₱1,995,568.00	1	1	1	LOW
31-D	MLCSP	300	₱19,100.00	12.87	₱245,817.00	1	1	1	LOW
37-D	MLCSP	300	₱19,100.00	97.71	₱1,866,261.00	1	1	1	LOW
38-D	MLCSP	300	₱19,100.00	13.57	₱259,187.00	1	1	1	LOW
37-D	MLCSP	300	₱19,100.00	227.02	₱4,336,082.00	1	1	1	LOW
AGDAO PROPER	MLCSP	300	₱19,100.00	239.57	₱4,575,787.00	1	1	1	LOW
AGDAO PROPER	MLCSP	400	₱23,600.00	53.67	₱1,266,612.00	1	1	1	LOW
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	206.29	₱4,868,444.00	1	1	1	LOW
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	116.45	₱2,748,220.00	1	1	1	LOW
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	20.82	₱491,352.00	1	1	1	LOW
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	66.75	₱1,575,300.00	1	1	1	LOW
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	124.74	₱2,943,864.00	1	1	1	LOW
UBALDE	MLCSP	400	₱23,600.00	173.79	₱4,101,444.00	1	1	1	LOW
UBALDE	MLCSP	400	₱23,600.00	21.83	₱515,188.00	1	1	1	LOW
GOV. VICENTE DUTERTE	MLCSP	400	₱23,600.00	368.65	₱8,700,140.00	1	1	1	LOW
SAN ANTONIO	MLCSP	400	₱23,600.00	195.03	₱4,602,708.00	1	1	1	LOW
UBALDE	MLCSP	400	₱23,600.00	9.54	₱225,144.00	1	1	1	LOW
LAPU - LAPU	MLCSP	400	₱23,600.00	180.35	₱4,256,260.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 2-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
LAPU - LAPU	MLCSP	400	₱23,600.00	490.41	₱11,573,676.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	22.87	₱436,817.00	1	1	1	LOW
UBALDE	MLCSP	400	₱23,600.00	56.8	₱1,340,480.00	1	1	1	LOW
LAPU - LAPU	MLCSP	400	₱23,600.00	162.28	₱3,829,808.00	1	1	1	LOW
CENTRO	MLCSP	400	₱23,600.00	93.72	₱2,211,792.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	1.58	₱17,696.00	1	1	1	LOW
AGDAO PROPER	MLCSP	150	₱11,200.00	72.06	₱807,072.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	87.85	₱1,098,125.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	49.17	₱614,625.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	601.31	₱7,516,375.00	1	1	1	LOW
A. ANGLIONGTO	MLCSP	250	₱17,700.00	38.27	₱677,379.00	1	1	1	LOW
PAMPANGA	MLCSP	300	₱19,100.00	118.53	₱2,263,923.00	1	1	1	LOW
PAMPANGA	MLCSP	300	₱19,100.00	45.71	₱873,061.00	1	1	1	LOW
V. HIZON	MLCSP	250	₱17,700.00	2.88	₱50,976.00	1	1	1	LOW
PAMPANGA	MLCSP	250	₱17,700.00	12.43	₱220,011.00	1	1	1	LOW
SASA	MLCSP	250	₱17,700.00	75.16	₱1,330,332.00	1	1	1	LOW
PAMPANGA	MLCSP	250	₱17,700.00	223.75	₱3,960,375.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	96.35	₱1,204,375.00	1	1	1	LOW
SASA	MLCSP	250	₱17,700.00	154.43	₱2,733,411.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	15.76	₱197,000.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	178.68	₱2,233,500.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	55.47	₱693,375.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	15.42	₱192,750.00	1	1	1	LOW
V. HIZON	MLCSP	250	₱17,700.00	386.97	₱6,849,369.00	1	1	1	LOW
PAMPANGA	MLCSP	250	₱17,700.00	23.61	₱417,897.00	1	1	1	LOW
PAMPANGA	MLCSP	250	₱17,700.00	23.06	₱408,162.00	1	1	1	LOW
PAMPANGA	MLCSP	300	₱19,100.00	336.36	₱6,424,476.00	1	1	1	LOW
SASA	MLCSP	250	₱17,700.00	152.72	₱2,703,144.00	1	1	1	LOW
V. HIZON	MLCSP	250	₱17,700.00	279.12	₱4,940,424.00	1	1	1	LOW
V. HIZON	MLCSP	250	₱17,700.00	107.3	₱1,899,210.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	149.99	₱1,874,875.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 2-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
SASA	MLCSP	200	₱12,500.00	155.39	₱1,942,375.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	190.87	₱3,645,617.00	1	1	1	LOW
V. HIZON	MLCSP	300	₱19,100.00	261.76	₱4,999,616.00	1	1	1	LOW
PAMPANGA	MLCSP	300	₱19,100.00	73.97	₱1,412,827.00	1	1	1	LOW
15-B	MLCSP	300	₱19,100.00	323.39	₱6,176,749.00	1	1	1	LOW
16-B	MLCSP	150	₱11,200.00	59.1	₱661,920.00	1	1	1	LOW
16-B	MLCSP	150	₱11,200.00	4.43	₱49,616.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	25.58	₱286,496.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	82.2	₱920,640.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	215.35	₱2,411,920.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	171.17	₱1,917,104.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	3.66	₱69,906.00	1	1	1	LOW
AGDAO PROPER	MLCSP	300	₱19,100.00	111.52	₱2,130,032.00	1	1	1	LOW
A. ANGLIONGTO	MLCSP	250	₱17,700.00	252.42	₱4,467,834.00	1	1	1	LOW
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	124.49	₱2,937,964.00	1	1	1	LOW
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	53.09	₱1,252,924.00	1	1	1	LOW
SAN ANTONIO	MLCSP	400	₱23,600.00	207.81	₱4,904,316.00	1	1	1	LOW
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	113.36	₱2,675,296.00	1	1	1	LOW
28-C	MLCSP	150	₱11,200.00	41.08	₱460,096.00	1	1	1	LOW
30-C	MLCSP	400	₱23,600.00	85.55	₱2,018,980.00	1	1	1	LOW
30-C	MLCSP	150	₱11,200.00	159.98	₱1,791,776.00	1	1	1	LOW
14-B	MLCSP	400	₱23,600.00	71.45	₱1,686,220.00	1	1	1	LOW
30-C	MLCSP	400	₱23,600.00	7.64	₱180,304.00	1	1	1	LOW
14-B	MLCSP	400	₱23,600.00	59.98	₱1,415,528.00	1	1	1	LOW
AGDAO PROPER	MLCSP	200	₱12,500.00	20.1	₱251,250.00	1	1	1	LOW
40-D	MLCSP	250	₱17,700.00	283.77	₱5,022,729.00	1	1	1	LOW
39-D	MLCSP	250	₱17,700.00	45.97	₱813,669.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	150	₱11,200.00	15.86	₱177,632.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	5.45	₱61,040.00	1	1	1	LOW
AGDAO PROPER	MLCSP	400	₱23,600.00	421.48	₱9,946,928.00	1	1	1	LOW
BUCANA	MLCSP	750	₱48,500.00	43.9	₱2,129,150.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 2-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
SASA	MLCSP	250	₱17,700.00	317.51	₱5,619,927.00	1	1	1	LOW
31-D	MLCSP	300	₱19,100.00	105.93	₱2,023,263.00	1	1	1	LOW
31-D	MLCSP	150	₱11,200.00	16.42	₱183,904.00	1	1	1	LOW
35-D	MLCSP	200	₱12,500.00	10.88	₱136,000.00	1	1	1	LOW
39-D	MLCSP	300	₱19,100.00	70.35	₱1,343,685.00	1	1	1	LOW
38-D	MLCSP	300	₱19,100.00	7.79	₱148,789.00	1	1	1	LOW
39-D	MLCSP	300	₱19,100.00	18.93	₱361,563.00	1	1	1	LOW
26-C	MLCSP	150	₱11,200.00	156.73	₱1,755,376.00	1	1	1	LOW
23-C	MLCSP	150	₱11,200.00	4.57	₱51,184.00	1	1	1	LOW
26-C	MLCSP	150	₱11,200.00	3.84	₱43,008.00	1	1	1	LOW
23-C	MLCSP	150	₱11,200.00	3.9	₱43,680.00	1	1	1	LOW
32-D	MLCSP	300	₱19,100.00	10.2	₱194,820.00	1	1	1	LOW
31-D	MLCSP	300	₱19,100.00	8.38	₱160,058.00	1	1	1	LOW
31-D	MLCSP	300	₱19,100.00	150.78	₱2,879,898.00	1	1	1	LOW
32-D	MLCSP	300	₱19,100.00	85.03	₱1,624,073.00	1	1	1	LOW
24-C	MLCSP	300	₱19,100.00	18.13	₱346,283.00	1	1	1	LOW
31-D	MLCSP	300	₱19,100.00	3.56	₱67,996.00	1	1	1	LOW
27-C	MLCSP	200	₱12,500.00	18.97	₱237,125.00	1	1	1	LOW
SASA	MLCSP	250	₱17,700.00	178.33	₱3,156,441.00	1	1	1	LOW
MATINA APLAYA	MLCSP	300	₱19,100.00	258.46	₱4,936,586.00	1	1	1	LOW
BAGO APLAYA	MLCSP	250	₱17,700.00	26.25	₱464,625.00	1	1	1	LOW
PAMPANGA	MLCSP	300	₱19,100.00	3.45	₱65,895.00	1	1	1	LOW
V. HIZON	MLCSP	250	₱17,700.00	2.68	₱47,436.00	1	1	1	LOW
V. HIZON	MLCSP	250	₱17,700.00	8.89	₱157,353.00	1	1	1	LOW
PANACAN	MLCSP	250	₱17,700.00	43.61	₱771,897.00	1	1	1	LOW
PANACAN	MLCSP	250	₱17,700.00	182.18	₱3,224,586.00	1	1	1	LOW
PANACAN	MLCSP	250	₱17,700.00	20.56	₱363,912.00	1	1	1	LOW
PANACAN	MLCSP	250	₱17,700.00	149.5	₱2,646,150.00	1	1	1	LOW
SASA	MLCSP	300	₱19,100.00	79.92	₱1,526,472.00	1	1	1	LOW
PAMPANGA	MLCSP	300	₱19,100.00	18.37	₱350,867.00	1	1	1	LOW
SASA	MLCSP	300	₱19,100.00	169.79	₱3,242,989.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 2-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
PAMPANGA	MLCSP	300	₱19,100.00	276.83	₱5,287,453.00	1	1	1	LOW
PANACAN	MLCSP	250	₱17,700.00	180.38	₱3,192,726.00	1	1	1	LOW
PANACAN	MLCSP	250	₱17,700.00	0.71	₱12,567.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	18.07	₱202,384.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	24.03	₱269,136.00	1	1	1	LOW
BAGO APLAYA	MLCSP	400	₱23,600.00	3.98	₱93,928.00	1	1	1	LOW
BAGO APLAYA	MLCSP	250	₱17,700.00	16.85	₱298,245.00	1	1	1	LOW
MATINA APLAYA	MLCSP	250	₱17,700.00	922.6	₱16,330,020.00	1	1	1	LOW
MATINA APLAYA	MLCSP	250	₱17,700.00	1,041.85	₱18,440,745.00	1	1	1	LOW
PANACAN	MLCSP	400	₱23,600.00	128.05	₱3,021,980.00	1	1	1	LOW
ILANG	MLCSP	400	₱23,600.00	110.08	₱2,597,888.00	1	1	1	LOW
ILANG	MLCSP	400	₱23,600.00	25.45	₱600,620.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	54.26	₱1,036,366.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	59.75	₱1,141,225.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	71.18	₱797,216.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	2.02	₱22,624.00	1	1	1	LOW
AGDAO PROPER	MLCSP	400	₱23,600.00	24.87	₱586,932.00	1	1	1	LOW
AGDAO PROPER	MLCSP	400	₱23,600.00	5.86	₱138,296.00	1	1	1	LOW
SAN ANTONIO	MLCSP	400	₱23,600.00	3.88	₱91,568.00	1	1	1	LOW
A. ANGLIONGTO	MLCSP	300	₱19,100.00	348.51	₱6,656,541.00	1	1	1	LOW
LAPU - LAPU	MLCSP	300	₱19,100.00	5.08	₱97,028.00	1	1	1	LOW
V. HIZON	MLCSP	300	₱19,100.00	37.03	₱707,273.00	1	1	1	LOW
A. ANGLIONGTO	MLCSP	300	₱19,100.00	23.08	₱440,828.00	1	1	1	LOW
MATINA APLAYA	MLCSP	250	₱17,700.00	27.27	₱482,679.00	1	1	1	LOW
BUCANA	MLCSP	250	₱17,700.00	240.33	₱4,253,841.00	1	1	1	LOW
AGDAO PROPER	MLCSP	150	₱11,200.00	55.96	₱626,752.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	8.48	₱94,976.00	1	1	1	LOW
AGDAO PROPER	MLCSP	150	₱11,200.00	37.93	₱424,816.00	1	1	1	LOW
15-B	MLCSP	150	₱11,200.00	19.13	₱214,256.00	1	1	1	LOW
SAN ANTONIO	MLCSP	400	₱23,600.00	79.36	₱1,872,896.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 3-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CA-PACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CA-PACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
39-D	MLCSP	300	₱19,100.00	156.23	₱2,983,993.00	1	1	1	LOW
32-D	MLCSP	300	₱19,100.00	222.24	₱4,244,784.00	1	1	1	LOW
30-C	MLCSP	300	₱19,100.00	10.29	₱196,539.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	117.3	₱2,240,430.00	1	1	1	LOW
32-D	MLCSP	400	₱23,600.00	31.07	₱733,252.00	1	1	1	LOW
30-C	MLCSP	400	₱23,600.00	419.75	₱9,906,100.00	1	1	1	LOW
12-B	MLCSP	400	₱23,600.00	40.79	₱962,644.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	91.64	₱1,750,324.00	1	1	1	LOW
18-B	MLCSP	300	₱19,100.00	194.44	₱3,713,804.00	1	1	1	LOW
19-B	MLCSP	300	₱19,100.00	2.43	₱46,413.00	1	1	1	LOW
18-B	MLCSP	300	₱19,100.00	3.62	₱69,142.00	1	1	1	LOW
19-B	MLCSP	300	₱19,100.00	115.4	₱2,204,140.00	1	1	1	LOW
12-B	MLCSP	150	₱11,200.00	23.32	₱261,184.00	1	1	1	LOW
19-B	MLCSP	150	₱11,200.00	37.77	₱423,024.00	1	1	1	LOW
18-B	MLCSP	300	₱19,100.00	13.35	₱254,985.00	1	1	1	LOW
13-B	MLCSP	300	₱19,100.00	42.75	₱816,525.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	18.93	₱212,016.00	1	1	1	LOW
18-B	MLCSP	150	₱11,200.00	34.32	₱384,384.00	1	1	1	LOW
18-B	MLCSP	150	₱11,200.00	10.91	₱122,192.00	1	1	1	LOW
32-D	MLCSP	300	₱19,100.00	0.48	₱9,168.00	1	1	1	LOW
30-C	MLCSP	300	₱19,100.00	12.67	₱241,997.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	2.57	₱28,784.00	1	1	1	LOW
18-B	MLCSP	150	₱11,200.00	213.68	₱2,393,216.00	1	1	1	LOW
2-A	MLCSP	300	₱19,100.00	113.84	₱2,174,344.00	1	1	1	LOW
19-B	MLCSP	300	₱19,100.00	96.96	₱1,851,936.00	1	1	1	LOW
BAGO APLAYA	MLCSP	300	₱19,100.00	104.63	₱1,998,433.00	1	1	1	LOW
BAGO APLAYA	MLCSP	400	₱23,600.00	318.33	₱7,512,588.00	1	1	1	LOW
TALOMO	MLCSP	700	₱44,200.00	150.9	₱6,669,780.00	1	1	1	LOW
TALOMO	MLCSP	700	₱44,200.00	21.82	₱964,444.00	1	1	1	LOW
TALOMO	MLCSP	750	₱48,500.00	18.45	₱894,825.00	1	1	1	LOW
39-D	MLCSP	300	₱19,100.00	23.9	₱456,490.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 3-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CA-	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
BUCANA	MLCSP	150	₱11,200.00	79	₱884,800.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	12.02	₱134,624.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	14.21	₱159,152.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	95.76	₱1,072,512.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	13.86	₱155,232.00	1	1	1	LOW
18-B	MLCSP	150	₱11,200.00	175.92	₱1,970,304.00	1	1	1	LOW
17-B	MLCSP	300	₱19,100.00	13.23	₱252,693.00	1	1	1	LOW
16-B	MLCSP	300	₱19,100.00	37.68	₱719,688.00	1	1	1	LOW
13-B	MLCSP	300	₱19,100.00	2.1	₱40,110.00	1	1	1	LOW
13-B	MLCSP	300	₱19,100.00	49.44	₱944,304.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	29.76	₱568,416.00	1	1	1	LOW
TALOMO	MLCSP	750	₱48,500.00	62.94	₱3,052,590.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	93.07	₱1,777,637.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	47.99	₱537,488.00	1	1	1	LOW
2-A	MLCSP	300	₱19,100.00	39.19	₱748,529.00	1	1	1	LOW
2-A	MLCSP	350	₱20,800.00	134.66	₱2,800,928.00	1	1	1	LOW
20-B	MLCSP	150	₱11,200.00	52.02	₱582,624.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	12.1	₱135,520.00	1	1	1	LOW
20-B	MLCSP	150	₱11,200.00	41.11	₱460,432.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	1.2	₱13,440.00	1	1	1	LOW
18-B	MLCSP	150	₱11,200.00	48.43	₱542,416.00	1	1	1	LOW
20-B	MLCSP	150	₱11,200.00	0	₱0.00	1	1	1	LOW
20-B	MLCSP	150	₱11,200.00	0	₱0.00	1	1	1	LOW
20-B	MLCSP	150	₱11,200.00	1.49	₱16,688.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	5.98	₱66,976.00	1	1	1	LOW
18-B	MLCSP	150	₱11,200.00	170.17	₱1,905,904.00	1	1	1	LOW
18-B	MLCSP	150	₱11,200.00	278.99	₱3,124,688.00	1	1	1	LOW
19-B	MLCSP	150	₱11,200.00	2.77	₱31,024.00	1	1	1	LOW
2-A	MLCSP	300	₱19,100.00	127.25	₱2,430,475.00	1	1	1	LOW
39-D	MLCSP	300	₱19,100.00	5.37	₱102,567.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 3-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
BAGO APLAYA	MLCSP	400	₱23,600.00	96.4	₱2,275,040.00	1	1	1	LOW
BAGO APLAYA	MLCSP	400	₱23,600.00	29.3	₱691,480.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	58.36	₱653,632.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	344.39	₱3,857,168.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	5.7	₱63,840.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	14.15	₱270,265.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	39.11	₱747,001.00	1	1	1	LOW
32-D	MLCSP	500	₱33,200.00	19.37	₱643,084.00	1	1	1	LOW
10-A	MLCSP	500	₱33,200.00	173.65	₱5,765,180.00	1	1	1	LOW
4-A	MLCSP	500	₱33,200.00	147.97	₱4,912,604.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	93.24	₱1,044,288.00	1	1	1	LOW
4-A	MLCSP	150	₱11,200.00	2.89	₱32,368.00	1	1	1	LOW
4-A	MLCSP	500	₱33,200.00	257.51	₱8,549,332.00	1	1	1	LOW
4-A	MLCSP	500	₱33,200.00	36.32	₱1,205,824.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	32.12	₱359,744.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	38.45	₱430,640.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	40.8	₱456,960.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	41.65	₱466,480.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	154.15	₱1,926,875.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	164.74	₱2,059,250.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	105.05	₱1,313,125.00	1	1	1	LOW
V. HIZON	MLCSP	250	₱17,700.00	130.5	₱2,309,850.00	1	1	1	LOW
A. ANGLIONGTO	MLCSP	250	₱17,700.00	7.29	₱129,033.00	1	1	1	LOW
V. HIZON	MLCSP	300	₱19,100.00	15.35	₱293,185.00	1	1	1	LOW
SASA	MLCSP	250	₱17,700.00	167.17	₱2,958,909.00	1	1	1	LOW
SASA	MLCSP	250	₱17,700.00	131.4	₱2,325,780.00	1	1	1	LOW
V. HIZON	MLCSP	250	₱17,700.00	384.89	₱6,812,553.00	1	1	1	LOW
V. HIZON	MLCSP	300	₱19,100.00	314.57	₱6,008,287.00	1	1	1	LOW
V. HIZON	MLCSP	300	₱19,100.00	10.52	₱200,932.00	1	1	1	LOW
16-B	MLCSP	300	₱19,100.00	13.62	₱260,142.00	1	1	1	LOW
15-B	MLCSP	300	₱19,100.00	158.37	₱3,024,867.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 3-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
16-B	MLCSP	300	₱19,100.00	50.22	₱959,202.00	1	1	1	LOW
16-B	MLCSP	150	₱11,200.00	176.25	₱1,974,000.00	1	1	1	LOW
16-B	MLCSP	150	₱11,200.00	114.97	₱1,287,664.00	1	1	1	LOW
16-B	MLCSP	150	₱11,200.00	168.37	₱1,885,744.00	1	1	1	LOW
PACIANO BANGOY	MLCSP	150	₱11,200.00	48.89	₱547,568.00	1	1	1	LOW
16-B	MLCSP	150	₱11,200.00	0.97	₱10,864.00	1	1	1	LOW
A. ANGLIONGTO	MLCSP	250	₱17,700.00	176.14	₱3,117,678.00	1	1	1	LOW
A. ANGLIONGTO	MLCSP	400	₱23,600.00	16.33	₱385,388.00	1	1	1	LOW
A. ANGLIONGTO	MLCSP	400	₱23,600.00	6.36	₱150,096.00	1	1	1	LOW
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	78.76	₱1,858,736.00	1	1	1	LOW
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	81.13	₱1,914,668.00	1	1	1	LOW
SAN ANTONIO	MLCSP	400	₱23,600.00	19.44	₱458,784.00	1	1	1	LOW
RAFAEL CASTILLO	MLCSP	400	₱23,600.00	43.75	₱1,032,500.00	1	1	1	LOW
2-A	MLCSP	250	₱17,700.00	7.32	₱129,564.00	1	1	1	LOW
39-D	MLCSP	250	₱17,700.00	150.29	₱2,660,133.00	1	1	1	LOW
19-B	MLCSP	300	₱19,100.00	106.45	₱2,033,195.00	1	1	1	LOW
MA-A	MLCSP	750	₱48,500.00	67.96	₱3,296,060.00	1	1	1	LOW
MA-A	MLCSP	750	₱48,500.00	16.15	₱783,275.00	1	1	1	LOW
2-A	MLCSP	750	₱48,500.00	13.62	₱660,570.00	1	1	1	LOW
BUCANA	MLCSP	750	₱48,500.00	210.73	₱10,220,405.00	1	1	1	LOW
2-A	MLCSP	300	₱19,100.00	13.62	₱260,142.00	1	1	1	LOW
18-B	MLCSP	150	₱11,200.00	347.83	₱3,895,696.00	1	1	1	LOW
39-D	MLCSP	300	₱19,100.00	65.28	₱1,246,848.00	1	1	1	LOW
TALOMO	MLCSP	450	₱24,300.00	5.47	₱132,921.00	1	1	1	LOW
TALOMO	MLCSP	450	₱24,300.00	23.69	₱575,667.00	1	1	1	LOW
MATINA APLAYA	MLCSP	300	₱19,100.00	180.87	₱3,454,617.00	1	1	1	LOW
BAGO APLAYA	MLCSP	250	₱17,700.00	7.69	₱136,113.00	1	1	1	LOW
BAGO APLAYA	MLCSP	250	₱17,700.00	1.77	₱31,329.00	1	1	1	LOW
PANACAN	MLCSP	250	₱17,700.00	337.97	₱5,982,069.00	1	1	1	LOW
PANACAN	MLCSP	250	₱17,700.00	355.99	₱6,301,023.00	1	1	1	LOW
TIBUNGCO	MLCSP	400	₱23,600.00	50.15	₱1,183,540.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 3-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CA-	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EX-ISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
PANACAN	MLCSP	250	₱17,700.00	98.2	₱1,738,140.00	1	1	1	LOW
BAGO APLAYA	MLCSP	400	₱23,600.00	106.19	₱2,506,084.00	1	1	1	LOW
BAGO APLAYA	MLCSP	400	₱23,600.00	308.85	₱7,288,860.00	1	1	1	LOW
BAGO APLAYA	MLCSP	250	₱17,700.00	22.45	₱397,365.00	1	1	1	LOW
BAGO APLAYA	MLCSP	600	₱40,100.00	133.67	₱5,360,167.00	1	1	1	LOW
BAGO APLAYA	MLCSP	600	₱40,100.00	309.24	₱12,400,524.00	1	1	1	LOW
BUCANA	MLCSP	250	₱17,700.00	35.28	₱624,456.00	1	1	1	LOW
20-B	MLCSP	150	₱11,200.00	60.44	₱676,928.00	1	1	1	LOW
PANACAN	MLCSP	400	₱23,600.00	394.81	₱9,317,516.00	1	1	1	LOW
ILANG	MLCSP	400	₱23,600.00	1,130.94	₱26,690,184.00	1	1	1	LOW
TIBUNGCO	MLCSP	400	₱23,600.00	101.99	₱2,406,964.00	1	1	1	LOW
ILANG	MLCSP	400	₱23,600.00	710.32	₱16,763,552.00	1	1	1	LOW
TALOMO	MLCSP	750	₱48,500.00	45.2	₱2,192,200.00	1	1	1	LOW
TALOMO	MLCSP	350	₱20,800.00	5.75	₱119,600.00	1	1	1	LOW
TALOMO	MLCSP	350	₱20,800.00	347.65	₱7,231,120.00	1	1	1	LOW
TALOMO	MLCSP	250	₱17,700.00	161.17	₱2,852,709.00	1	1	1	LOW
TALOMO	MLCSP	250	₱17,700.00	0.61	₱10,797.00	1	1	1	LOW
V. HIZON	MLCSP	300	₱19,100.00	125.42	₱2,395,522.00	1	1	1	LOW
MATINA APLAYA	MLCSP	250	₱17,700.00	244.85	₱4,333,845.00	1	1	1	LOW
MATINA APLAYA	MLCSP	250	₱17,700.00	266.89	₱4,723,953.00	1	1	1	LOW
BUCANA	MLCSP	250	₱17,700.00	193.89	₱3,431,853.00	1	1	1	LOW
TIBUNGCO	MLCSP	400	₱23,600.00	10.06	₱237,416.00	1	1	1	LOW
TIBUNGCO	MLCSP	350	₱20,800.00	5.56	₱115,648.00	1	1	1	LOW
SAN ANTONIO	MLCSP	400	₱23,600.00	166.74	₱3,935,064.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 4-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	VULNERABILITY INDEX SCORE RANGE
10-A	MLCSP	150	₱11,200.00	33.65	₱376,880.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	162.51	₱1,820,112.00	1	1	1	LOW
12-B	MLCSP	150	₱11,200.00	316.29	₱3,542,448.00	1	1	1	LOW
11-B	MLCSP	150	₱11,200.00	157.9	₱1,768,480.00	1	1	1	LOW
12-B	MLCSP	150	₱11,200.00	34.69	₱388,528.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	67.51	₱756,112.00	2	1	2	LOW
BUCANA	MLCSP	150	₱11,200.00	42.92	₱480,704.00	2	1	2	LOW
11-B	MLCSP	300	₱19,100.00	65.48	₱1,250,668.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	50.7	₱968,370.00	1	1	1	LOW
BAGO APLAYA	MLCSP	300	₱19,100.00	92.16	₱1,760,256.00	2	1	2	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	61.88	₱693,056.00	2	1	2	LOW
TALOMO	MLCSP	700	₱44,200.00	101.51	₱4,486,742.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	109.92	₱1,231,104.00	2	1	2	LOW
TALOMO	MLCSP	600	₱40,100.00	312.37	₱12,526,037.00	1	1	1	LOW
BAGO APLAYA	MLCSP	500	₱33,200.00	134.63	₱4,469,716.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	69.95	₱783,440.00	2	1	2	LOW
BAGO GALLERA	MLCSP	250	₱17,700.00	232.38	₱4,113,126.00	1	1	1	LOW
BAGO APLAYA	MLCSP	250	₱17,700.00	243.45	₱4,309,065.00	1	1	1	LOW
BAGO APLAYA	MLCSP	400	₱23,600.00	88.95	₱2,099,220.00	2	2	4	MODERATE
TALOMO	MLCSP	700	₱44,200.00	84.93	₱3,753,906.00	1	1	1	LOW
BAGO APLAYA	MLCSP	500	₱33,200.00	121.64	₱4,038,448.00	1	1	1	LOW
7-A	MLCSP	600	₱40,100.00	59.9	₱2,401,990.00	1	1	1	LOW
2-A	MLCSP	350	₱20,800.00	214.03	₱4,451,824.00	1	1	1	LOW
MA-A	MLCSP	750	₱48,500.00	28.11	₱1,363,335.00	1	1	1	LOW
11-B	MLCSP	150	₱11,200.00	13.05	₱146,160.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	142.32	₱1,593,984.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	54.95	₱1,049,545.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	64.27	₱1,227,557.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	21.72	₱414,852.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	47.41	₱530,992.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 4-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	VULNERABILITY INDEX SCORE RANGE
10-A	MLCSP	150	₱11,200.00	111.52	₱1,249,024.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	2.36	₱26,432.00	1	1	1	LOW
9-A	MLCSP	150	₱11,200.00	11.94	₱133,728.00	1	1	1	LOW
7-A	MLCSP	600	₱40,100.00	150.53	₱6,036,253.00	1	1	1	LOW
7-A	MLCSP	500	₱33,200.00	140.13	₱4,652,316.00	1	1	1	LOW
7-A	MLCSP	600	₱40,100.00	7.69	₱308,369.00	1	1	1	LOW
6-A	MLCSP	600	₱40,100.00	80.98	₱3,247,298.00	1	1	1	LOW
7-A	MLCSP	500	₱33,200.00	3.49	₱115,868.00	1	1	1	LOW
4-A	MLCSP	500	₱33,200.00	182.25	₱6,050,700.00	1	1	1	LOW
2-A	MLCSP	350	₱20,800.00	52.74	₱1,096,992.00	1	1	1	LOW
TALOMO	MLCSP	900	₱56,500.00	78.13	₱4,414,345.00	1	1	1	LOW
TALOMO	MLCSP	800	₱52,800.00	130.78	₱6,905,184.00	1	1	1	LOW
TALOMO	MLCSP	750	₱48,500.00	16.57	₱803,645.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	57.35	₱1,095,385.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	14.63	₱163,856.00	2	1	2	LOW
2-A	MLCSP	350	₱20,800.00	38.36	₱797,888.00	1	1	1	LOW
11-B	MLCSP	150	₱11,200.00	12.97	₱145,264.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	142.86	₱1,600,032.00	1	1	1	LOW
BAGO APLAYA	MLCSP	300	₱19,100.00	219.77	₱4,197,607.00	1	1	2	LOW
BAGO APLAYA	MLCSP	600	₱40,100.00	196.64	₱7,885,264.00	1	1	1	LOW
BAGO APLAYA	MLCSP	600	₱40,100.00	345.04	₱13,836,104.00	1	1	1	LOW
7-A	MLCSP	600	₱40,100.00	78.89	₱3,163,489.00	1	1	1	LOW
BAGO APLAYA	MLCSP	600	₱40,100.00	424.6	₱17,026,460.00	1	1	1	LOW
TALOMO	MLCSP	250	₱17,700.00	85.41	₱1,511,757.00	1	1	1	LOW
TALOMO	MLCSP	300	₱19,100.00	152.94	₱2,921,154.00	2	1	2	LOW
BAGO APLAYA	MLCSP	500	₱33,200.00	65.78	₱2,183,896.00	1	1	1	LOW
BAGO APLAYA	MLCSP	400	₱23,600.00	17.98	₱424,328.00	2	2	4	MODERATE
6-A	MLCSP	600	₱40,100.00	101.25	₱4,060,125.00	1	1	1	LOW
TALOMO	MLCSP	900	₱56,500.00	20.76	₱1,172,940.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	65.89	₱737,968.00	2	1	2	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 4-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	VULNERABILITY INDEX SCORE RANGE
MATINA CROSSING	MLCSP	150	₱11,200.00	17.73	₱198,576.00	2	1	2	LOW
TALOMO	MLCSP	450	₱24,300.00	8.64	₱209,952.00	1	1	1	LOW
BAGO APLAYA	MLCSP	450	₱24,300.00	30.74	₱746,982.00	1	1	1	LOW
TALOMO	MLCSP	600	₱40,100.00	4.63	₱185,663.00	1	1	1	LOW
BAGO APLAYA	MLCSP	600	₱40,100.00	41.6	₱1,668,160.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	55.48	₱621,376.00	2	1	2	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	13.1	₱146,720.00	2	1	2	LOW
BUCANA	MLCSP	150	₱11,200.00	1.49	₱16,688.00	2	1	2	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	156.25	₱1,750,000.00	2	1	2	LOW
BAGO APLAYA	MLCSP	450	₱24,300.00	476.45	₱11,577,735.00	1	1	1	LOW
BAGO APLAYA	MLCSP	700	₱44,200.00	13.77	₱608,634.00	1	1	1	LOW
TALOMO	MLCSP	700	₱44,200.00	219.87	₱9,718,254.00	1	1	1	LOW
BAGO APLAYA	MLCSP	700	₱44,200.00	7.87	₱347,854.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	57.01	₱638,512.00	2	1	2	LOW
7-A	MLCSP	600	₱40,100.00	53.93	₱2,162,593.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	75.77	₱848,624.00	1	1	1	LOW
4-A	MLCSP	500	₱33,200.00	6.13	₱203,516.00	1	1	1	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	16.87	₱188,944.00	2	1	2	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	11.21	₱125,552.00	2	1	2	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	21.56	₱241,472.00	2	1	2	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	83.29	₱932,848.00	2	1	2	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	0.4	₱4,480.00	2	1	2	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	1.93	₱21,616.00	2	1	2	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	52.77	₱591,024.00	2	1	2	LOW
TALOMO	MLCSP	250	₱17,700.00	44.64	₱790,128.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	208.51	₱2,606,375.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	61.23	₱765,375.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	3.12	₱39,000.00	1	1	1	LOW
SASA	MLCSP	250	₱17,700.00	84.53	₱1,496,181.00	1	1	1	LOW
SASA	MLCSP	250	₱17,700.00	110.93	₱1,963,461.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 4-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	VULNERABILITY INDEX SCORE RANGE
BAGO GALLERA	MLCSP	350	₱20,800.00	217.28	₱4,519,424.00	1	1	1	LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	256.4	₱5,333,120.00	1	1	1	LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	449.95	₱9,358,960.00	1	1	1	LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	346.5	₱7,207,200.00	1	1	1	LOW
BAGO APLAYA	MLCSP	250	₱17,700.00	14.99	₱265,323.00	1	1	1	LOW
BAGO GALLERA	MLCSP	350	₱20,800.00	217.59	₱4,525,872.00	1	1	1	LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	243.39	₱5,062,512.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	60.43	₱1,154,213.00	1	1	1	LOW
A. ANGLIONGTO	MLCSP	250	₱17,700.00	69.97	₱1,238,469.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	400	₱23,600.00	12.06	₱284,616.00	1	1	1	LOW
19-B	MLCSP	300	₱19,100.00	92.88	₱1,774,008.00	1	1	1	LOW
MA-A	MLCSP	750	₱48,500.00	95.39	₱4,626,415.00	1	1	1	LOW
5-A	MLCSP	750	₱48,500.00	45.83	₱2,222,755.00	1	1	1	LOW
2-A	MLCSP	750	₱48,500.00	35.84	₱1,738,240.00	1	1	1	LOW
BAGO GALLERA	MLCSP	350	₱20,800.00	23.71	₱493,168.00	1	1	1	LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	397	₱8,257,600.00	1	1	1	LOW
BAGO GALLERA	MLCSP	300	₱19,100.00	4.41	₱84,231.00	2	1	2	LOW
BAGO APLAYA	MLCSP	300	₱19,100.00	8.71	₱166,361.00	1	1	2	LOW
WILFREDO AQUINO	MLCSP	400	₱23,600.00	7.72	₱182,192.00	1	1	1	LOW
12-B	MLCSP	100	₱11,000.00	0.78	₱8,580.00	1	1	1	LOW
TALOMO	MLCSP	450	₱24,300.00	65.2	₱1,584,360.00	1	1	1	LOW
TALOMO	MLCSP	450	₱24,300.00	2.35	₱57,105.00	1	1	1	LOW
MATINA CROSSING	MLCSP	350	₱20,800.00	239.21	₱4,975,568.00	1	1	1	LOW
MATINA APLAYA	MLCSP	300	₱19,100.00	169.9	₱3,245,090.00	2	1	2	LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	7.81	₱162,448.00	1	1	1	LOW
PANACAN	MLCSP	250	₱17,700.00	27.17	₱480,909.00	2	1	2	LOW
TIBUNGCO	MLCSP	400	₱23,600.00	99.02	₱2,336,872.00	1	1	1	LOW
PANACAN	MLCSP	250	₱17,700.00	482.76	₱8,544,852.00	1	1	1	LOW
6-A	MLCSP	600	₱40,100.00	14.1	₱565,410.00	1	1	1	LOW
6-A	MLCSP	600	₱40,100.00	9.89	₱396,589.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 4-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	VULNERABILITY INDEX SCORE RANGE
BAGO APLAYA	MLCSP	450	₱24,300.00	150.52	₱3,657,636.00	1	1	1	LOW
BAGO APLAYA	MLCSP	450	₱24,300.00	49.9	₱1,212,570.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	11.72	₱223,852.00	1	1	1	LOW
19-B	MLCSP	300	₱19,100.00	7.9	₱150,890.00	1	1	1	LOW
BAGO APLAYA	MLCSP	400	₱23,600.00	105.04	₱2,478,944.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	400	₱23,600.00	149.64	₱3,531,504.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	600	₱40,100.00	89.84	₱3,602,584.00	1	1	1	LOW
BAGO APLAYA	MLCSP	600	₱40,100.00	154.19	₱6,183,019.00	1	1	1	LOW
BUCANA	MLCSP	250	₱17,700.00	149.35	₱2,643,495.00	1	1	1	LOW
20-B	MLCSP	150	₱11,200.00	21.7	₱243,040.00	1	1	1	LOW
20-B	MLCSP	150	₱11,200.00	41.02	₱459,424.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	17.38	₱194,656.00	1	1	1	LOW
PANACAN	MLCSP	400	₱23,600.00	127.58	₱3,010,888.00	1	1	1	LOW
ILANG	MLCSP	400	₱23,600.00	0	₱0.00	2	1	2	LOW
ILANG	MLCSP	400	₱23,600.00	268.62	₱6,339,432.00	2	1	2	LOW
TIBUNGCO	MLCSP	400	₱23,600.00	200.18	₱4,724,248.00	1	1	1	LOW
ILANG	MLCSP	400	₱23,600.00	316.97	₱7,480,492.00	1	1	1	LOW
TALOMO	MLCSP	450	₱24,300.00	6.06	₱147,258.00	1	1	1	LOW
TALOMO	MLCSP	750	₱48,500.00	411.28	₱19,947,080.00	1	1	1	LOW
TALOMO	MLCSP	750	₱48,500.00	69.41	₱3,366,385.00	1	1	1	LOW
TALOMO	MLCSP	350	₱20,800.00	39.38	₱819,104.00	1	1	1	LOW
TALOMO	MLCSP	350	₱20,800.00	569.71	₱11,849,968.00	1	1	1	LOW
TALOMO	MLCSP	250	₱17,700.00	16.21	₱286,917.00	1	1	1	LOW
TALOMO	MLCSP	350	₱20,800.00	89.7	₱1,865,760.00	1	1	1	LOW
TALOMO	MLCSP	250	₱17,700.00	166.83	₱2,952,891.00	1	1	1	LOW
TALOMO	MLCSP	700	₱44,200.00	78.15	₱3,454,230.00	1	1	1	LOW
TALOMO	MLCSP	700	₱44,200.00	316.94	₱14,008,748.00	1	1	1	LOW
TALOMO	MLCSP	350	₱20,800.00	8.74	₱181,792.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	400	₱23,600.00	12.17	₱287,212.00	1	1	1	LOW
MATINA APLAYA	MLCSP	250	₱17,700.00	69.11	₱1,223,247.00	1	1	1	LOW
TIBUNGCO	MLCSP	350	₱20,800.00	22.6	₱470,080.00	1	1	1	LOW
SAN ANTONIO	MLCSP	400	₱23,600.00	78.61	₱1,855,196.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	400	₱23,600.00	122.72	₱2,896,192.00	1	1	1	LOW
SAN ANTONIO	MLCSP	400	₱23,600.00	121.28	₱2,862,208.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 4-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	VULNERABILITY INDEX SCORE RANGE
BAGO APLAYA	MLCSP	450	₱24,300.00	150.52	₱3,657,636.00	1	1	1	LOW
BAGO APLAYA	MLCSP	450	₱24,300.00	49.9	₱1,212,570.00	1	1	1	LOW
11-B	MLCSP	300	₱19,100.00	11.72	₱223,852.00	1	1	1	LOW
19-B	MLCSP	300	₱19,100.00	7.9	₱150,890.00	1	1	1	LOW
BAGO APLAYA	MLCSP	400	₱23,600.00	105.04	₱2,478,944.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	400	₱23,600.00	149.64	₱3,531,504.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	600	₱40,100.00	89.84	₱3,602,584.00	1	1	1	LOW
BAGO APLAYA	MLCSP	600	₱40,100.00	154.19	₱6,183,019.00	1	1	1	LOW
BUCANA	MLCSP	250	₱17,700.00	149.35	₱2,643,495.00	1	1	1	LOW
20-B	MLCSP	150	₱11,200.00	21.7	₱243,040.00	1	1	1	LOW
20-B	MLCSP	150	₱11,200.00	41.02	₱459,424.00	1	1	1	LOW
10-A	MLCSP	150	₱11,200.00	17.38	₱194,656.00	1	1	1	LOW
PANACAN	MLCSP	400	₱23,600.00	127.58	₱3,010,888.00	1	1	1	LOW
ILANG	MLCSP	400	₱23,600.00	0	₱0.00	2	1	2	LOW
ILANG	MLCSP	400	₱23,600.00	268.62	₱6,339,432.00	2	1	2	LOW
TIBUNGCO	MLCSP	400	₱23,600.00	200.18	₱4,724,248.00	1	1	1	LOW
ILANG	MLCSP	400	₱23,600.00	316.97	₱7,480,492.00	1	1	1	LOW
TALOMO	MLCSP	450	₱24,300.00	6.06	₱147,258.00	1	1	1	LOW
TALOMO	MLCSP	750	₱48,500.00	411.28	₱19,947,080.00	1	1	1	LOW
TALOMO	MLCSP	750	₱48,500.00	69.41	₱3,366,385.00	1	1	1	LOW
TALOMO	MLCSP	350	₱20,800.00	39.38	₱819,104.00	1	1	1	LOW
TALOMO	MLCSP	350	₱20,800.00	569.71	₱11,849,968.00	1	1	1	LOW
TALOMO	MLCSP	250	₱17,700.00	16.21	₱286,917.00	1	1	1	LOW
TALOMO	MLCSP	350	₱20,800.00	89.7	₱1,865,760.00	1	1	1	LOW
TALOMO	MLCSP	250	₱17,700.00	166.83	₱2,952,891.00	1	1	1	LOW
TALOMO	MLCSP	700	₱44,200.00	78.15	₱3,454,230.00	1	1	1	LOW
TALOMO	MLCSP	700	₱44,200.00	316.94	₱14,008,748.00	1	1	1	LOW
TALOMO	MLCSP	350	₱20,800.00	8.74	₱181,792.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	400	₱23,600.00	12.17	₱287,212.00	1	1	1	LOW
MATINA APLAYA	MLCSP	250	₱17,700.00	69.11	₱1,223,247.00	1	1	1	LOW
TIBUNGCO	MLCSP	350	₱20,800.00	22.6	₱470,080.00	1	1	1	LOW
SAN ANTONIO	MLCSP	400	₱23,600.00	78.61	₱1,855,196.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	400	₱23,600.00	122.72	₱2,896,192.00	1	1	1	LOW
SAN ANTONIO	MLCSP	400	₱23,600.00	121.28	₱2,862,208.00	1	1	1	LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 4-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	VULNERABILITY INDEX SCORE RANGE
10-A	MLCSP	150	₱11,200.00	126.87	₱1,420,944.00	1	1	1	LOW
12-B	MLCSP	150	₱11,200.00	49.64	₱555,968.00	1	1	1	LOW
11-B	MLCSP	150	₱11,200.00	6.39	₱71,568.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	69.38	₱777,056.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	39.95	₱447,440.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	26.46	₱296,352.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	178.52	₱1,999,424.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	2.79	₱31,248.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	8.29	₱92,848.00	1	1	1	LOW
19-B	MLCSP	300	₱19,100.00	37.75	₱721,025.00	1	1	1	LOW
19-B	MLCSP	300	₱19,100.00	34.61	₱661,051.00	1	1	1	LOW
5-A	MLCSP	150	₱11,200.00	128.45	₱1,438,640.00	1	1	1	LOW
5-A	MLCSP	300	₱19,100.00	100.92	₱1,927,572.00	1	1	1	LOW
DUMOY	MLCSP	300	₱19,100.00	529.87	₱10,120,517.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	300	₱19,100.00	69.16	₱1,320,956.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	110.39	₱1,236,368.00	1	1	1	LOW
TALOMO	MLCSP	600	₱40,100.00	258.8	₱10,377,880.00	1	1	1	LOW
BAGO GALLERA	MLCSP	250	₱17,700.00	7.24	₱128,148.00	1	1		LOW
BAGO APLAYA	MLCSP	500	₱33,200.00	18.39	₱610,548.00	1	1	1	LOW
BUCANA	MLCSP	150	₱11,200.00	80.03	₱896,336.00	1	1	2	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	1.01	₱11,312.00	1	1	2	LOW
BUCANA	MLCSP	150	₱11,200.00	78.94	₱884,128.00	1	1	2	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	59.92	₱671,104.00	1	1	2	LOW
MA-A	MLCSP	750	₱48,500.00	143.95	₱6,981,575.00	1	1		LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	75.75	₱848,400.00	2	1	2	LOW
7-A	MLCSP	600	₱40,100.00	40.84	₱1,637,684.00	1	1		LOW
9-A	MLCSP	150	₱11,200.00	145.74	₱1,632,288.00	1	1		LOW
10-A	MLCSP	150	₱11,200.00	1.89	₱21,168.00	1	1		LOW
6-A	MLCSP	350	₱20,800.00	1.7	₱35,360.00	1	1		LOW
5-A	MLCSP	350	₱20,800.00	11.53	₱239,824.00	1	1		LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 5-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	VULNERABILITY INDEX SCORE RANGE
2-A	MLCSP	350	₱20,800.00	47.49	₱987,792.00	1	1		LOW
TALOMO	MLCSP	800	₱52,800.00	150.02	₱7,921,056.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	300	₱19,100.00	26	₱496,600.00	1	1		LOW
BAGO APLAYA	MLCSP	300	₱19,100.00	40.05	₱764,955.00	1	1	1	LOW
BAGO APLAYA	MLCSP	600	₱40,100.00	69.46	₱2,785,346.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	600	₱40,100.00	230.12	₱9,227,812.00	2	2	4	MODERATE
DUMOY	MLCSP	600	₱40,100.00	461.42	₱18,502,942.00	1	1		LOW
BAGO APLAYA	MLCSP	600	₱40,100.00	168.6	₱6,760,860.00	2	2	4	MODERATE
BAGO APLAYA	MLCSP	600	₱40,100.00	347.68	₱13,941,968.00	2	2	4	MODERATE
TALOMO	MLCSP	300	₱19,100.00	1.65	₱31,515.00	1	1	1	LOW
TALOMO	MLCSP	900	₱56,500.00	99.08	₱5,598,020.00	1	1	1	LOW
TALOMO	MLCSP	900	₱56,500.00	32.44	₱1,832,860.00	1	1	1	LOW
DUMOY	MLCSP	500	₱33,200.00	347.62	₱11,540,984.00	1	1		LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	13.94	₱156,128.00	2	1	2	LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	91.74	₱1,027,488.00	2	1	2	LOW
BAGO APLAYA	MLCSP	450	₱24,300.00	8.51	₱206,793.00	1	1	1	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	123.52	₱1,383,424.00	2	1	2	LOW
5-A	MLCSP	150	₱11,200.00	56.71	₱635,152.00	1	1		LOW
19-B	MLCSP	400	₱23,600.00	13.31	₱314,116.00	1	1		LOW
BAGO APLAYA	MLCSP	450	₱24,300.00	362.12	₱8,799,516.00	1	1	1	LOW
19-B	MLCSP	400	₱23,600.00	235.19	₱5,550,484.00	1	1		LOW
BUCANA	MLCSP	150	₱11,200.00	6.06	₱67,872.00	2	1	2	LOW
7-A	MLCSP	600	₱40,100.00	20.93	₱839,293.00	1	1		LOW
MATINA APLAYA	MLCSP	150	₱11,200.00	59.72	₱668,864.00	2	1	2	LOW
MATINA CROSSING	MLCSP	150	₱11,200.00	42.48	₱475,776.00	2	1	2	LOW
TALOMO	MLCSP	250	₱17,700.00	65.6	₱1,161,120.00	1	1	1	LOW
SASA	MLCSP	200	₱12,500.00	9.58	₱119,750.00	1	1		LOW
SASA	MLCSP	200	₱12,500.00	6.01	₱75,125.00	1	1		LOW
SASA	MLCSP	250	₱17,700.00	22.6	₱400,020.00	1	1		LOW
SASA	MLCSP	250	₱17,700.00	112.27	₱1,987,179.00	1	1		LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 5-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	VULNERABILITY INDEX SCORE RANGE
BAGO GALLERA	MLCSP	350	₱20,800.00	201.34	₱4,187,872.00	1	1		LOW
BAGO GALLERA	MLCSP	350	₱20,800.00	0	₱0.00	1	1		LOW
BAGO GALLERA	MLCSP	350	₱20,800.00	0	₱0.00	1	1		LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	25.65	₱533,520.00	1	1	1	LOW
BAGO GALLERA	MLCSP	350	₱20,800.00	120.55	₱2,507,440.00	1	1		LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	105.58	₱2,196,064.00	1	1	1	LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	97.58	₱2,029,664.00	1	1	1	LOW
BAGO GALLERA	MLCSP	350	₱20,800.00	187.42	₱3,898,336.00	1	1		LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	38.7	₱804,960.00	1	1	1	LOW
WILFREDO AQUINO	MLCSP	400	₱23,600.00	72.27	₱1,705,572.00	1	1		LOW
WILFREDO AQUINO	MLCSP	400	₱23,600.00	58.37	₱1,377,532.00	1	1		LOW
BUHANGIN	MLCSP	400	₱23,600.00	1.98	₱46,728.00	1	1		LOW
BUHANGIN	MLCSP	400	₱23,600.00	13.48	₱318,128.00	1	1		LOW
19-B	MLCSP	300	₱19,100.00	55.61	₱1,062,151.00	1	1		LOW
5-A	MLCSP	750	₱48,500.00	150.79	₱7,313,315.00	1	1		LOW
BAGO APLAYA	MLCSP	350	₱20,800.00	148.52	₱3,089,216.00	1	1	1	LOW
MATINA CROSSING	MLCSP	350	₱20,800.00	162.66	₱3,383,328.00	1	1		LOW
MATINA APLAYA	MLCSP	350	₱20,800.00	98.18	₱2,042,144.00	1	1		LOW
MATINA APLAYA	MLCSP	300	₱19,100.00	56.03	₱1,070,173.00	2	2	4	MODERATE
DUMOY	MLCSP	250	₱17,700.00	15	₱265,500.00	1	1		LOW
BAGO APLAYA	MLCSP	250	₱17,700.00	5.64	₱99,828.00	1	1	1	LOW
BAGO GALLERA	MLCSP	250	₱17,700.00	6.99	₱123,723.00	1	1		LOW
PANACAN	MLCSP	250	₱17,700.00	27.61	₱488,697.00	2	1	2	LOW
TIBUNGCO	MLCSP	400	₱23,600.00	21.98	₱518,728.00	1	1	1	LOW
PANACAN	MLCSP	250	₱17,700.00	137.02	₱2,425,254.00	1	1	1	LOW
6-A	MLCSP	600	₱40,100.00	76.07	₱3,050,407.00	1	1		LOW
5-A	MLCSP	600	₱40,100.00	9.16	₱367,316.00	1	1		LOW
BAGO APLAYA	MLCSP	450	₱24,300.00	40.05	₱973,215.00	1	1	1	LOW
BAGO APLAYA	MLCSP	450	₱24,300.00	12.26	₱297,918.00	1	1	1	LOW
19-B	MLCSP	300	₱19,100.00	100.29	₱1,915,539.00	1	1		LOW

Table LU-196. Lifeline Utilities, Level III Water System, Vulnerability Table for Storm Surge 5-meter wave, Davao City

EXPOSURE						IMPACT	ADAPTIVE	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	VULNERABILITY INDEX SCORE
19-B	MLCSP	300	₱19,100.00	45.56	₱870,196.00	1	1		LOW
10-A	MLCSP	150	₱11,200.00	3.91	₱43,792.00	1	1		LOW
10-A	MLCSP	150	₱11,200.00	40.94	₱458,528.00	1	1		LOW
ILANG	MLCSP	400	₱23,600.00	175.96	₱4,152,656.00	2	2	4	MODERATE
ILANG	MLCSP	400	₱23,600.00	0	₱0.00	2	2	4	MODERATE
TIBUNGCO	MLCSP	400	₱23,600.00	109.09	₱2,574,524.00	1	1	1	LOW
ILANG	MLCSP	400	₱23,600.00	4.44	₱104,784.00	2	2	4	MODERATE
TALOMO	MLCSP	750	₱48,500.00	17.28	₱838,080.00	2	2	4	MODERATE
TALOMO	MLCSP	700	₱44,200.00	275.23	₱12,165,166.00	2	2	4	MODERATE
TALOMO	MLCSP	350	₱20,800.00	217.93	₱4,532,944.00	1	1	1	LOW
TIBUNGCO	MLCSP	350	₱20,800.00	21.54	₱448,032.00	1	1	1	LOW

Table LU-197. Climate Change Vulnerability Assessment Summary Matrix of Level III Water System for Storm Surge, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
MATINA APLAYA	<ul style="list-style-type: none"> • There is one 300 mm pipe bridge located in Shanghai Road Matina Aplaya is exposed to storm surge with 5 m wave. • The total exposed length is 53.03 m. • The degree of impact is moderate, the adaptive capacity is moderate. • The vulnerability rating is moderate. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
ULAS (Talomo Proper)	<ul style="list-style-type: none"> • There are two pipe bridges within Ulas-Talomo bridge with diameter of 700 and 750 exposed in storm surge with 5 meter wave. • The total exposed length is 292.51 m. • The degree of impact is moderate, the adaptive capacity is moderate. • The vulnerability rating is moderate. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
ILANG, TIBUNGCO	<ul style="list-style-type: none"> • There are 3 pipelines with 400 m exposed to 5 m wave. • Two pipe bridge, Ilang-Tibungco, one near Tefasco and one near Holcim. • The total exposed length is 180.39 m. • The degree of impact is moderate, the adaptive capacity is moderate. • The vulnerability rating is moderate. 	<ul style="list-style-type: none"> • There will be disruption of regular operations due to damage of pipes. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-197. Climate Change Vulnerability Assessment Summary Matrix of Level III Water System for Storm Surge, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
BAGO APLAYA	<ul style="list-style-type: none"> ● 20.3 m of 600 mm diameter pipe bridge in Davao-Cotabato Road, Bago Aplaya is exposed to storm surge with 5 meter wave. ● All in all four pipelines in 600 mm diameter is exposed to storm surge with 5 meter wave. ● The total hazard length of all pipelines is 815.86 m. ● The degree of impact is moderate, and the adaptive capacity is moderate. ● The vulnerability rating is moderate. ● Also a there are 20.7 and 15.7 m of separate 400 mm diameter pipe bridge crossings in Davao-Cotabato Road, Bago Aplaya is exposed to storm surge with 4 meter wave. ● In Bago Aplaya, a there are 4 main lines exposed to storm surge with 4 meter wave. ● The total exposed length is 361.61 m. ● In these pipelines, 361.61 m have moderate vulnerability. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations due to damage of pipes. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

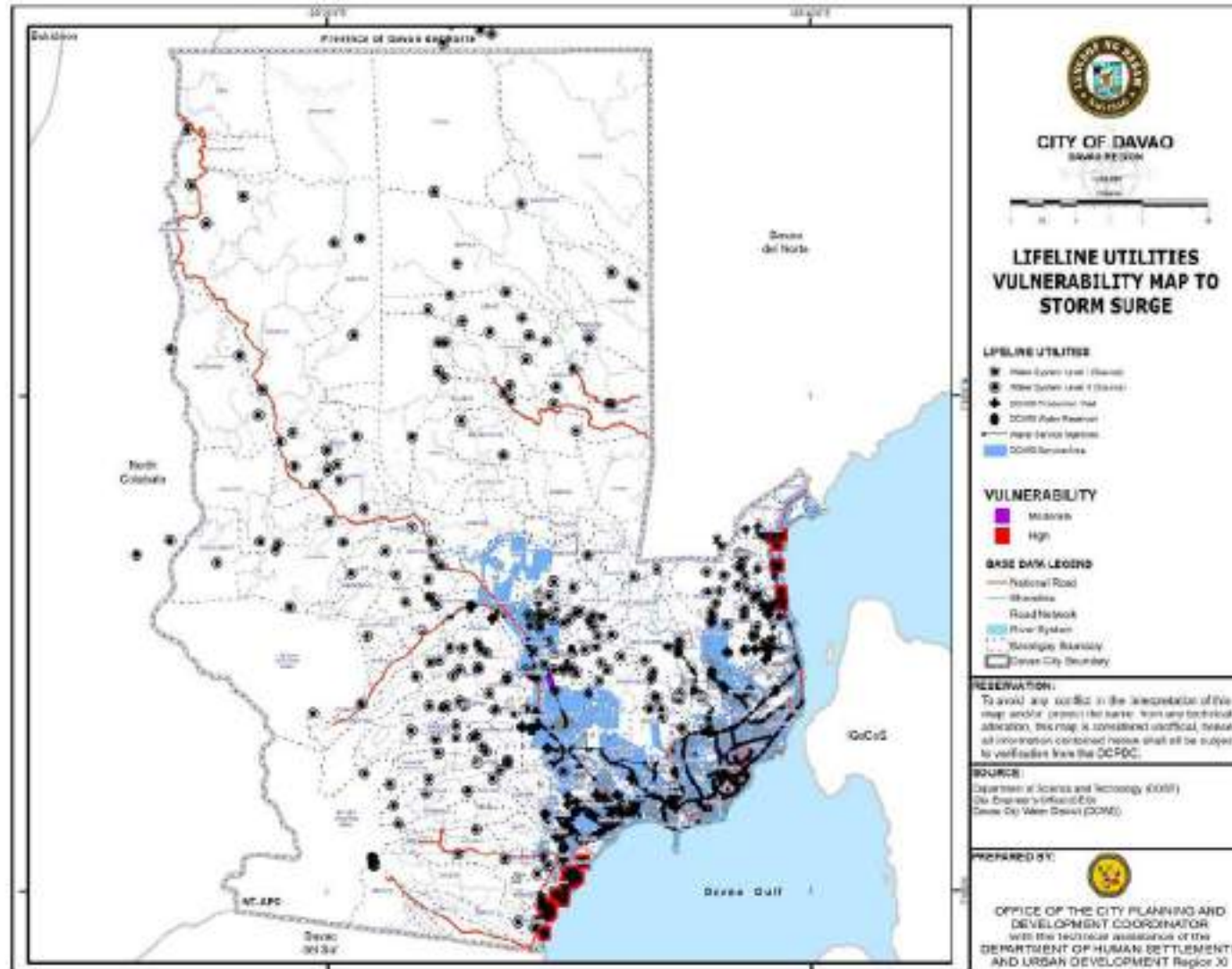
Vulnerability of DCWD Wells

All DCWD wells have low vulnerability.

Table LU-198. Lifeline Utilities, Level III Water System, DCWD Production Wells, Vulnerability Table for Storm Surge, Davao City

LOCATION	PUMP TYPE	REPLACEMENT COST	VALUE OF EXISTING LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX SCORE	VULNERABILITY INDEX RATING
Km. 7, Talomo Sump Bangkal, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
UUHSA, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Km. 8 Ulas, Brgy. Talomo	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Puan Junction, Brgy. Talomo	SUBMERSIBLE	6,500,000.00	6,500,000.00	2	1	2	LOW
Lower Rapnaga, Puan, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Lower Rapnaga, Puan, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Crossing Bago Aplaya, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Km. 10 Bago Aplaya fronting Ideal Subdivision, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Km. 11 Dumoy near the entrance to Dusnai, Brgy. Dumoy	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Bago Gallera Road near Gallera De Oro Subd., Brgy. Bago Gallera	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Km. 9, Puan along Davao Cotabato Road Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Catotal Subdivision near Block 22, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW
Gallera de Oro Subdivision near Block 8, Brgy. Bago Aplaya	VERTICAL TURBINE	6,500,000.00	6,500,000.00	2	1	2	LOW

Map 5. 22 Lifeline Utilities, Water Supply, Vulnerability Map to Storm Surge



Vulnerability of Cell Site Towers

Two cell sites in Bunawan and one in Lasang have moderate vulnerability to storm surge with 4-meter wave. All the rest of the cell sites have low vulnerability with 2-meter, 3-meter, 4-meter and 5-meter wave.

Table LU-199. Lifeline Utilities, Cell Sites, Vulnerability Table for Storm Surge 2-meter wave, Davao City

EXPOSURE (STORM SURGE - 2M)					ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	AVE.			
DIGITEL MOBILE PHILIPPINES, INC.	Lorenzo Manuel St., San Vicente Daliao, Toril, Davao City,	300 sq. m	₱12 -₱15 million	1.5	2	3	Low
GLOBE TELECOM, INC.	Badak Beach Resort, Toril (Pob.)	300 sq. m	₱12 -₱15 million	2	2	4	Moderate
SMART COMMUNICATIONS, INC.	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	2	1	2	Low
GLOBE TELECOM, INC.	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	JMS Bldg., #88 Maya Street, Barangay 76A, Ecoland,	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Magno Prop., No. 64 V. Mapa St.,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	No. 64 V. Mapa St.	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro corner Quimpo Blvd.	300 sq. m	₱12 -₱15 million	1	1	1	Low
GLOBE TELECOM, INC.	Bonifacio St., cor M.L. Quezon Blvd	300 sq. m	₱12 -₱15 million	1.5	1	1.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	109 Piapi, Quezon Blvd,	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Santiago's Lot, Brgy. Sasa Buhangin,	300 sq. m	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Erlinda Reyes Bldg., 19-Piapi Quezon Blvd.,	300 sq. m	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	D. Ponce St.,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	1	1	1	Low
DIGITEL MOBILE PHILIPPINES, INC.	Chippens Bldg., 368 Padre Gomez St.,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Chippens Bldg., 368 Padre Gomez St.	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Gov. Sales St., Brgy. 27	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Jose Co Bldg., Gov. Sales St., Brgy. 27,	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	NCC Mall Uyanguren	300 sq. m	₱12 -₱15 million	1.5	1	1.5	Low
SMART COMMUNICATIONS, INC.	NCC Mall Unaguren	300 sq. m	₱12 -₱15 million	1.5	1	1.5	Low
SMART COMMUNICATIONS, INC.	PBCOM Bldg., Monteverde cor. Bangoy St.,	300 sq. m	₱12 -₱15 million	1.5	1	1.5	Low
SMART COMMUNICATIONS, INC.	PLDT Post fronting Chimes Store, Sales St.,	300 sq. m	₱12 -₱15 million	1	1	1	Low
DIGITEL MOBILE PHILIPPINES, INC.	Lapu Lapu corner Bangoy Sts., Agdao,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Lapu-lapu St., cor. Bangoy Agdao,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Banco Filipino Bldg., Lapu-lapu St., cor. Dacudao Ave.,	300 sq. m	₱12 -₱15 million	1	1	1	Low
GLOBE TELECOM, INC.	Wescon Suites Cmpd., R. Castillo, Agdao	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Llanes Prop 1, Cabaguio Ave., Agdao,	300 sq. m	₱12 -₱15 million	1.5	1	1.5	Low
SMART COMMUNICATIONS, INC.	Cabaguio Ave., Agdao	300 sq. m	₱12 -₱15 million	1.5	1	1.5	Low

Table LU-199. Lifeline Utilities, Cell Sites, Vulnerability Table for Storm Surge 2-meter wave, Davao City

EXPOSURE (STORM SURGE - 2M)				AVE.	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST				
GLOBE TELECOM, INC.	R. Castillo St., Otero Compound, Lapu-Lapu	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Leonor Property, CamiaSt., Ubalde Subd.,Brgy. Ubalde	300 sq. m	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Camia St., Ubalde Subd., Brgy. Ubalde	300 sq. m	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Waterfront Hotel, Lanang,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Doña Asuncion Road, Brgy. Pampanga, Lanang,	300 sq. m	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Km. 9, KMA, Brgy. Sasa	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Sitio Nahul, Barangay Baliok,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Sitio Nahul, Brgy. Baliok	300 sq. m	₱12 -₱15 million	1	1	1	Low
GLOBE TELECOM, INC.	National Highway Panacan	300 sq. m	₱12 -₱15 million	2	1	2	Low

Table LU-199. Lifeline Utilities, Cell Sites, Vulnerability Table for Storm Surge 3-meter wave, Davao City

EXPOSURE (STORM SURGE - 3M)				DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST				
GLOBE TELECOM, INC.	Brgy. Daliao, Toril,	300 sq. m	₱12 -₱15 million	1.5	2	3	Low
SMART COMMUNICATIONS, INC.	Brgy. Daliao, Toril	300 sq. m	₱12 -₱15 million	1.5	2	3	Low
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Sandawa, McArthur Hi-Way, Matina,	300 sq. m	₱12 -₱15 million	1.5	1	1.5	Low
SMART COMMUNICATIONS, INC.	Sandawa, McArthur Hi-way, Matina	300 sq. m	₱12 -₱15 million	1.5	1	1.5	Low
GLOBE TELECOM, INC.	Magallanes St.	300 sq. m	₱12 -₱15 million	1.5	1	1.5	Low
SMART COMMUNICATIONS, INC.	#88 Maya St., Brgy. 76A, Ecoland,	300 sq. m	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Luna Bldg., San Pedro cor. Quimpo Blvd.	300 sq. m	₱12 -₱15 million	1.5	1	1.5	Low
SMART COMMUNICATIONS, INC.	Ponciano Reyes St. (crooked Rd.)	300 sq. m	₱12 -₱15 million	1	1	1	Low
DIGITEL MOBILE PHILIPPINES, INC.	Magno Bldg., Ponciano Reyes St. (crooked rd.),	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Marco Polo Hotel	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Baguio (Pob.),	300 sq. m	₱12 -₱15 million	1	1	1	Low
DIGITEL MOBILE PHILIPPINES, INC.	Km.12, National Highway, Barangay Catalunan Pequeno,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	PLDT Ponciano, PLDT Bldg., Ponciano St.	300 sq. m	₱12 -₱15 million	1	1	1	Low
DIGITEL MOBILE PHILIPPINES, INC.	Regency Inn, Villa Abrille St.,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Holy Cross College, Sta. Ana Ave. Cor Guerero	300 sq. m	₱12 -₱15 million	1.5	1	1.5	Low
GLOBE TELECOM, INC.	San Pedro Hospital Guzman St., Brgy. Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	1	1	1	Low
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., TÁBrgy. Gov. Vicente Duterte,	300 sq. m	₱12 -₱15 million	1	1	1	Low
GLOBE TELECOM, INC.	San Pedro Hospital, Guzman St., Gov. Vicente Duterte	300 sq. m	₱12 -₱15 million	1	1	1	Low
GLOBE TELECOM, INC.	Corner Palma Gil & Cervantes St.	300 sq. m	₱12 -₱15 million	1	1	1	Low

Table LU-199. Lifeline Utilities, Cell Sites, Vulnerability Table for Storm Surge 3-meter wave, Davao City

EXPOSURE (STORM SURGE - 3M)				DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST				
SMART COMMUNICATIONS, INC.	University of Southern Philippines, Trade School Drive	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Opal St., Obrero,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Opal St., Obrero	300 sq. m	₱12 -₱15 million	1	1	1	Low
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	1	1	1	Low
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang	300 sq. m	₱12 -₱15 million	1	1	1	Low
GLOBE TELECOM, INC.	J.P. Laurel Avenue, Lanang,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	SM Lanang, Km. 6 Lanang	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	SM Lanang, Km 6, Lanang,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	3rd Floor, SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	1.5	1	1.5	Low
SMART COMMUNICATIONS, INC.	SM Davao Ecoland	300 sq. m	₱12 -₱15 million	1.5	1	1.5	Low
SMART COMMUNICATIONS, INC.	SM Davao Ecoland,	300 sq. m	₱12 -₱15 million	1.5	1	1.5	Low

Table 1.4.5e Lifeline Utilities, Cell Sites, Vulnerability Table for Storm Surge 4-meter wave, Davao City

EXPOSURE (STORM SURGE - 4M)				DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST				
SMART COMMUNICATIONS, INC.	Barangay Bago Aplaya, Talomo District, Davao City Golf Country Club	300 sq. m	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	3	1	3	Low
SMART COMMUNICATIONS, INC.	Progress Building Quimpo Boulevard, Ecoland	300 sq. m	₱12 -₱15 million	3	1	3	Low
SMART COMMUNICATIONS, INC.	Crossing Puan, McArthur Highway	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Bago Aplaya, Talomo	300 sq. m	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo,	300 sq. m	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	PLDT Village, Bo. Talomo	300 sq. m	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Ortis Road, Brgy. Ulas	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Ortis road, Brgy. Ulas	300 sq. m	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Acacia St., near Ecoland Subd.	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Alzati's Lot, Matina Aplaya	300 sq. m	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	Matina Aplaya	300 sq. m	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	5/F Gaisano Ilustre St.	300 sq. m	₱12 -₱15 million	1	1	1	Low
DIGITEL MOBILE PHILIPPINES, INC.	Ilustre St.,	300 sq. m	₱12 -₱15 million	1	1	1	Low

Table LU-199. Lifeline Utilities, Cell Sites, Vulnerability Table for Storm Surge 4-meter wave, Davao City

EXPOSURE (STORM SURGE - 4M)				DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST				
SMART COMMUNICATIONS, INC.	J.S. Gaisano Mall, Ilustre St., cor. Gen. Luna St.,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	General Malvar St.	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Legaspi St. Cor. Bonifacio St.,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	J.P Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Infront of Luisa Avenue Square Bldg., B. Jacinto Ext. St.	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Landco Bldg., JP Laurel St.	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Billboard on Synchar Hotel, J.P. Laurel Ave., Bajada	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	J.P. Laurel Avenue, Bajada,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Avenue	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Rooftop SM Lanang, JP Laurel Ave.,	300 sq. m	₱12 -₱15 million	1	1	1	Low
GLOBE TELECOM, INC.	SM Lanang Former Lanang Golf and Country Club, J.P. Laurel Ave., Lanang District, Brgy. San Antonio	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Park Inn Radison, Lanang	300 sq. m	₱12 -₱15 million	1	1	1	Low
GLOBE TELECOM, INC.	J.P. Laurel Ave., Monark Compound, Brgy. Rafael Castillo	300 sq. m	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Malagamot Road, Panacan,	300 sq. m	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway, Panacan	300 sq. m	₱12 -₱15 million	2.5	1	2.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Mercado Property, Purok 3 (Near Market Site), Brgy. Bunawan	300 sq. m	₱12 -₱15 million	2	2	4	Moderate
SMART COMMUNICATIONS, INC.	Purok 3, (near Market site), Brgy. Bunawan	300 sq. m	₱12 -₱15 million	2	2	4	Moderate
SMART COMMUNICATIONS, INC.	Lasang	300 sq. m	₱12 -₱15 million	2	2	4	Moderate

Table LU-199. Lifeline Utilities, Cell Sites, Vulnerability Table for Storm Surge 5-meter wave, Davao City

EXPOSURE (STORM SURGE - 5M)				DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
NAME OF CELL SITE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST				
SMART COMMUNICATIONS, INC.	Along National Highway, Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	1.5	1	1.5	Low
DIGITEL MOBILE PHILIPPINES, INC.	Commandante Property, Along National Highway, Brgy. Bago Aplaya, Talomo District,	300 sq. m	₱12 -₱15 million	2	1	2	Low
GLOBE TELECOM, INC.	Doña Luisa Subdivision, Phase 2, Brgy. Matina Aplaya	300 sq. m	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana	300 sq. m	₱12 -₱15 million	2.5	1	2.5	Low
GLOBE TELECOM, INC.	SM City Davao Annex Building, Brgy. Bucana,	300 sq. m	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	SM Davao, Ecoland,	300 sq. m	₱12 -₱15 million	2.5	1	2.5	Low
SMART COMMUNICATIONS, INC.	University Ave., Juna Subd., Martina	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Abarquez Prop., University Ave., Juna Subd., Martina,	300 sq. m	₱12 -₱15 million	2	1	2	Low
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St., Barangay 20-B (Pob.)	300 sq. m	₱12 -₱15 million	1	1	1	Low
GLOBE TELECOM, INC.	Abreeza Mall JP Laurel St. Acacia,	300 sq. m	₱12 -₱15 million	1	1	1	Low
GLOBE TELECOM, INC.	JP Laurel St., Barangay 20-B (Pob.),	300 sq. m	₱12 -₱15 million	1	1	1	Low
SMART COMMUNICATIONS, INC.	Malagamot Road, Bayani Diaz Compound, Panacan	300 sq. m	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	PLDT Compound, National Highway	300 sq. m	₱12 -₱15 million	2	1	2	Low
DIGITEL MOBILE PHILIPPINES, INC.	Tefasco Lot, Panacan,	300 sq. m	₱12 -₱15 million	2	1	2	Low
SMART COMMUNICATIONS, INC.	Panacan,	300 sq. m	₱12 -₱15 million	2	1	2	Low

Table LU-200. Climate Change Vulnerability Assessment Summary Matrix of Cell Sites for Storm Surge, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Bunawan	<ul style="list-style-type: none"> Two cell sites are moderately vulnerable to storm surge 4-meter wave 	<ul style="list-style-type: none"> There will be possible drop down of communication signal 	<ul style="list-style-type: none"> Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions
Lasang	<ul style="list-style-type: none"> One cell site is vulnerable to storm surge with 4-meter wave 	<ul style="list-style-type: none"> There will be possible drop down of communication signal 	<ul style="list-style-type: none"> Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions

Vulnerability of Roads

A total of 0.0760 kilometers of Davao Bukidnon Road is moderately vulnerable to earthquake. This is identified to be the highest road length vulnerable to earthquakes. Such road network is the road length which is exposed to three fault lines: 0.0482 kilometers of the same road length is exposed to Dacudao Fault; 0.0179 kilometers is exposed to Lacson Fault; and 0.0100 kilometers is exposed to Tamugan Fault.

Table LU-201. Lifeline Utilities, Roads, Vulnerability Table for Faultline, Davao City

ROAD NAME	TOTAL LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY
Calinan-Baguio-Cadalian Road	0.0106	35,000,000	372,526	1.0	2.0	2.0	Low
Calinan-Baguio-Cadalian Road	0.0108	35,000,000	378,525	1.0	2.0	2.0	Low
Davao-Bukidnon Road	0.0100	40,000,000	400,800	3.0	2.0	6.0	Moderate
Davao-Bukidnon Road	0.0100	40,000,000	400,064	3.0	2.0	6.0	Moderate
Davao-Bukidnon Road	0.0117	40,000,000	469,160	3.0	2.0	6.0	Moderate
Davao-Bukidnon Road	0.0179	40,000,000	714,648	3.0	2.0	6.0	Moderate
Davao-Bukidnon Road	0.0264	40,000,000	1,057,104	3.0	2.0	6.0	Moderate
Fatima-Malabog Road	0.0319	54,000,000	1,723,275	2.7	2.0	5.3	Moderate
Fatima-Malabog Road	0.0108	54,000,000	583,146	2.7	2.0	5.3	Moderate
Inawayan-Baracatan Road	0.0100	35,000,000	350,004	2.7	2.0	5.3	Moderate
Mc. Arthur Highway	0.0611	56,000,000	3,422,031	3.0	2.0	6.0	Moderate
Mc. Arthur Highway	0.1842	56,000,000	10,315,648	3.0	2.0	6.0	Moderate
Mc. Arthur Highway	0.0101	56,000,000	563,153	3.0	2.0	6.0	Moderate
Mc. Arthur Highway	0.1541	56,000,000	8,630,328	3.0	2.0	6.0	Moderate

Vulnerability of Bridges

Lipadas Bridge 1 and Lipadas Bridge 2 are moderately vulnerable to fault line.

Table LU-202. Lifeline Utilities, Roads, Vulnerability Table for Faultline, Davao City

ROAD NAME	REPLACEMENT COST PER (LINEAR METER)	EXPOSED LENGTH (LINEAR METERS)	VALUE OF THE EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY CATEGORY
Lipadas Br. I	1,200,000	37.80	45,360,000	3.0	2.0	6.0	Moderate
Lipadas Br. II	1,200,000	40.00	48,000,000	3.0	2.0	6.0	Moderate

Table LU-203. Climate Change Vulnerability Assessment Summary Matrix of Roads for Faultline, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Davao-Bukidnon Road	<ul style="list-style-type: none"> This road network is moderately vulnerable. A total of 0.0760 km road length is vulnerable hazard. Tamugan, Talomo, Tugbok, Malagos and Riverside are the exposed barangays within the Davao-Bukidnon Road. Davao-Bukidnon-Road is the road length which is exposed to three fault lines, 0.0482 kilometers of the same is exposed to Dacudao Fault, 0.0179 kilometers is exposed to Lacson Fault, and 0.0100 kilometers is exposed to Tamugan Fault. 	<ul style="list-style-type: none"> A portion of the road maybe partially or totally damaged. Costly maintenance/ rehabilitation replacement based on the degree of damage within those affected road network. Road access interruption due to maintenance/replacement of affected areas. Delay of delivery of goods and services. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.
Fatima-Malabog Road	<ul style="list-style-type: none"> This road network is moderately vulnerable to earthquake. A total of 0.0427 km road length is vulnerable. Barangay Malabog is the exposed barangay within the Fatima – Malabog road. Fatima-Malabog Road is also exposed to Pangyan-Biao Escuela Fault with a total 0.0427 kilometers exposed length. 	<ul style="list-style-type: none"> A portion of the road maybe partially or totally damaged. Costly maintenance/ rehabilitation/replacement based on the degree of damage within those affected road network. Road access interruption due to maintenance/replacement of affected areas. Delayed delivery of goods and services. 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.
Inawayan-Baracatan Road	<ul style="list-style-type: none"> A total of 0.01 km road length is moderately vulnerable to earthquake. Barangay Binugao is within the Inawayan - Baracatan road. Inawayan-Baracatan Road exposed to Lacson Fault with 0.0100 kilometers exposed length 	<ul style="list-style-type: none"> A portion of the road maybe partially or totally damaged. Costly maintenance/ rehabilitation/replacement based on the degree of damage within those affected road network. Road access interruption due to maintenance/replacement of affected areas. Delayed delivery of goods and services 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.
Mc. Arthur Highway	<ul style="list-style-type: none"> A total of 0.4095 km road length is moderately vulnerable to earthquake. Barangay Lizada, Binugao and Sirawan are exposed barangays within the Mc. Arthur Highway. McArthur Highway is exposed to Lacson Fault. 	<ul style="list-style-type: none"> A portion of the road maybe partially or totally damaged. Costly maintenance/ rehabilitation/replacement based on the degree of damage within those affected road network. Road access interruption due to maintenance/replacement of affected areas. Delayed delivery of goods and services 	<ul style="list-style-type: none"> Crafting of contingency plans for emergency situation. Re-routing scheme within the affected areas.

Table LU-203. Climate Change Vulnerability Assessment Summary Matrix of Roads for Faultline, Davao City

BRIDGE NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Lipadas Bridge I	<ul style="list-style-type: none"> • This bridge is moderately vulnerable. • A total of 37.80 is exposed to Tamugan Fault with 10 meter buffer. • This bridge is located at Barangay Lizada. • The exposed area of this bridge has a total value of P 45,360,000. 	<ul style="list-style-type: none"> • A portion of the bridge maybe partially or totally damaged. • Connecting roads cannot traverse due to maintenance/ replacement activity. • Appropriation of fund for maintenance/replacement based on the degree of damage. • Traffic congestion (due re-routing). • Delayed delivery of goods and services. 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Re-routing scheme within the affected areas.
Lipadas Bridge II	<ul style="list-style-type: none"> • This bridge is moderately vulnerable. • About 40.00 meters is exposed to Tamugan Fault with 10 meter buffer. • This bridge is located at Barangay Lizada. • The exposed area of this bridge has a total value of P 48,000,000. 	<ul style="list-style-type: none"> • A portion of the bridge maybe partially or totally damaged. • Connecting roads cannot traverse due to maintenance/ replacement activity. • Appropriation of fund for maintenance/replacement based on the degree of damage. • Traffic congestion (due re-routing). • Delayed delivery of goods and services 	<ul style="list-style-type: none"> • Crafting of contingency plans for emergency situation. • Re-routing scheme within the affected areas

Vulnerability of Level II Water Supply System

The 3 HP well found in Manambulan with high degree of impact and low adaptive capacity is highly vulnerable to earthquake.

Table LU-204. Lifeline Utilities, Level II Water System, Vulnerability Table for Faultline, Davao City

EXPOSURE				IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
MANAMBULAN	3 HP	60,500	60,500	3	3	9	HIGH

Table 205. Climate Change Vulnerability Assessment Summary Matrix for Faultline, Davao City

NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
3 horsepower well	<ul style="list-style-type: none"> The well is located in barangay Manambulan The well is exposed to Tamugan Fault and has a value of exposed lifeline of P60,500. The well has high degree of impact and a low adaptive capacity. 	<ul style="list-style-type: none"> There will be disruption of regular operations due to damage of wells. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas.

Vulnerability of Level III Water Supply System

For Level 3, 11 mainline pipes found in Wangan, Calinan, Tugbok, Mintal, Catalunan Grande, Talomo, and Los Amigos are moderately vulnerable to Earthquake

Table LU-206. Lifeline Utilities, Level III Water System, Vulnerability Table for Faultline, Davao City

EXPOSURE						IMPACT	ADAPTIVE CAPACITY	VULNERABILITY	
BARANGAY	TYPE	SIZE	REPLACEMENT COST	LENGTH	VALUE OF EXPOSED LIFELINE	DEGREE OF IMPACT	ADAPTIVE CAPACITY SCORE	VULNERABILITY INDEX	VULNERABILITY INDEX CATEGORY
WANGAN	MLCSP	200	₱12,500.00	0.12	₱1,500.00	2	2	4	MODERATE
CALINAN	MLCSP	200	₱12,500.00	0.09	₱1,125.00	2	2	4	MODERATE
TUGBOK	MLCSP	500	₱33,200.00	10.04	₱333,328.00	2	2	4	MODERATE
MINTAL	MLCSP	350	₱20,800.00	11.19	₱232,752.00	2	2	4	MODERATE
CATALUNAN GRANDE	MLCSP	350	₱20,800.00	10.37	₱215,696.00	2	2	4	MODERATE
TALOMO	MLCSP	350	₱20,800.00	10.02	₱208,416.00	2	2	4	MODERATE
LOS AMIGOS	MLCSP	250	₱17,700.00	35.73	₱632,421.00	2	2	4	MODERATE
WANGAN	MLCSP	200	₱12,500.00	4.52	₱56,500.00	2	2	4	MODERATE
WANGAN	MLCSP	200	₱12,500.00	4.52	₱56,500.00	2	2	4	MODERATE
CALINAN	MLCSP	200	₱12,500.00	5.27	₱65,875.00	2	2	4	MODERATE
CALINAN	MLCSP	200	₱12,500.00	5.27	₱65,875.00	2	2	4	MODERATE

Table LU-207. Climate Change Vulnerability Assessment Summary Matrix of Level III Water System for Faultline, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Wangan	<ul style="list-style-type: none"> ● A total of 9.16 m is exposed to Lacson Fault ● Three 200 mm diameter falls within the fault line. ● The Degree of Impact is moderate ● The adaptive capacity is high. ● The pipelines are moderately vulnerable. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Calinan	<ul style="list-style-type: none"> ● A total of 9.16 m is exposed to Lacson Fault ● Three 200 mm diameter falls within the fault line. ● The Degree of Impact is moderate ● The adaptive capacity is high. ● The pipelines are moderately vulnerable. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-207. Climate Change Vulnerability Assessment Summary Matrix of Level III Water System for Faultline, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Tugbok	<ul style="list-style-type: none"> ● One 500 mm diameter pipeline has an exposed length of 10.04 m ● The area is exposed to Lacson Fault ● The degree of impact is moderate ● The adaptive capacity is high. ● DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Mintal	<ul style="list-style-type: none"> ● A total of 11.9 m is exposed to the Dacudao Fault. ● The degree of impact is moderate ● The adaptive capacity is high. ● DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-207. Climate Change Vulnerability Assessment Summary Matrix of Level III Water System for Faultline, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Catalunan Grande	<ul style="list-style-type: none"> ● A total of 10.37 m is exposed to Dacudao Fault. ● The degree of impact is moderate ● The adaptive capacity is high. ● DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Los Amigos	<ul style="list-style-type: none"> ● A total of 35.73 m is exposed to Dacudao Fault. ● The degree of impact is moderate ● The adaptive capacity is high. ● DCWD is compliant to all applied standards. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. ● 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Disaster Risk Assessment for Flood

Lifeline Utilities subjected to the Climate Change Vulnerability Assessment has also undergone Risk Assessment. The difference between the two is that the risk adds up likelihood of occurrence, which is the frequency hazard to hit the area based from the historical data of calamities in Davao City.

Risk score is the product of severity of consequence and likelihood of occurrence. For this study, severity of consequence measures length of disruption which will be experienced by consumers upon heavy damage due to hazard

Severity of Consequence Estimation for Roads

Carlos P. Garcia Highway, Davao Bukidnon Road and McArthur Highway have low severity of consequence, which means that six hour disruption is imminent in case of strong flood occurrence. The likelihood of occurrence in Carlos P. Garcia Highway has a range of 4.5 to 6.5 which means that there is moderate to frequent likelihood of flood occurrence in the area. The Davao Bukidnon Road also has low severity of consequence, and moderate to frequent likelihood of occurrence. Lastly, for McArthur Highway, the whole stretch has moderate to frequent likelihood of flood occurrence.

Table LU-208. Lifeline Utilities, Roads, Severity of Consequence Estimation for Flood, Davao City

ROAD NAME	HAZARD			EXPOSURE			SENSITIVITY			IMPACT			
	HAZARD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE	EXPECTED FLOOD DEPTH	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	SEVERITY OF CONSEQUENCE			
										GROUP 1	GROUP 2	GROUP 3	AVE.
2nd Avenue	HF	1.00	<1	0.0055	60,000,000	327,355	concrete	good	Yes	1	1	1	1.0
Agdao Flyover	MF	1.00	<1	0.4734	56,000,000	26,508,216	concrete	good	Yes	1	1	1	1.0
Calinan-Baguio-Cadalian Road	HF	1.00	<1	2.4488	35,000,000	85,708,700	concrete	good	Yes	1	1	1	1.0
Calinan-Baguio-Cadalian Road	MF	1.00	<1	0.4303	35,000,000	15,059,240	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	HF	6.00	≥1	0.1052	60,000,000	6,310,020	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	HF	6.00	≥1	0.0399	60,000,000	2,394,378	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	HF	5.00	≥1	0.0817	60,000,000	4,899,636	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	HF	1.00	<1	0.3295	60,000,000	19,772,940	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	HF	5.00	≥1	0.0314	60,000,000	1,886,508	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	MF	6.00	≥1	0.3522	60,000,000	21,129,360	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	MF	5.50	≥1	0.1119	60,000,000	6,711,120	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	MF	4.00	≥1	0.0129	60,000,000	775,470	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	HF	1.00	<1	0.0063	60,000,000	375,574	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	VHF	6.00	≥1	0.3292	60,000,000	19,751,820	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	VHF	4.50	≥1	0.2961	60,000,000	17,768,520	concrete	good	Yes	1	1	1	1.0
Dacudao Avenue	MF	1.00	<1	1.1168	56,000,000	62,540,800	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	HF	1.00	<1	2.2435	40,000,000	89,739,600	concrete	good	Yes	1	1	1	1.0

Table LU-208. Lifeline Utilities, Roads, Severity of Consequence Estimation for Flood, Davao City

ROAD NAME	HAZARD			EXPOSURE			SENSITIVITY			IMPACT			
	HAZARD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE	EXPECTED FLOOD DEPTH	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	SEVERITY OF CONSEQUENCE			
										GROUP 1	GROUP 2	GROUP 3	AVE.
Davao-Bukidnon Road	HF	1.00	<1	0.5888	40,000,000	23,551,720	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	HF	1.00	<1	0.9692	40,000,000	38,769,520	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	HF	1.00	<1	0.3905	40,000,000	15,621,320	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	HF	1.00	<1	1.6118	40,000,000	64,471,600	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	HF	5.00	≥1	0.6323	40,000,000	25,293,080	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	HF	5.50	≥1	0.9835	40,000,000	39,340,080	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	HF	6.00	≥1	0.8472	40,000,000	33,889,920	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	MF	1.00	<1	0.2592	40,000,000	10,369,640	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	MF	1.00	<1	1.9633	40,000,000	78,531,600	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	MF	1.00	<1	1.1280	40,000,000	45,121,200	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	MF	1.00	<1	0.5791	40,000,000	23,165,360	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	MF	5.00	≥1	0.6943	40,000,000	27,773,760	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	MF	6.00	≥1	0.0412	40,000,000	1,647,920	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	MF	6.00	≥1	0.5601	40,000,000	22,405,360	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	VHF	4.00	≥1	0.3309	40,000,000	13,237,880	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	VHF	1.00	<1	2.0777	40,000,000	83,107,600	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	VHF	2.33	<1	1.6613	40,000,000	66,450,400	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	MF	5.00	≥1	0.2861	40,000,000	11,445,040	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	HF	1.00	<1	2.4449	40,000,000	97,797,600	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	MF	1.00	<1	0.0825	56,000,000	4,621,092	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	MF	1.00	<1	0.0331	56,000,000	1,851,041	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	MF	1.00	<1	0.0126	56,000,000	704,346	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	HF	1.00	<1	0.2037	56,000,000	11,408,544	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	HF	1.00	<1	0.1551	56,000,000	8,688,064	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	MF	1.00	<1	0.6234	56,000,000	34,908,384	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	MF	1.00	<1	0.0860	56,000,000	4,813,519	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	MF	1.00	<1	0.0480	56,000,000	2,690,055	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	MF	4.00	≥1	0.0329	56,000,000	1,843,610	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	VHF	4.00	≥1	0.0842	56,000,000	4,716,370	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	MF	4.00	≥1	0.1324	56,000,000	7,415,800	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	HF	4.00	≥1	0.0685	56,000,000	3,835,726	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	HF	2.00	<1	0.1062	56,000,000	5,948,488	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	MF	4.00	≥1	0.0245	56,000,000	1,374,548	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	HF	4.00	≥1	0.0880	56,000,000	4,928,465	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	HF	4.00	≥1	0.0993	56,000,000	5,559,999	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	MF	4.00	≥1	0.0226	56,000,000	1,262,839	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	MF	4.00	≥1	0.0444	56,000,000	2,484,166	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	HF	1.00	<1	0.0796	56,000,000	4,456,368	concrete	good	Yes	1	1	1	1.0
Davao - Agusan Highway	VHF	1.00	<1	0.0262	56,000,000	1,469,451	concrete	good	Yes	1	1	1	1.0

Table LU-208. Lifeline Utilities, Roads, Severity of Consequence Estimation for Flood, Davao City

ROAD NAME	HAZARD			EXPOSURE			SENSITIVITY			IMPACT			
	HAZARD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE	EXPECTED FLOOD DEPTH	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	SEVERITY OF CONSEQUENCE			
										GROUP 1	GROUP 2	GROUP 3	AVE.
Don Julian Rodriguez Ave. (Maa Road)	HF	4.00	≥1	0.5272	28,000,000	14,760,536	concrete	good	Yes	1	1	1	1.0
Don Julian Rodriguez Ave. (Maa Road)	MF	4.00	≥1	0.3069	28,000,000	8,593,004	concrete	good	Yes	1	1	1	1.0
Don Julian Rodriguez Ave. (Maa Road)	MF	4.00	≥1	0.3612	28,000,000	10,113,488	concrete	good	Yes	1	1	1	1.0
Eden-Tagurano Road	HF	1.00	<1	0.1210	35,000,000	4,235,595	concrete	good	Yes	1	1	1	1.0
Inawayan-Baracatan Road	HF	1.00	<1	0.0328	35,000,000	1,146,572	concrete	good	Yes	1	1	1	1.0
J.P. Cabaguio Avenue	MF	1.00	<1	1.4047	56,000,000	78,662,080	concrete	good	Yes	1	1	1	1.0
Leon Garcia St.	MF	1.00	<1	0.2600	49,000,000	12,740,588	concrete	good	Yes	1	1	1	1.0
Libby Road	MF	1.00	<1	0.0494	25,000,000	1,235,630	concrete	good	Yes	1	1	1	1.0
Libby Road	HF	1.00	<1	0.0075	25,000,000	186,545	concrete	good	Yes	1	1	1	1.0
Libby Road	MF	2.33	<1	1.7755	25,000,000	44,387,750	concrete	good	Yes	1	1	1	1.0
Maa Radio Station St.	HF	4.00	≥1	0.1871	28,000,000	5,238,352	concrete	good	Yes	1	1	1	1.0
Maa Radio Station St.	MF	4.00	≥1	0.1576	28,000,000	4,411,904	concrete	good	Yes	1	1	1	1.0
Mabuhay-Pañalum-Paquibato Road	HF	1.00	<1	0.2632	44,000,000	11,582,604	concrete	good	Yes	1	1	1	1.0
Mabuhay-Pañalum-Paquibato Road	MF	1.00	<1	0.1382	44,000,000	6,081,108	concrete	good	Yes	1	1	1	1.0
Manggahan St.	HF	1.00	<1	0.5772	25,000,000	14,431,225	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	HF	1.00	<1	0.0730	56,000,000	4,087,412	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	HF	6.00	≥1	0.1741	56,000,000	9,750,720	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	HF	3.00	<1	0.7103	56,000,000	39,776,016	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	HF	2.50	<1	0.1954	56,000,000	10,942,848	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	MF	1.00	<1	0.2950	56,000,000	16,518,208	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	MF	1.00	<1	0.7051	56,000,000	39,485,432	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	MF	1.00	<1	0.1347	56,000,000	7,544,768	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	MF	1.00	<1	0.2224	56,000,000	12,452,832	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	MF	6.00	≥1	0.1283	56,000,000	7,186,872	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	MF	4.00	≥1	0.2059	56,000,000	11,531,912	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	MF	5.50	≥1	0.4105	56,000,000	22,990,352	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	HF	1.00	<1	0.4010	56,000,000	22,458,464	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	HF	1.00	<1	0.1792	56,000,000	10,035,200	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	HF	1.00	<1	0.2129	56,000,000	11,922,904	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	VHF	6.00	≥1	0.4510	56,000,000	25,258,128	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	VHF	1.00	<1	0.2950	56,000,000	16,520,392	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	MF	3.00	<1	1.1842	56,000,000	66,314,080	concrete	good	Yes	1	1	1	1.0
Pakiputan Wharf Road	MF	1.00	<1	0.4554	56,000,000	25,500,328	concrete	good	Yes	1	1	1	1.0
Pichon St.	HF	1.00	<1	0.1014	56,000,000	5,677,560	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	HF	1.00	<1	0.5484	50,000,000	27,422,300	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	HF	1.00	<1	0.0351	50,000,000	1,756,095	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	MF	1.00	<1	0.3839	50,000,000	19,194,450	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	VHF	1.00	<1	0.4730	50,000,000	23,650,750	concrete	good	Yes	1	1	1	1.0
Quirino Avenue	VHF	1.38	<1	0.2199	40,000,000	8,794,920	concrete	good	Yes	1	1	1	1.0

Table LU-208. Lifeline Utilities, Roads, Severity of Consequence Estimation for Flood, Davao City

ROAD NAME	HAZARD			EXPOSURE			SENSITIVITY			IMPACT			
	HAZARD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE	EXPECTED FLOOD DEPTH	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	SEVERITY OF CONSEQUENCE			
										GROUP 1	GROUP 2	GROUP 3	AVE.
Rafael Castillo St.	HF	1.00	<1	0.4003	86,000,000	34,426,144	concrete	good	Yes	1	1	1	1.0
Rafael Castillo St.	MF	1.00	<1	0.8161	86,000,000	70,183,224	concrete	good	Yes	1	1	1	1.0
Toril-Bayabas-Eden Road	HF	1.00	<1	0.2472	30,000,000	7,414,650	concrete	good	Yes	1	1	1	1.0
Toril-Bayabas-Eden Road	HF	1.00	<1	0.2321	30,000,000	6,962,490	concrete	good	Yes	1	1	1	1.0
Toril-Bayabas-Eden Road	HF	1.00	<1	0.0626	30,000,000	1,877,580	concrete	good	Yes	1	1	1	1.0
Toril-Bayabas-Eden Road	MF	1.00	<1	0.2519	30,000,000	7,555,530	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	HF	6.00	≥1	0.0003	60,000,000	17,217	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	VHF	6.00	≥1	0.0003	60,000,000	17,217	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	HF	1.00	<1	0.0002	40,000,000	8,169	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	VHF	1.00	<1	0.0002	40,000,000	8,169	concrete	good	Yes	1	1	1	1.0
J.P. Cabaguio Avenue	MF	1.00	<1	0.0001	56,000,000	6,043	concrete	good	Yes	1	1	1	1.0
Pichon St.	HF	1.00	<1	0.0005	56,000,000	28,962	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	HF	1.00	<1	0.0001	50,000,000	5,460	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	HF	1.00	<1	0.0001	50,000,000	4,624	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	VHF	1.00	<1	0.0001	50,000,000	4,624	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	HF	1.00	<1	0.0008	50,000,000	38,908	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	VHF	1.00	<1	0.0008	50,000,000	38,908	concrete	good	Yes	1	1	1	1.0
Quirino Avenue	VHF	1.00	<1	0.0001	40,000,000	3,889	concrete	good	Yes	1	1	1	1.0
Rafael Castillo St.	HF	1.00	<1	0.0003	86,000,000	25,057	concrete	good	Yes	1	1	1	1.0
Rafael Castillo St.	MF	1.00	<1	0.0003	86,000,000	26,521	concrete	good	Yes	1	1	1	1.0
Don Julian Rodriguez Ave. (Maa Road)	HF	4.00	≥1	0.5272	28,000,000	14,760,536	concrete	good	Yes	1	1	1	1.0
Don Julian Rodriguez Ave. (Maa Road)	MF	4.00	≥1	0.3069	28,000,000	8,593,004	concrete	good	Yes	1	1	1	1.0
Don Julian Rodriguez Ave. (Maa Road)	MF	4.00	≥1	0.3612	28,000,000	10,113,488	concrete	good	Yes	1	1	1	1.0
Eden-Tagurano Road	HF	1.00	<1	0.1210	35,000,000	4,235,595	concrete	good	Yes	1	1	1	1.0
Inawayan-Baracatan Road	HF	1.00	<1	0.0328	35,000,000	1,146,572	concrete	good	Yes	1	1	1	1.0
J.P. Cabaguio Avenue	MF	1.00	<1	1.4047	56,000,000	78,662,080	concrete	good	Yes	1	1	1	1.0
Leon Garcia St.	MF	1.00	<1	0.2600	49,000,000	12,740,588	concrete	good	Yes	1	1	1	1.0
Libby Road	MF	1.00	<1	0.0494	25,000,000	1,235,630	concrete	good	Yes	1	1	1	1.0
Libby Road	HF	1.00	<1	0.0075	25,000,000	186,545	concrete	good	Yes	1	1	1	1.0
Libby Road	MF	2.33	<1	1.7755	25,000,000	44,387,750	concrete	good	Yes	1	1	1	1.0
Maa Radio Station St.	HF	4.00	≥1	0.1871	28,000,000	5,238,352	concrete	good	Yes	1	1	1	1.0
Maa Radio Station St.	MF	4.00	≥1	0.1576	28,000,000	4,411,904	concrete	good	Yes	1	1	1	1.0
Mabuhay-Pañalum-Paquiabato Road	HF	1.00	<1	0.2632	44,000,000	11,582,604	concrete	good	Yes	1	1	1	1.0
Mabuhay-Pañalum-Paquiabato Road	MF	1.00	<1	0.1382	44,000,000	6,081,108	concrete	good	Yes	1	1	1	1.0
Manggahan St.	HF	1.00	<1	0.5772	25,000,000	14,431,225	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	HF	1.00	<1	0.0730	56,000,000	4,087,412	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	HF	6.00	≥1	0.1741	56,000,000	9,750,720	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	HF	3.00	<1	0.7103	56,000,000	39,776,016	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	HF	2.50	<1	0.1954	56,000,000	10,942,848	concrete	good	Yes	1	1	1	1.0

Table LU-208. Lifeline Utilities, Roads, Severity of Consequence Estimation for Flood, Davao City

ROAD NAME	HAZARD			EXPOSURE			SENSITIVITY			IMPACT			
	HAZARD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE	EXPECTED FLOOD DEPTH	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	SEVERITY OF CONSEQUENCE			
										GROUP 1	GROUP 2	GROUP 3	AVE.
Mc. Arthur Highway	MF	1.00	<1	0.2950	56,000,000	16,518,208	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	MF	1.00	<1	0.7051	56,000,000	39,485,432	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	MF	1.00	<1	0.1347	56,000,000	7,544,768	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	MF	1.00	<1	0.2224	56,000,000	12,452,832	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	MF	6.00	≥1	0.1283	56,000,000	7,186,872	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	MF	4.00	≥1	0.2059	56,000,000	11,531,912	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	MF	5.50	≥1	0.4105	56,000,000	22,990,352	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	HF	1.00	<1	0.4010	56,000,000	22,458,464	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	HF	1.00	<1	0.1792	56,000,000	10,035,200	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	HF	1.00	<1	0.2129	56,000,000	11,922,904	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	VHF	6.00	≥1	0.4510	56,000,000	25,258,128	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	VHF	1.00	<1	0.2950	56,000,000	16,520,392	concrete	good	Yes	1	1	1	1.0
Mc. Arthur Highway	MF	3.00	<1	1.1842	56,000,000	66,314,080	concrete	good	Yes	1	1	1	1.0
Pakiputan Wharf Road	MF	1.00	<1	0.4554	56,000,000	25,500,328	concrete	good	Yes	1	1	1	1.0
Pichon St.	HF	1.00	<1	0.1014	56,000,000	5,677,560	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	HF	1.00	<1	0.5484	50,000,000	27,422,300	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	HF	1.00	<1	0.0351	50,000,000	1,756,095	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	MF	1.00	<1	0.3839	50,000,000	19,194,450	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	VHF	1.00	<1	0.4730	50,000,000	23,650,750	concrete	good	Yes	1	1	1	1.0
Quirino Avenue	VHF	1.38	<1	0.2199	40,000,000	8,794,920	concrete	good	Yes	1	1	1	1.0
Rafael Castillo St.	HF	1.00	<1	0.4003	86,000,000	34,426,144	concrete	good	Yes	1	1	1	1.0
Rafael Castillo St.	MF	1.00	<1	0.8161	86,000,000	70,183,224	concrete	good	Yes	1	1	1	1.0
Toril-Bayabas-Eden Road	HF	1.00	<1	0.2472	30,000,000	7,414,650	concrete	good	Yes	1	1	1	1.0
Toril-Bayabas-Eden Road	HF	1.00	<1	0.2321	30,000,000	6,962,490	concrete	good	Yes	1	1	1	1.0
Toril-Bayabas-Eden Road	HF	1.00	<1	0.0626	30,000,000	1,877,580	concrete	good	Yes	1	1	1	1.0
Toril-Bayabas-Eden Road	MF	1.00	<1	0.2519	30,000,000	7,555,530	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	HF	6.00	≥1	0.0003	60,000,000	17,217	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	VHF	6.00	≥1	0.0003	60,000,000	17,217	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	HF	1.00	<1	0.0002	40,000,000	8,169	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	VHF	1.00	<1	0.0002	40,000,000	8,169	concrete	good	Yes	1	1	1	1.0
J.P. Cabaguio Avenue	MF	1.00	<1	0.0001	56,000,000	6,043	concrete	good	Yes	1	1	1	1.0
Pichon St.	HF	1.00	<1	0.0005	56,000,000	28,962	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	HF	1.00	<1	0.0001	50,000,000	5,460	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	HF	1.00	<1	0.0001	50,000,000	4,624	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	VHF	1.00	<1	0.0001	50,000,000	4,624	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	HF	1.00	<1	0.0008	50,000,000	38,908	concrete	good	Yes	1	1	1	1.0
Quimpo Boulevard	VHF	1.00	<1	0.0008	50,000,000	38,908	concrete	good	Yes	1	1	1	1.0
Quirino Avenue	VHF	1.00	<1	0.0001	40,000,000	3,889	concrete	good	Yes	1	1	1	1.0
Rafael Castillo St.	HF	1.00	<1	0.0003	86,000,000	25,057	concrete	good	Yes	1	1	1	1.0
Rafael Castillo St.	MF	1.00	<1	0.0003	86,000,000	26,521	concrete	good	Yes	1	1	1	1.0

Severity of Consequence Estimation for Bridges

Bunawan Bridge 1, Bunawan Bridge 2, Davao River Bridge, Panacan Bridge have occasional likelihood of occurrence and moderate severity of consequence. On the other hand, bridges with moderate likelihood of occurrence are Pagan Pequeño, Suawan Bridge, Talomo Bridge 1, and Talomo Bridge 2. They also have moderate severity of consequence, which means that there will be disruption of service by less than six hours. Matina Bridge, Pagan Grande, Pangí Bridge, and Tamugan bridge are in areas with frequent likelihood of flood occurrence and the flood level is >1 meters. The severity of consequence to flood to these bridges is moderate.

Table LU-209. Lifeline Utilities, Bridges, Severity of Consequence Estimation for Flood, Davao City

HAZARD NAME	EXPOSURE			VULNERABILITY			SEVERITY OF CONSEQUENCE			HAZARD			
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE	EXPECTED FLOOD DEPTH	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST	VALUE OF EXPOSED LIFE-LINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	SEVERITY OF CONSEQUENCE SCORE			
										GROUP 1	GROUP 2	GROUP 3	AVERAGE
Agdao Flyover	M	1	<1	382.98	1,200,000	459,576,000	Concrete	Good	Yes	1	1	1	1.00
Angalan Br. I	H	1	<1	12.10	1,200,000	14,520,000	Concrete	Good	Yes	1	1	1	1.00
Angalan Br. II	H	1	<1	11.92	1,200,000	14,304,000	Concrete	Good	Yes	1	1	1	1.00
Angalan Br. III	H	1	<1	48.88	1,200,000	58,656,000	Concrete	Good	Yes	1	1	1	1.00
Angalan Br. IV	H	1	≤1	15.90	1,200,000	19,080,000	Concrete	Good	Yes	1	1	1	1.00
Angalan Br. V	H	1	<1	18.00	1,200,000	21,600,000	Concrete	Good	Yes	1	1	1	1.00
Angalan Br. VI	H	1	<1	45.00	1,200,000	54,000,000	Concrete	Good	Yes	1	1	1	1.00
Bago Br.	H	1	<1	31.21	1,200,000	37,452,000		Good	Yes	1	1	1	1.00
Bato Br.	H	1	<1	20.70	1,200,000	24,840,000	Concrete	Good	Yes	1	1	1	1.00
Bolton Br. 1	H	1	<1	185.30	1,200,000	222,360,000	-	Good	Yes	1	1	1	1.00
Bolton Br. 2	H	1	<1	196.88	1,200,000	236,256,000	-	Good	Yes	1	1	1	1.00
Bunawan Br. 1	H	4	≥1	49.76	1,200,000	59,712,000	-	Good	Yes	2	2	2	2.00
Bunawan Br. 2	H	4	≥1	47.79	1,200,000	57,348,000	-	Good	Yes	2	2	2	2.00
Davao River Br.	H	4	≥1	141.11	1,200,000	169,332,000	-	Good	Yes	2	2	2	2.00
Generoso Br. 1	H	1	<1	89.94	1,200,000	107,928,000	-	Good	Yes	1	1	1	1.00
Generoso Br. 2	H	1	<1	87.60	1,200,000	105,120,000	-	Good	Yes	1	1	1	1.00
Libby Br.	M	1	<1	24.69	1,200,000	29,628,000	-	Good	Yes	1	1	1	1.00
Lipadas Br. I	M	1	≤1	37.80	1,200,000	45,360,000	Concrete	Good	Yes	1	1	1	1.00
Lipadas Br. II	M	1	≥1	40.00	1,200,000	48,000,000	Concrete	Good	Yes	1	1	1	1.00
Matina Br.	H	6	≥1	38.66	1,200,000	46,392,000	-	Good	Yes	2	2	2	2.00
Pagan Grande	H	6	≥1	45.48	1,200,000	54,576,000	Concrete	Good	Yes	2	2	2	2.00
Pagan Pequeño	H	5	≥1	89.93	1,200,000	107,916,000	Steel	Good	Yes	2	2	2	2.00
Panacan Br.	H	4	≥1	23.53	1,200,000	28,236,000	-	Good	Yes	2	2	2	2.00
Pangi Br.	H	6	≥1	121.69	1,200,000	146,028,000	-	Good	Yes	2	2	2	2.00
Piedad Br.	M	1	≥1	47.82	1,200,000	57,384,000	Steel	Good	Yes	1	1	1	1.00
Sasa Br.	H	1	≤1	18.43	1,200,000	22,116,000	-	Good	Yes	1	1	1	1.00
Suawan Br.	H	5	≥1	45.00	1,200,000	54,000,000	Concrete	Good	Yes	2	2	2	2.00
Tagurano Br.	H	1	<1	12.46	1,200,000	14,952,000	Bailey	Good	Yes	1	1	1	1.00
Talomo Br. 1	H	5	≥1	48.10	1,200,000	57,720,000	-	Good	Yes	2	2	2	2.00

Table LU-209. Lifeline Utilities, Bridges, Severity of Consequence Estimation for Flood, Davao City

HAZARD	EXPOSURE			VULNERABILITY			SEVERITY OF CONSEQUENCE			HAZARD			
NAME	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE	EXPECTED FLOOD DEPTH	EXPOSED LENGTH (LINEAR METERS)	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	SEVERITY OF CONSEQUENCE SCORE			
										GROUP 1	GROUP 2	GROUP 3	AVERAGE
Talomo Br. 2	H	5	≥1	48.11	1,200,000	57,732,000	-	Good	Yes	2	2	2	2.00
Tamugan Br.	H	6	≥1	104.96	1,200,000	125,952,000	Concrete	Good	Yes	2	2	2	2.00
Talomo Br. 1	H	5	≥1	48.10	1,200,000	57,720,000	-	Good	Yes	2	2	2	2.00
Talomo Br. 2	H	5	≥1	48.11	1,200,000	57,732,000	-	Good	Yes	2	2	2	2.00
Tamugan Br.	H	6	≥1	104.96	1,200,000	125,952,000	Concrete	Good	Yes	2	2	2	2.00

Severity of Consequence Estimation for Power Substations

Calinan Substation, Tugbok Substation, Matina Substation and Pampanga Substation are the substations located in areas with high flood susceptibility. However, only Tugbok and Matina Substations are located in areas with frequent likelihood of flood occurrence. These two (2) substations have low severity of consequence which means disruption of services by less than 6 hours. Calinan Substation highly susceptible to flood has been estimated to have low severity of consequence, and is located in an area with moderate likelihood of flood occurrence.

Table LU-210. Lifeline Utilities, Power Substations, Severity of Consequence Estimation for Flood , Davao City

FLOOD SUSCEPTIBILITY	HAZARD		EXPOSURE		SENSITIVITY/VULNERABILITY			SEVERITY OF CONSEQUENCE SCORE
	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH (M)	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	
High/Very High	5	≥1	1,000.00	140 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; with Roofdeck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1
High	6	≥1	1,809.00	130 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along road-side b) Control Building: Prepainted Metal Sheet Cladding Wall and Concrete Floor ; Prepainted Roofing Sheet. c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	1

Table LU-210. Lifeline Utilities, Power Substations, Severity of Consequence Estimation for Flood, Davao City

HAZARD			EXPOSURE		SENSITIVITY/VULNERABILITY			SEVERITY OF CONSEQUENCE SCORE
FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH (M)	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	
High	6	≥1	1,000.00	120 Million	a) Perimeter Fence : Concrete Fence (3.0m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1
Moderate	3	<1	1,031.00	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	1

Severity of Consequence Estimation of Level Water System

A total of 33 Level I sources that are highly or moderately susceptible to flood are located in areas with improbable to frequent likelihood of flood occurrence. The Bunawan area with a total of two (2) spring sources have the highest likelihood of occurrence. Moreover, areas assessed with high severity of consequence are Tibungco, Panacan, Lizada and Binugao.

Table LU-211, Lifeline Utilities, Level I Water System, Severity of Consequence Estimation for Flood, Davao City

BARANGAY	FLOOD SUSCEPTIBILITY	DEPTH	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE
BUNAWAN	MF	>= 1 meter	6	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
BUNAWAN	MF	>= 1 meter	6	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
TIBUNGCO	HF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4
TIBUNGCO	HF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4
TIBUNGCO	HF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4
PANACAN	HF	>= 1 meter	5	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4

Table LU-211, Lifeline Utilities, Level I Water System, Severity of Consequence Estimation for Flood, Davao City

BARANGAY	FLOOD SUSCEPTIBILITY	DEPTH	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE
PANACAN	HF	>= 1 meter	5	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4
ULA	MF	<= 1 meter	3	DEEPWELL	1,500,000.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	3
RIVERSIDE	MF	>= 1 meter	4	DEEPWELL	1,500,000.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	3
DALIAO	MF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
DALIAO	MF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
DALIAO	MF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
DALIAO	MF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
DALIAO	MF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
DALIAO	MF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
DALIAO	MF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
DALIAO	MF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
DALIAO	MF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
DALIAO	MF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
DALIAO	MF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
LIZADA	MF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
LIZADA	MF	>= 1 meter	5	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
LIZADA	MF	>= 1 meter	5	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
LIZADA	HF	>= 1 meter	5	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3

Table LU-211, Lifeline Utilities, Level I Water System, Severity of Consequence Estimation for Flood, Davao City

BARANGAY	FLOOD SUSCEPTIBILITY	DEPTH	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	3
BINUGAO	HF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4
BINUGAO	HF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4

Severity of Consequence Estimation for Level II Water System

Sirawan spring source and Malagos spring source are located in areas with occasional likelihood of flood occurrence. These sources have high and moderate estimation for severity of consequence, respectively. The remaining sources found in Binugao, Daliaon Plantation, Salaysay are in areas with improbable likelihood of occurrence of flood, with three sources estimated to have moderate severity of consequence. One sole spring found in Daliaon Plantation has been estimated to have high severity of consequence.

Table LU-212. Lifeline Utilities, Level II Water System, Severity of Consequence Estimation for Flood, Davao City

BARANGAY	FLOOD SUSCEPTIBILITY	DEPTH	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE
BINUGAO	HF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	2
SIRAWAN	HF	>= 1 meter	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4
BINUGAO	MF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	2
SIRAWAN	MF	>= 1 meter	4	2HP	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	4
SIRAWAN	MF	>= 1 meter	4	2HP	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	4
MARAPANGI	MF	>= 1 meter	6	2HP	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	4
DALIAON PLANTATION	HF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4
WAAN	VHF	>= 1 meter	4	18GS20	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is (1) one month warranty if the waterpump is installed by the supplier	YES. For funding proposal	4
WAAN	VHF	>= 1 meter	4	2HP	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	4

Table LU-212. Lifeline Utilities, Level II Water System, Severity of Consequence Estimation for Flood, Davao City

BARANGAY	FLOOD SUSCEPTIBILITY	DEPTH	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE
TIGATTO	HF	>= 1 meter	6	2HP	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	4
LOS AMIGOS	MF	>= 1 meter	5	3HP	60,500.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	2
LOS AMIGOS	MF	>= 1 meter	5	2HP	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	2
LOS AMIGOS	MF	>= 1 meter	5	1HP	31,000.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	2
BAGUIO	HF	<= 1 meter	3	3HP	60,500.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	2
TALANDANG	MF	<= 1 meter	3	2HP	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	2
MALAGOS	HF	>= 1 meter	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	2
GUMALANG	MF	>= 1 meter	4	3HP	60,500.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) warranty 1 month if the waterpump is installed by the supplier	YES. For funding proposal	2
SALAYSAY	HF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	2

Severity of Consequence Estimation for Level III Water System

All 385 mainline pipes which are highly susceptible to flood have been estimated to have moderate severity of consequence. These mainlines are found in 19-B, 2-A, Angliongto Bago Aplaya, Bago Gallera, Bucana, Cabantian, Calinan, Catalunan Grande, Communal, Ilang, Los Amigos, Lubogan, Ma-a, Mandug, Matina Aplaya, Matina Crossing, Matina Pangi, Mintal, Pampanga, Riverside, Sasa, Sto. Niño, Tacunan, Talomo, Tibungco, Tigatto, Tugbok, Ubalde, and Wangan. All these main line pipes are within areas with moderate to frequent likelihood of flood occurrence.

Table LU-213. Lifeline Utilities, Level III Water System, Severity of Consequence Estimation for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE
CALINAN	VHF	5	>= 1 meter	MLCSP	30.35	30.35	100.00%	11,200	339,954.43	Good	Yes	2
CALINAN	HF	5	>= 1 meter	MLCSP	177.15	85.89	48.48%	12,500	1,073,606.74	Good	Yes	2
CALINAN	VHF	5	>= 1 meter	MLCSP	177.15	91.26	51.52%	12,500	1,140,743.07	Good	Yes	2
WANGAN	HF	4	>= 1 meter	MLCSP	26.05	20.62	79.16%	12,500	257,799.02	Good	Yes	2
CALINAN	HF	5	>= 1 meter	MLCSP	22.81	22.81	100.00%	12,500	285,146.15	Good	Yes	2
RIVERSIDE	MF	4	>= 1 meter	MLCSP	47.65	47.65	100.00%	17,700	843,361.22	Good	Yes	1
RIVERSIDE	VHF	4	>= 1 meter	MLCSP	22.74	22.74	100.00%	11,200	254,712.19	Good	Yes	2
CALINAN	HF	5	>= 1 meter	MLCSP	87.38	87.38	100.00%	12,500	1,092,252.20	Good	Yes	2
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	175.51	175.51	100.00%	23,600	4,141,923.89	Good	Yes	1
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	131.04	28.80	21.98%	11,200	322,583.05	Good	Yes	1
WILFREDO AQUINO	MF	3	<= 1 meter	MLCSP	49.80	22.26	44.69%	19,100	425,133.61	Good	Yes	1
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	17.76	17.76	100.00%	23,600	419,054.35	Good	Yes	1
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	63.34	63.34	100.00%	23,600	1,494,814.43	Good	Yes	1
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	158.17	158.17	100.00%	17,700	2,799,697.32	Good	Yes	1
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	669.08	604.49	90.35%	17,700	10,699,497.84	Good	Yes	1
DUMOY	MF	4	>= 1 meter	MLCSP	387.05	51.53	13.31%	23,600	1,216,017.06	Good	Yes	1
BAGO APLAYA	HF	5	>= 1 meter	MLCSP	196.79	106.54	54.14%	19,100	2,034,983.29	Good	Yes	2
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	196.79	90.25	45.86%	19,100	1,723,794.82	Good	Yes	1
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	229.30	229.30	100.00%	17,700	4,058,617.12	Good	Yes	1
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	3.93	3.93	100.00%	17,700	69,491.79	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	414.12	44.64	10.78%	52,800	2,356,854.84	Good	Yes	1
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	61.88	61.88	100.00%	11,200	693,038.72	Good	Yes	2
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	278.85	18.19	6.52%	48,500	882,104.31	Good	Yes	2
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	278.85	126.37	45.32%	48,500	6,128,822.82	Good	Yes	1
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	146.85	146.85	100.00%	48,500	7,122,117.80	Good	Yes	2
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	96.58	96.58	100.00%	11,200	1,081,646.77	Good	Yes	1
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	38.24	38.24	100.00%	11,200	428,306.93	Good	Yes	2

Table LU-213. Lifeline Utilities, Level III Water System, Severity of Consequence Estimation for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	154.20	154.20	100.00%	11,200	1,726,986.01	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	149.77	149.77	100.00%	11,200	1,677,406.35	Good	Yes	2
TALOMO	MF	6	>= 1 meter	MLCSP	101.51	49.78	49.04%	44,200	2,200,388.79	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	177.49	109.99	61.97%	48,500	5,334,540.68	Good	Yes	1
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	301.96	74.05	24.52%	11,200	829,392.67	Good	Yes	2
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	301.96	7.28	2.41%	11,200	81,489.35	Good	Yes	1
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	301.96	220.22	72.93%	11,200	2,466,512.48	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	174.49	174.49	100.00%	11,200	1,954,283.52	Good	Yes	2
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	109.92	106.03	96.46%	11,200	1,187,564.30	Good	Yes	2
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	109.92	2.66	2.42%	11,200	29,766.71	Good	Yes	2
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	265.80	112.32	42.26%	48,500	5,447,278.09	Good	Yes	2
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	265.80	153.34	57.69%	48,500	7,436,856.32	Good	Yes	2
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	326.59	326.59	100.00%	11,200	3,657,808.07	Good	Yes	2
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	9.95	8.67	87.17%	48,500	420,653.55	Good	Yes	2
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	9.95	1.00	10.05%	48,500	48,492.41	Good	Yes	2
TALOMO	MF	6	>= 1 meter	MLCSP	571.17	571.17	100.00%	40,100	22,903,954.61	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	95.28	46.82	49.13%	56,500	2,645,150.26	Good	Yes	1
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	90.43	90.43	100.00%	23,600	2,134,058.68	Good	Yes	1
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	554.62	74.23	13.38%	17,700	1,313,927.57	Good	Yes	1
BAGO APLAYA	HF	5	>= 1 meter	MLCSP	407.29	223.09	54.77%	23,600	5,264,920.18	Good	Yes	2
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	407.29	99.67	24.47%	23,600	2,352,240.17	Good	Yes	1
TALOMO	HF	6	>= 1 meter	MLCSP	235.84	231.11	98.00%	44,200	10,215,265.83	Good	Yes	2
TALOMO	MF	6	>= 1 meter	MLCSP	235.84	4.72	2.00%	44,200	208,671.61	Good	Yes	1
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	301.54	301.54	100.00%	48,500	14,624,619.12	Good	Yes	2
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	534.66	413.54	77.35%	11,200	4,631,636.11	Good	Yes	2
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	534.66	117.78	22.03%	11,200	1,319,130.05	Good	Yes	2
TALOMO	HF	6	>= 1 meter	MLCSP	21.82	21.82	100.00%	44,200	964,632.34	Good	Yes	2
TALOMO	HF	6	>= 1 meter	MLCSP	18.45	18.45	100.00%	48,500	894,896.75	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	95.18	95.18	100.00%	11,200	1,065,981.85	Good	Yes	2
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	9.02	9.02	100.00%	23,600	212,982.05	Good	Yes	1
15-B	MF	3	<= 1 meter	MLCSP	339.50	28.77	8.47%	23,600	678,929.00	Good	Yes	1
MA-A	MF	6	>= 1 meter	MLCSP	249.82	68.62	27.47%	48,500	3,327,983.27	Good	Yes	1
MA-A	MF	6	>= 1 meter	MLCSP	13.06	13.06	100.00%	20,800	271,606.67	Good	Yes	1
MA-A	HF	6	>= 1 meter	MLCSP	385.14	194.93	50.61%	19,100	3,723,163.40	Good	Yes	2
MA-A	MF	6	>= 1 meter	MLCSP	385.14	188.62	48.97%	19,100	3,602,678.47	Good	Yes	1
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	69.02	32.52	47.12%	11,200	364,269.06	Good	Yes	1
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	72.60	72.60	100.00%	48,500	3,521,279.10	Good	Yes	2
TALOMO	MF	6	>= 1 meter	MLCSP	4.59	4.59	100.00%	48,500	222,529.50	Good	Yes	1
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	221.24	201.95	91.28%	48,500	9,794,419.92	Good	Yes	2
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	221.24	19.29	8.72%	48,500	935,623.28	Good	Yes	1

Table LU-213. Lifeline Utilities, Level III Water System, Severity of Consequence Estimation for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	20.09	18.95	94.31%	11,200	212,247.87	Good	Yes	2
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	20.09	0.87	4.32%	11,200	9,719.49	Good	Yes	2
TALOMO	HF	6	>= 1 meter	MLCSP	78.13	78.13	100.00%	56,500	4,414,178.58	Good	Yes	2
TALOMO	HF	6	>= 1 meter	MLCSP	294.59	248.74	84.44%	52,800	13,133,705.33	Good	Yes	2
TALOMO	MF	6	>= 1 meter	MLCSP	294.59	45.84	15.56%	52,800	2,420,405.09	Good	Yes	1
TALOMO	HF	6	>= 1 meter	MLCSP	79.51	79.51	100.00%	48,500	3,856,188.05	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	47.99	47.99	100.00%	11,200	537,538.17	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	14.63	14.63	100.00%	11,200	163,861.08	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	38.75	38.75	100.00%	11,200	433,955.09	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	87.81	87.81	100.00%	11,200	983,437.05	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	28.56	28.56	100.00%	11,200	319,903.47	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	34.89	34.89	100.00%	11,200	390,739.44	Good	Yes	2
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	341.35	341.35	100.00%	17,700	6,041,918.36	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	92.43	62.21	67.30%	19,100	1,188,123.25	Good	Yes	1
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	453.44	331.11	73.02%	19,100	6,324,279.36	Good	Yes	1
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	610.30	130.39	21.36%	40,100	5,228,542.68	Good	Yes	1
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	6.83	6.83	100.00%	11,200	76,452.88	Good	Yes	1
2-A	HF	4	>= 1 meter	MLCSP	127.25	71.13	55.89%	19,100	1,358,531.44	Good	Yes	2
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	1,007.28	169.94	16.87%	40,100	6,814,564.07	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	85.41	85.41	100.00%	17,700	1,511,758.40	Good	Yes	1
TALOMO	HF	6	>= 1 meter	MLCSP	154.59	154.59	100.00%	19,100	2,952,640.96	Good	Yes	2
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	96.40	48.77	50.59%	23,600	1,150,888.59	Good	Yes	1
DUMOY	MF	4	>= 1 meter	MLCSP	269.22	269.22	100.00%	17,700	4,765,245.66	Good	Yes	1
TALOMO	HF	6	>= 1 meter	MLCSP	119.84	119.84	100.00%	56,500	6,771,073.36	Good	Yes	2
TALOMO	HF	6	>= 1 meter	MLCSP	55.82	10.74	19.24%	56,500	606,908.26	Good	Yes	2
TALOMO	MF	6	>= 1 meter	MLCSP	55.82	45.08	80.76%	56,500	2,547,112.14	Good	Yes	1
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	31.66	31.66	100.00%	11,200	354,610.44	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	91.74	91.74	100.00%	11,200	1,027,477.53	Good	Yes	2
TALOMO	MF	6	>= 1 meter	MLCSP	8.64	8.64	100.00%	24,300	209,916.38	Good	Yes	1
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	39.25	39.25	100.00%	24,300	953,864.99	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	4.63	4.63	100.00%	40,100	185,572.61	Good	Yes	1
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	41.60	41.60	100.00%	40,100	1,668,190.99	Good	Yes	1
DUMOY	MF	4	>= 1 meter	MLCSP	588.61	315.81	53.65%	23,600	7,453,051.75	Good	Yes	1
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	837.76	18.62	2.22%	20,800	387,342.57	Good	Yes	1
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	1,033.58	171.98	16.64%	24,300	4,179,001.54	Good	Yes	1
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	13.77	13.77	100.00%	44,200	608,726.32	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	219.87	219.87	100.00%	44,200	9,718,130.18	Good	Yes	1
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	7.87	7.87	100.00%	44,200	347,705.99	Good	Yes	1
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	471.07	405.51	86.08%	17,700	7,177,564.11	Good	Yes	1
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	423.27	423.27	100.00%	24,300	10,285,515.43	Good	Yes	1

Table LU-213. Lifeline Utilities, Level III Water System, Severity of Consequence Estimation for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	207.43	207.43	100.00%	19,100	3,961,967.92	Good	Yes	1
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	239.57	239.57	100.00%	19,100	4,575,759.49	Good	Yes	1
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	53.67	53.67	100.00%	23,600	1,266,711.33	Good	Yes	1
UBALDE	HF	3	<= 1 meter	MLCSP	21.83	8.77	40.17%	23,600	206,884.64	Good	Yes	2
UBALDE	HF	3	<= 1 meter	MLCSP	56.80	56.80	100.00%	23,600	1,340,392.27	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	16.87	16.87	100.00%	11,200	188,999.06	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	32.12	32.12	100.00%	11,200	359,744.40	Good	Yes	2
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	11.21	11.21	100.00%	11,200	125,578.12	Good	Yes	2
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	21.56	21.56	100.00%	11,200	241,514.23	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	143.01	143.01	100.00%	11,200	1,601,695.69	Good	Yes	2
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	42.88	42.88	100.00%	11,200	480,233.29	Good	Yes	2
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	224.73	123.86	55.11%	11,200	1,387,193.76	Good	Yes	2
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	224.73	100.87	44.89%	11,200	1,129,778.32	Good	Yes	1
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	69.27	69.27	100.00%	11,200	775,815.66	Good	Yes	1
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	40.60	40.60	100.00%	11,200	454,761.77	Good	Yes	1
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	166.62	44.36	26.62%	11,200	496,785.38	Good	Yes	1
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	73.05	73.05	100.00%	11,200	818,111.64	Good	Yes	1
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	38.45	38.45	100.00%	11,200	430,616.62	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	42.39	42.39	100.00%	11,200	474,764.83	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	43.58	43.58	100.00%	11,200	488,151.94	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	52.77	52.77	100.00%	11,200	590,990.62	Good	Yes	2
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	72.06	72.06	100.00%	11,200	807,034.52	Good	Yes	1
SASA	MF	3	<= 1 meter	MLCSP	460.10	95.78	20.82%	12,500	1,197,307.55	Good	Yes	1
PAMPANGA	HF	3	<= 1 meter	MLCSP	118.53	5.00	4.22%	19,100	95,536.43	Good	Yes	2
PAMPANGA	MF	3	<= 1 meter	MLCSP	118.53	14.98	12.64%	19,100	286,066.10	Good	Yes	1
PAMPANGA	MF	3	<= 1 meter	MLCSP	45.71	45.71	100.00%	19,100	873,145.47	Good	Yes	1
PAMPANGA	MF	3	<= 1 meter	MLCSP	12.43	12.43	100.00%	17,700	220,059.13	Good	Yes	1
SASA	HF	3	<= 1 meter	MLCSP	75.16	75.16	100.00%	17,700	1,330,375.08	Good	Yes	2
PAMPANGA	HF	3	<= 1 meter	MLCSP	223.75	13.90	6.21%	17,700	246,040.60	Good	Yes	2
PAMPANGA	MF	3	<= 1 meter	MLCSP	223.75	209.85	93.79%	17,700	3,714,415.17	Good	Yes	1
SASA	HF	3	<= 1 meter	MLCSP	96.35	61.06	63.38%	12,500	763,277.77	Good	Yes	2
PAMPANGA	MF	3	<= 1 meter	MLCSP	23.61	23.61	100.00%	17,700	417,867.81	Good	Yes	1
PAMPANGA	MF	3	<= 1 meter	MLCSP	23.06	23.06	100.00%	17,700	408,076.97	Good	Yes	1
PAMPANGA	MF	3	<= 1 meter	MLCSP	336.36	336.36	100.00%	19,100	6,424,543.28	Good	Yes	1
SASA	MF	3	<= 1 meter	MLCSP	507.32	87.14	17.18%	17,700	1,542,450.63	Good	Yes	1
MA-A	HF	6	>= 1 meter	MLCSP	485.34	348.23	71.75%	20,800	7,243,095.80	Good	Yes	2
MA-A	MF	6	>= 1 meter	MLCSP	485.34	137.11	28.25%	20,800	2,851,902.57	Good	Yes	1
MA-A	HF	6	>= 1 meter	MLCSP	195.26	194.54	99.63%	52,800	10,271,615.79	Good	Yes	2
MA-A	HF	6	>= 1 meter	MLCSP	26.39	10.29	39.01%	52,800	543,552.17	Good	Yes	2
MA-A	MF	6	>= 1 meter	MLCSP	26.39	12.31	46.64%	52,800	649,948.37	Good	Yes	1

Table LU-213. Lifeline Utilities, Level III Water System, Severity of Consequence Estimation for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE
CABANTIAN	HF	3	< = 1 meter	MLCSP	115.82	5.59	4.83%	23,600	132,013.54	Good	Yes	2
CABANTIAN	HF	3	< = 1 meter	MLCSP	55.93	5.20	9.29%	20,800	108,112.63	Good	Yes	2
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	502.30	489.24	97.40%	20,800	10,176,090.46	Good	Yes	1
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	1,206.78	663.83	55.01%	20,800	13,807,712.83	Good	Yes	1
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	282.05	104.91	37.19%	20,800	2,182,079.41	Good	Yes	1
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	1,304.14	505.33	38.75%	20,800	10,510,909.32	Good	Yes	1
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	555.53	280.59	50.51%	20,800	5,836,210.47	Good	Yes	1
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	703.04	186.97	26.59%	20,800	3,889,005.93	Good	Yes	1
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	282.09	104.92	37.19%	20,800	2,182,435.01	Good	Yes	1
19-B	VHF	6	>= 1 meter	MLCSP	260.30	181.38	69.68%	40,100	7,273,386.27	Good	Yes	2
19-B	VHF	6	>= 1 meter	MLCSP	245.54	229.36	93.41%	40,100	9,197,391.05	Good	Yes	2
19-B	VHF	6	>= 1 meter	MLCSP	202.41	191.74	94.72%	40,100	7,688,611.26	Good	Yes	2
WILFREDO AQUINO	MF	3	< = 1 meter	MLCSP	190.87	190.87	100.00%	19,100	3,645,677.98	Good	Yes	1
PACIANO BANGOY	MF	3	< = 1 meter	MLCSP	25.58	25.58	100.00%	11,200	286,538.24	Good	Yes	1
PACIANO BANGOY	MF	3	< = 1 meter	MLCSP	82.20	38.83	47.24%	11,200	434,887.20	Good	Yes	1
PACIANO BANGOY	MF	3	< = 1 meter	MLCSP	171.17	171.17	100.00%	11,200	1,917,049.11	Good	Yes	1
WILFREDO AQUINO	MF	3	< = 1 meter	MLCSP	3.66	3.66	100.00%	19,100	69,828.95	Good	Yes	1
AGDAO PROPER	MF	3	< = 1 meter	MLCSP	111.52	111.52	100.00%	19,100	2,130,060.54	Good	Yes	1
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	37.85	37.85	100.00%	11,200	423,879.17	Good	Yes	2
AGDAO PROPER	MF	3	< = 1 meter	MLCSP	20.10	20.10	100.00%	12,500	251,279.71	Good	Yes	1
2-A	HF	4	>= 1 meter	MLCSP	7.32	7.32	100.00%	17,700	129,588.49	Good	Yes	2
WILFREDO AQUINO	MF	3	< = 1 meter	MLCSP	15.86	15.86	100.00%	11,200	177,609.43	Good	Yes	1
PACIANO BANGOY	MF	3	< = 1 meter	MLCSP	5.45	5.45	100.00%	11,200	61,000.44	Good	Yes	1
AGDAO PROPER	MF	3	< = 1 meter	MLCSP	421.48	421.48	100.00%	23,600	9,947,033.00	Good	Yes	1
MA-A	HF	6	>= 1 meter	MLCSP	163.35	37.27	22.82%	48,500	1,807,495.21	Good	Yes	2
MA-A	MF	6	>= 1 meter	MLCSP	163.35	126.08	77.18%	48,500	6,114,738.65	Good	Yes	1
MA-A	HF	6	>= 1 meter	MLCSP	16.15	16.15	100.00%	48,500	783,164.31	Good	Yes	2
2-A	VHF	4	>= 1 meter	MLCSP	103.21	100.64	97.51%	48,500	4,881,152.37	Good	Yes	2
BUCANA	HF	4	>= 1 meter	MLCSP	307.67	145.29	47.22%	48,500	7,046,671.07	Good	Yes	2
BUCANA	VHF	4	>= 1 meter	MLCSP	307.67	162.06	52.67%	48,500	7,860,024.19	Good	Yes	2
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	208.98	208.98	100.00%	11,200	2,340,545.48	Good	Yes	2
BAGO GALLERA	HF	4	>= 1 meter	MLCSP	23.71	23.71	100.00%	20,800	493,220.95	Good	Yes	2
BAGO APLAYA	HF	5	>= 1 meter	MLCSP	545.52	206.38	37.83%	20,800	4,292,659.76	Good	Yes	2
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	545.52	339.14	62.17%	20,800	7,054,117.92	Good	Yes	1
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	4.41	4.41	100.00%	19,100	84,321.31	Good	Yes	1
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	8.71	8.71	100.00%	19,100	166,445.55	Good	Yes	1
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	294.00	48.42	16.47%	11,200	542,262.94	Good	Yes	2
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	294.00	244.32	83.10%	11,200	2,736,355.39	Good	Yes	2
CABANTIAN	HF	3	< = 1 meter	MLCSP	24.78	6.12	24.70%	20,800	127,307.73	Good	Yes	2
A. ANGLIONGTO	HF	3	< = 1 meter	MLCSP	456.48	13.91	3.05%	20,800	289,354.82	Good	Yes	2

Table LU-213. Lifeline Utilities, Level III Water System, Severity of Consequence Estimation for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE
A. ANGLIONGTO	HF	3	< = 1 meter	MLCSP	96.58	7.64	7.91%	20,800	158,946.15	Good	Yes	2
MA-A	MF	6	>= 1 meter	MLCSP	224.84	46.31	20.60%	20,800	963,336.96	Good	Yes	1
MA-A	MF	6	>= 1 meter	MLCSP	40.19	40.19	100.00%	23,600	948,374.19	Good	Yes	1
MA-A	MF	6	>= 1 meter	MLCSP	35.26	35.26	100.00%	24,300	856,782.33	Good	Yes	1
MA-A	MF	6	>= 1 meter	MLCSP	22.76	22.76	100.00%	33,200	755,489.19	Good	Yes	1
MA-A	MF	6	>= 1 meter	MLCSP	319.83	105.56	33.01%	40,100	4,232,900.15	Good	Yes	1
SASA	HF	3	< = 1 meter	MLCSP	317.51	212.79	67.02%	17,700	3,766,457.38	Good	Yes	2
SASA	HF	3	< = 1 meter	MLCSP	317.51	61.19	19.27%	17,700	1,082,991.95	Good	Yes	2
MA-A	HF	6	>= 1 meter	MLCSP	1,572.53	124.31	7.90%	52,800	6,563,342.88	Good	Yes	2
MATINA PANGI	HF	6	>= 1 meter	MLCSP	1,741.74	163.78	9.40%	52,800	8,647,760.47	Good	Yes	2
MATINA PANGI	MF	6	>= 1 meter	MLCSP	1,741.74	644.38	37.00%	52,800	34,023,354.13	Good	Yes	1
MATINA PANGI	MF	6	>= 1 meter	MLCSP	1,741.74	65.99	3.79%	52,800	3,484,287.76	Good	Yes	1
MATINA PANGI	HF	6	>= 1 meter	MLCSP	168.64	158.75	94.14%	52,800	8,381,934.80	Good	Yes	2
MATINA PANGI	MF	6	>= 1 meter	MLCSP	168.64	9.89	5.86%	52,800	522,181.24	Good	Yes	1
MATINA PANGI	HF	6	>= 1 meter	MLCSP	459.75	186.78	40.63%	52,800	9,861,865.53	Good	Yes	2
MATINA PANGI	MF	6	>= 1 meter	MLCSP	459.75	72.40	15.75%	52,800	3,822,872.60	Good	Yes	1
SASA	MF	3	< = 1 meter	MLCSP	196.05	107.31	54.74%	19,100	2,049,600.75	Good	Yes	1
TALOMO	HF	6	>= 1 meter	MLCSP	5.47	5.47	100.00%	24,300	132,904.86	Good	Yes	2
TALOMO	HF	6	>= 1 meter	MLCSP	88.89	88.89	100.00%	24,300	2,160,046.41	Good	Yes	2
TALOMO	HF	6	>= 1 meter	MLCSP	2.35	2.35	100.00%	24,300	57,077.72	Good	Yes	2
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	625.57	524.62	83.86%	20,800	10,912,108.86	Good	Yes	2
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	625.57	99.60	15.92%	20,800	2,071,647.35	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	98.18	98.18	100.00%	20,800	2,042,215.47	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	665.27	665.27	100.00%	19,100	12,706,576.48	Good	Yes	2
TIGATTO	HF	6	>= 1 meter	MLCSP	831.97	64.00	7.69%	23,600	1,510,483.69	Good	Yes	2
TIGATTO	VHF	6	>= 1 meter	MLCSP	831.97	458.47	55.11%	23,600	10,819,788.44	Good	Yes	2
BAGO APLAYA	HF	5	>= 1 meter	MLCSP	28.02	28.02	100.00%	17,700	495,998.17	Good	Yes	2
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	11.23	11.23	100.00%	17,700	198,832.14	Good	Yes	1
PAMPANGA	MF	3	< = 1 meter	MLCSP	3.45	3.45	100.00%	19,100	65,948.62	Good	Yes	1
LUBOGAN	HF	4	>= 1 meter	MLCSP	426.38	168.90	39.61%	17,700	2,989,489.76	Good	Yes	2
LUBOGAN	HF	4	>= 1 meter	MLCSP	47.96	47.96	100.00%	17,700	848,958.43	Good	Yes	2
LUBOGAN	HF	4	>= 1 meter	MLCSP	12.19	12.19	100.00%	17,700	215,693.75	Good	Yes	2
LUBOGAN	HF	4	>= 1 meter	MLCSP	137.93	137.93	100.00%	17,700	2,441,444.09	Good	Yes	2
LUBOGAN	HF	4	>= 1 meter	MLCSP	282.38	282.38	100.00%	17,700	4,998,077.73	Good	Yes	2
SASA	MF	3	< = 1 meter	MLCSP	31.74	28.84	90.85%	17,700	510,430.02	Good	Yes	1
SASA	MF	3	< = 1 meter	MLCSP	24.48	24.48	100.00%	17,700	433,259.68	Good	Yes	1
SASA	MF	3	< = 1 meter	MLCSP	96.01	96.01	100.00%	17,700	1,699,332.84	Good	Yes	1
PANACAN	MF	5	>= 1 meter	MLCSP	907.37	3.35	0.37%	17,700	59,246.14	Good	Yes	1
SASA	MF	3	< = 1 meter	MLCSP	1.65	1.65	100.00%	17,700	29,120.39	Good	Yes	1
PANACAN	MF	5	>= 1 meter	MLCSP	505.50	33.39	6.60%	17,700	590,916.81	Good	Yes	1

Table LU-213. Lifeline Utilities, Level III Water System, Severity of Consequence Estimation for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE
PANACAN	VHF	5	>= 1 meter	MLCSP	505.50	85.39	16.89%	17,700	1,511,413.01	Good	Yes	2
PANACAN	MF	5	>= 1 meter	MLCSP	505.50	95.73	18.94%	17,700	1,694,338.97	Good	Yes	1
PANACAN	HF	5	>= 1 meter	MLCSP	505.50	75.91	15.02%	17,700	1,343,694.52	Good	Yes	2
PANACAN	HF	5	>= 1 meter	MLCSP	505.50	59.91	11.85%	17,700	1,060,447.61	Good	Yes	2
LUBOGAN	HF	4	>= 1 meter	MLCSP	561.09	179.66	32.02%	17,700	3,180,019.64	Good	Yes	2
TUGBOK	MF	6	>= 1 meter	MLCSP	433.44	184.44	42.55%	33,200	6,123,513.42	Good	Yes	1
TUGBOK	HF	6	>= 1 meter	MLCSP	286.54	79.53	27.76%	17,700	1,407,668.34	Good	Yes	2
TUGBOK	MF	6	>= 1 meter	MLCSP	286.54	207.01	72.24%	17,700	3,664,051.20	Good	Yes	1
MINTAL	HF	5	>= 1 meter	MLCSP	88.59	88.59	100.00%	20,800	1,842,749.98	Good	Yes	2
MINTAL	HF	5	>= 1 meter	MLCSP	206.93	24.58	11.88%	20,800	511,194.16	Good	Yes	2
MINTAL	VHF	5	>= 1 meter	MLCSP	206.93	22.63	10.94%	20,800	470,717.04	Good	Yes	2
MINTAL	HF	5	>= 1 meter	MLCSP	206.93	159.72	77.19%	20,800	3,322,197.39	Good	Yes	2
CATALUNAN GRANDE	HF	3	<= 1 meter	MLCSP	885.89	41.16	4.65%	20,800	856,087.73	Good	Yes	2
CATALUNAN GRANDE	MF	3	<= 1 meter	MLCSP	885.89	272.28	30.74%	20,800	5,663,500.28	Good	Yes	1
CATALUNAN GRANDE	VHF	3	<= 1 meter	MLCSP	885.89	100.91	11.39%	20,800	2,098,930.41	Good	Yes	2
CATALUNAN GRANDE	MF	3	<= 1 meter	MLCSP	1,109.93	88.11	7.94%	20,800	1,832,682.41	Good	Yes	1
TUGBOK	HF	6	>= 1 meter	MLCSP	156.72	156.72	100.00%	33,200	5,203,127.42	Good	Yes	2
TUGBOK	HF	6	>= 1 meter	MLCSP	866.82	505.59	58.33%	33,200	16,785,479.32	Good	Yes	2
TUGBOK	VHF	6	>= 1 meter	MLCSP	866.82	308.15	35.55%	33,200	10,230,710.59	Good	Yes	2
TUGBOK	HF	6	>= 1 meter	MLCSP	866.82	52.67	6.08%	33,200	1,748,513.20	Good	Yes	2
MINTAL	HF	5	>= 1 meter	MLCSP	545.75	545.75	100.00%	33,200	18,118,752.26	Good	Yes	2
MINTAL	HF	5	>= 1 meter	MLCSP	10.49	10.49	100.00%	33,200	348,357.30	Good	Yes	2
STO. NIÑO	MF	4	>= 1 meter	MLCSP	483.18	163.39	33.82%	20,800	3,398,553.28	Good	Yes	1
STO. NIÑO	HF	4	>= 1 meter	MLCSP	483.18	279.44	57.83%	20,800	5,812,349.43	Good	Yes	2
MINTAL	MF	5	>= 1 meter	MLCSP	631.75	91.03	14.41%	20,800	1,893,510.62	Good	Yes	1
MINTAL	HF	5	>= 1 meter	MLCSP	631.75	540.72	85.59%	20,800	11,246,887.38	Good	Yes	2
MINTAL	HF	5	>= 1 meter	MLCSP	11.85	11.85	100.00%	33,200	393,442.70	Good	Yes	2
TUGBOK	HF	6	>= 1 meter	MLCSP	256.82	256.82	100.00%	33,200	8,526,574.85	Good	Yes	2
CATALUNAN GRANDE	MF	3	<= 1 meter	MLCSP	222.21	20.49	9.22%	20,800	426,121.55	Good	Yes	1
TUGBOK	HF	6	>= 1 meter	MLCSP	79.26	79.26	100.00%	17,700	1,402,971.03	Good	Yes	2
TUGBOK	HF	6	>= 1 meter	MLCSP	20.77	20.77	100.00%	17,700	367,714.98	Good	Yes	2
TUGBOK	HF	6	>= 1 meter	MLCSP	304.69	304.69	100.00%	33,200	10,115,780.21	Good	Yes	2
TUGBOK	HF	6	>= 1 meter	MLCSP	291.67	77.19	26.47%	33,200	2,562,798.95	Good	Yes	2
TUGBOK	MF	6	>= 1 meter	MLCSP	291.67	214.48	73.53%	33,200	7,120,694.94	Good	Yes	1
TUGBOK	VHF	6	>= 1 meter	MLCSP	36.45	36.45	100.00%	11,200	408,196.63	Good	Yes	2
MINTAL	VHF	5	>= 1 meter	MLCSP	667.99	101.31	15.17%	12,500	1,266,313.19	Good	Yes	2
MINTAL	HF	5	>= 1 meter	MLCSP	667.99	310.22	46.44%	12,500	3,877,728.55	Good	Yes	2
MINTAL	HF	5	>= 1 meter	MLCSP	192.23	192.23	100.00%	12,500	2,402,869.93	Good	Yes	2
MINTAL	HF	5	>= 1 meter	MLCSP	332.13	332.13	100.00%	12,500	4,151,646.00	Good	Yes	2
TUGBOK	MF	6	>= 1 meter	MLCSP	5.07	5.07	100.00%	11,200	56,766.60	Good	Yes	1

Table LU-213. Lifeline Utilities, Level III Water System, Severity of Consequence Estimation for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE
TUGBOK	MF	6	>= 1 meter	MLCSP	5.62	5.62	100.00%	17,700	99,561.31	Good	Yes	1
TIGATTO	VHF	6	>= 1 meter	MLCSP	1,076.29	733.65	68.16%	23,600	17,314,053.37	Good	Yes	2
PANACAN	HF	5	>= 1 meter	MLCSP	1,093.70	44.03	4.03%	17,700	779,381.95	Good	Yes	2
SASA	HF	3	<= 1 meter	MLCSP	79.92	79.92	100.00%	19,100	1,526,436.01	Good	Yes	2
PAMPANGA	MF	3	<= 1 meter	MLCSP	18.37	18.37	100.00%	19,100	350,812.53	Good	Yes	1
SASA	HF	3	<= 1 meter	MLCSP	169.79	73.23	43.13%	19,100	1,398,724.05	Good	Yes	2
SASA	HF	3	<= 1 meter	MLCSP	169.79	96.55	56.87%	19,100	1,844,190.05	Good	Yes	2
PAMPANGA	HF	3	<= 1 meter	MLCSP	276.83	65.98	23.83%	19,100	1,260,178.77	Good	Yes	2
PAMPANGA	MF	3	<= 1 meter	MLCSP	276.83	210.86	76.17%	19,100	4,027,355.00	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	254.75	159.31	62.54%	24,300	3,871,332.57	Good	Yes	1
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	226.66	226.66	100.00%	24,300	5,507,858.76	Good	Yes	1
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	222.14	186.83	84.10%	24,300	4,539,970.42	Good	Yes	1
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	62.16	62.16	100.00%	24,300	1,510,400.83	Good	Yes	1
LOS AMIGOS	HF	5	>= 1 meter	MLCSP	1,475.26	51.37	3.48%	20,800	1,068,510.91	Good	Yes	2
LOS AMIGOS	MF	5	>= 1 meter	MLCSP	1,475.26	1,244.28	84.34%	20,800	25,881,005.15	Good	Yes	1
RIVERSIDE	HF	4	>= 1 meter	MLCSP	1,675.88	839.64	50.10%	20,800	17,464,409.89	Good	Yes	2
RIVERSIDE	MF	4	>= 1 meter	MLCSP	1,675.88	836.24	49.90%	20,800	17,393,831.22	Good	Yes	1
ULA	MF	3	<= 1 meter	MLCSP	598.81	214.10	35.75%	17,700	3,789,522.40	Good	Yes	1
TACUNAN	HF	3	<= 1 meter	MLCSP	714.88	148.72	20.80%	17,700	2,632,342.13	Good	Yes	2
TACUNAN	MF	3	<= 1 meter	MLCSP	714.88	324.24	45.35%	17,700	5,738,970.63	Good	Yes	1
MATINA PANGI	HF	6	>= 1 meter	MLCSP	455.49	223.69	49.11%	17,700	3,959,348.95	Good	Yes	2
MATINA PANGI	MF	6	>= 1 meter	MLCSP	455.49	231.79	50.89%	17,700	4,102,767.12	Good	Yes	1
CATALUNAN GRANDE	MF	3	<= 1 meter	MLCSP	3,233.03	315.15	9.75%	17,700	5,578,236.62	Good	Yes	1
MINTAL	HF	5	>= 1 meter	MLCSP	34.60	34.60	100.00%	33,200	1,148,758.95	Good	Yes	2
MINTAL	HF	5	>= 1 meter	MLCSP	11.83	11.83	100.00%	33,200	392,602.03	Good	Yes	2
PANACAN	HF	5	>= 1 meter	MLCSP	371.63	67.51	18.16%	19,100	1,289,349.67	Good	Yes	2
PANACAN	HF	5	>= 1 meter	MLCSP	670.83	279.20	41.62%	19,100	5,332,748.00	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	18.07	18.07	100.00%	11,200	202,382.31	Good	Yes	2
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	24.03	24.03	100.00%	11,200	269,095.96	Good	Yes	2
TIGATTO	VHF	6	>= 1 meter	MLCSP	979.68	280.80	28.66%	23,600	6,626,846.64	Good	Yes	2
TIGATTO	VHF	6	>= 1 meter	MLCSP	933.96	25.15	2.69%	23,600	593,437.36	Good	Yes	2
TIGATTO	VHF	6	>= 1 meter	MLCSP	569.71	52.58	9.23%	23,600	1,240,867.61	Good	Yes	2
MANDUG	VHF	6	>= 1 meter	MLCSP	403.25	90.74	22.50%	23,600	2,141,406.19	Good	Yes	2
MANDUG	VHF	6	>= 1 meter	MLCSP	403.25	309.63	76.78%	23,600	7,307,197.82	Good	Yes	2
MANDUG	VHF	6	>= 1 meter	MLCSP	1,005.97	92.98	9.24%	23,600	2,194,379.96	Good	Yes	2
BAGO APLAYA	HF	5	>= 1 meter	MLCSP	215.20	45.16	20.99%	23,600	1,065,798.62	Good	Yes	2
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	215.20	76.34	35.47%	23,600	1,801,688.04	Good	Yes	1
BAGO APLAYA	HF	5	>= 1 meter	MLCSP	458.49	163.75	35.71%	23,600	3,864,400.08	Good	Yes	2
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	458.49	79.14	17.26%	23,600	1,867,760.13	Good	Yes	1
BAGO APLAYA	HF	5	>= 1 meter	MLCSP	39.30	39.30	100.00%	17,700	695,588.26	Good	Yes	2

Table LU-213. Lifeline Utilities, Level III Water System, Severity of Consequence Estimation for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE
BAGO APLAYA	HF	5	>= 1 meter	MLCSP	223.51	64.71	28.95%	40,100	2,594,857.85	Good	Yes	2
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	223.51	75.18	33.63%	40,100	3,014,642.26	Good	Yes	1
BAGO APLAYA	HF	5	>= 1 meter	MLCSP	463.42	158.54	34.21%	40,100	6,357,490.38	Good	Yes	2
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	463.42	76.23	16.45%	40,100	3,056,768.22	Good	Yes	1
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	922.60	576.96	62.54%	17,700	10,212,176.05	Good	Yes	2
MATINA APLAYA	MF	6	>= 1 meter	MLCSP	1,041.85	875.00	83.99%	17,700	15,487,428.48	Good	Yes	1
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	1,041.85	45.78	4.39%	17,700	810,386.24	Good	Yes	2
COMMUNAL	HF	4	>= 1 meter	MLCSP	60.14	4.28	7.12%	20,800	89,079.81	Good	Yes	2
COMMUNAL	HF	4	>= 1 meter	MLCSP	152.96	13.89	9.08%	20,800	288,966.05	Good	Yes	2
TUGBOK	HF	6	>= 1 meter	MLCSP	786.72	786.72	100.00%	33,200	26,119,095.17	Good	Yes	2
MINTAL	HF	5	>= 1 meter	MLCSP	103.31	103.31	100.00%	33,200	3,429,775.79	Good	Yes	2
TUGBOK	HF	6	>= 1 meter	MLCSP	68.54	68.54	100.00%	33,200	2,275,654.23	Good	Yes	2
ILANG	HF	3	<= 1 meter	MLCSP	1,814.79	32.40	1.79%	23,600	764,634.75	Good	Yes	2
ILANG	VHF	3	<= 1 meter	MLCSP	1,814.79	19.49	1.07%	23,600	459,886.66	Good	Yes	2
TIBUNGO	HF	3	<= 1 meter	MLCSP	559.79	25.62	4.58%	23,600	604,638.28	Good	Yes	2
CATALUNAN GRANDE	MF	3	<= 1 meter	MLCSP	7.05	6.88	97.59%	20,800	143,111.50	Good	Yes	1
CATALUNAN GRANDE	MF	3	<= 1 meter	MLCSP	46.53	46.53	100.00%	20,800	967,901.25	Good	Yes	1
CATALUNAN GRANDE	MF	3	<= 1 meter	MLCSP	47.91	47.91	100.00%	20,800	996,577.17	Good	Yes	1
CATALUNAN GRANDE	MF	3	<= 1 meter	MLCSP	103.67	103.67	100.00%	20,800	2,156,362.46	Good	Yes	1
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	390.95	14.61	3.74%	17,700	258,639.62	Good	Yes	1
TUGBOK	HF	6	>= 1 meter	MLCSP	177.45	177.45	100.00%	17,700	3,140,926.42	Good	Yes	2
TUGBOK	HF	6	>= 1 meter	MLCSP	721.72	630.04	87.30%	17,700	11,151,705.86	Good	Yes	2
TUGBOK	MF	6	>= 1 meter	MLCSP	721.72	91.68	12.70%	17,700	1,622,817.75	Good	Yes	1
CALINAN	VHF	5	>= 1 meter	MLCSP	64.47	47.96	74.39%	12,500	599,502.55	Good	Yes	2
CALINAN	HF	5	>= 1 meter	MLCSP	64.47	16.51	25.61%	12,500	206,343.98	Good	Yes	2
CALINAN	VHF	5	>= 1 meter	MLCSP	248.50	79.38	31.95%	12,500	992,298.79	Good	Yes	2
CALINAN	HF	5	>= 1 meter	MLCSP	248.50	169.11	68.05%	12,500	2,113,890.18	Good	Yes	2
TIGATTO	HF	6	>= 1 meter	MLCSP	2,289.22	368.62	16.10%	23,600	8,699,321.27	Good	Yes	2
TIGATTO	VHF	6	>= 1 meter	MLCSP	2,289.22	478.61	20.91%	23,600	11,295,116.96	Good	Yes	2
MINTAL	MF	5	>= 1 meter	MLCSP	855.48	414.87	48.50%	17,700	7,343,195.66	Good	Yes	1
MINTAL	HF	5	>= 1 meter	MLCSP	855.48	440.61	51.50%	17,700	7,798,877.67	Good	Yes	2
MINTAL	HF	5	>= 1 meter	MLCSP	772.18	100.79	13.05%	17,700	1,784,009.69	Good	Yes	2
TALOMO	MF	6	>= 1 meter	MLCSP	6.06	6.06	100.00%	24,300	147,334.92	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	428.56	277.64	64.79%	48,500	13,465,694.50	Good	Yes	1
TALOMO	HF	6	>= 1 meter	MLCSP	114.61	111.56	97.35%	48,500	5,410,901.81	Good	Yes	2
TALOMO	MF	6	>= 1 meter	MLCSP	114.61	3.04	2.65%	48,500	147,497.48	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	39.38	39.38	100.00%	20,800	819,088.14	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	569.71	569.71	100.00%	20,800	11,850,023.60	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	16.21	16.21	100.00%	17,700	287,004.35	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	5.75	5.75	100.00%	20,800	119,647.21	Good	Yes	1

Table LU-213. Lifeline Utilities, Level III Water System, Severity of Consequence Estimation for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE
TALOMO	MF	6	>= 1 meter	MLCSP	437.34	437.34	100.00%	20,800	9,096,746.13	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	328.00	328.00	100.00%	17,700	5,805,524.72	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	0.61	0.61	100.00%	17,700	10,821.60	Good	Yes	1
PANACAN	HF	5	>= 1 meter	MLCSP	666.86	24.42	3.66%	19,100	466,326.79	Good	Yes	2
MA-A	VHF	6	>= 1 meter	MLCSP	552.91	120.09	21.72%	52,800	6,340,703.79	Good	Yes	2
TIGATTO	HF	6	>= 1 meter	MLCSP	427.36	83.03	19.43%	52,800	4,383,792.77	Good	Yes	2
TIGATTO	VHF	6	>= 1 meter	MLCSP	427.36	97.57	22.83%	52,800	5,151,941.35	Good	Yes	2
MA-A	VHF	6	>= 1 meter	MLCSP	87.21	87.21	100.00%	52,800	4,604,804.58	Good	Yes	2
TALOMO	MF	6	>= 1 meter	MLCSP	353.39	353.39	100.00%	44,200	15,619,726.82	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	316.94	224.70	70.90%	44,200	9,931,537.61	Good	Yes	1
TALOMO	MF	6	>= 1 meter	MLCSP	1,258.03	280.51	22.30%	20,800	5,834,606.33	Good	Yes	1
PACIANO BANGOY	MF	3	< = 1 meter	MLCSP	71.18	71.18	100.00%	11,200	797,268.43	Good	Yes	1
PACIANO BANGOY	MF	3	< = 1 meter	MLCSP	2.02	2.02	100.00%	11,200	22,571.60	Good	Yes	1
AGDAO PROPER	MF	3	< = 1 meter	MLCSP	24.87	24.87	100.00%	23,600	586,835.02	Good	Yes	1
AGDAO PROPER	MF	3	< = 1 meter	MLCSP	5.86	5.86	100.00%	23,600	138,379.33	Good	Yes	1
MATINA APLAYA	MF	6	>= 1 meter	MLCSP	341.23	341.23	100.00%	17,700	6,039,772.22	Good	Yes	1
MATINA APLAYA	MF	6	>= 1 meter	MLCSP	266.89	44.03	16.50%	17,700	779,318.34	Good	Yes	1
LOS AMIGOS	VHF	5	>= 1 meter	MLCSP	8.80	8.80	100.00%	17,700	155,795.50	Good	Yes	2
LOS AMIGOS	VHF	5	>= 1 meter	MLCSP	2.67	2.67	100.00%	17,700	47,241.74	Good	Yes	2
LOS AMIGOS	VHF	5	>= 1 meter	MLCSP	2.22	2.22	100.00%	17,700	39,310.16	Good	Yes	2
LOS AMIGOS	HF	5	>= 1 meter	MLCSP	815.72	260.44	31.93%	17,700	4,609,772.90	Good	Yes	2
LOS AMIGOS	MF	5	>= 1 meter	MLCSP	815.72	2.08	0.25%	17,700	36,790.58	Good	Yes	1
LOS AMIGOS	VHF	5	>= 1 meter	MLCSP	815.72	553.20	67.82%	17,700	9,791,610.28	Good	Yes	2
LOS AMIGOS	MF	5	>= 1 meter	MLCSP	359.81	359.81	100.00%	17,700	6,368,712.51	Good	Yes	1
LOS AMIGOS	MF	5	>= 1 meter	MLCSP	16.73	16.73	100.00%	17,700	296,074.96	Good	Yes	1
WILFREDO AQUINO	MF	3	< = 1 meter	MLCSP	49.80	0.37	0.73%	19,100	6,983.75	Good	Yes	1
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	301.96	0.41	0.14%	11,200	4,612.83	Good	Yes	2
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	301.96	0.41	0.14%	11,200	4,612.83	Good	Yes	2
2-A	VHF	4	>= 1 meter	MLCSP	103.21	0.06	0.06%	48,500	3,073.25	Good	Yes	2
TACUNAN	HF	3	< = 1 meter	MLCSP	714.88	1.87	0.26%	17,700	33,145.93	Good	Yes	2
TACUNAN	MF	3	< = 1 meter	MLCSP	714.88	1.87	0.26%	17,700	33,145.93	Good	Yes	1
PANACAN	HF	5	>= 1 meter	MLCSP	670.83	1.22	0.18%	19,100	23,271.84	Good	Yes	2
MANDUG	VHF	6	>= 1 meter	MLCSP	403.25	2.89	0.72%	23,600	68,126.58	Good	Yes	2
MANDUG	VHF	6	>= 1 meter	MLCSP	403.25	2.89	0.72%	23,600	68,126.58	Good	Yes	2
COMMUNAL	HF	4	>= 1 meter	MLCSP	60.14	26.77	44.52%	20,800	556,909.62	Good	Yes	2
COMMUNAL	HF	4	>= 1 meter	MLCSP	60.14	26.77	44.52%	20,800	556,909.62	Good	Yes	2
COMMUNAL	HF	4	>= 1 meter	MLCSP	152.96	33.32	21.78%	20,800	693,001.54	Good	Yes	2
COMMUNAL	HF	4	>= 1 meter	MLCSP	152.96	33.32	21.78%	20,800	693,001.54	Good	Yes	2

Severity of Consequence Estimation for Level III DCWD Wells

Of 26 DCWD wells, 12 wells are moderately and highly susceptible to flood. These wells are also located in Talomo, Bago Aplaya, Tugbok and Los Amigos, which have moderate to frequent likelihood of flood occurrence. All of these wells are estimated to have low severity of consequence.

Table LU-214. Severity of Consequence Estimation of DCWD Wells for Flood, Davao City

LOCATION	FLOOD	DEPTH	LIKELIHOOD OF OCCURRENCE SCORE	REPLACE-MENT COST COS	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE
Km. 7, Talomo Sump Bangkal, Brgy. Talomo	HF	>= 1 meter	6	6,500,000.00	6,500,000.00	GOOD	YES	NO	DCWD Fund	1
UUHSA, Brgy. Talomo	MF	>= 1 meter	6	6,500,000.00	6,500,000.00	GOOD	YES	NO	DCWD Fund	1
Km. 8 Ulas, Brgy. Talomo	MF	>= 1 meter	6	6,500,000.00	6,500,000.00	GOOD	YES	NO	DCWD Fund	1
Puan Junction, Brgy. Talomo	MF	>= 1 meter	6	6,500,000.00	6,500,000.00	GOOD	YES	NO	DCWD Fund	1
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	HF	>= 1 meter	5	6,500,000.00	6,500,000.00	GOOD	YES	NO	DCWD Fund	1
Catotal Subdivision near Block 22, Brgy. Bago Aplaya	HF	>= 1 meter	5	6,500,000.00	6,500,000.00	GOOD	YES	NO	DCWD Fund	1
Gallera de Oro Subdivision near Block 8, Brgy. Bago Aplaya	MF	>= 1 meter	5	6,500,000.00	6,500,000.00	GOOD	YES	NO	DCWD Fund	1
Along Apo Golf Road, Brgy. Bago Aplaya	MF	>= 1 meter	5	6,500,000.00	6,500,000.00	GOOD	YES	NO	DCWD Fund	1
Sitio Mahayahay, Brgy. Tugbok	MF	>= 1 meter	6	6,500,000.00	6,500,000.00	GOOD	YES	NO	DCWD Fund	1
Sitio Mahayahay, Brgy. Tugbok	MF	>= 1 meter	6	6,500,000.00	6,500,000.00	GOOD	YES	NO	DCWD Fund	1
Tugbok Quarry, Along Davao Bukidnon Road, Brgy. Tugbok	HF	>= 1 meter	6	6,500,000.00	6,500,000.00	GOOD	YES	NO	DCWD Fund	1
Los Amigos	VHF	>= 1 meter	5	6,500,000.00	6,500,000.00	GOOD	YES	NO	DCWD Fund	1

Severity of Consequence Estimation for Cell Sites

There are 26 cell sites located in areas with improbable to frequent likelihood of occurrence to flood. The severity of consequence however, is low.

Table LU-215. Lifeline Utilities, Cell Sites, Severity of Consequence Table to Flood, Davao City

NAME OF CELL SITE	HAZARD			EXPOSURE (FLOOD -VERY HIGH)			SENSITIVITY/VULNERABILITY			SEVERITY OF CONSEQUENCE SCORE
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	EXPECTED FLOOD DEPTH (M)	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	
GLOBE TELECOM, INC.	Very High	6	≥1	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
DIGITEL MOBILE PHILIPPINES, INC.	Very High	6	≥1	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Very High	6	≥1	Matina Aplaya Road, Brgy. Pagasa, Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
DIGITEL MOBILE PHILIPPINES, INC.	Very High	6	≥1	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Very High	6	≥1	Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Very High	6	≥1	Centerpoint Mall, Brgy. Matina Crossing,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
DIGITEL MOBILE PHILIPPINES, INC.	Very High	3	<1	Peralta Property, Seminary Rd., Brgy. Catalunan Grande Talomo District,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Very High	6	≥1	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
DIGITEL MOBILE PHILIPPINES, INC.	High	6	≥1	Mc Arthur Hiway, Brgy. 74-A, Matina Crossing	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
DIGITEL MOBILE PHILIPPINES, INC.	High	3	<1	Magno Prop., No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	High	3	<1	No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	High	4	≥1	#88 Maya St., Brgy. 76A, Ecoland, Brgy. Bucana	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Moderate	6	≥1	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Moderate	5	≥1	Crossing Puan, McArthur Highway, Brgy. Bago Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	5	≥1	Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Moderate	6	≥1	PLDT Village, Bo. Talomo, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33

Table LU-215. Lifeline Utilities, Cell Sites, Severity of Consequence Table to Flood, Davao City

NAME OF CELL SITE	HAZARD			EXPOSURE (FLOOD -VERY HIGH)			SENSITIVITY/VULNERABILITY			SEVERITY OF CONSEQUENCE SCORE
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	EXPECTED FLOOD DEPTH (M)	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	
SMART COMMUNICATIONS, INC.	Moderate	6	≥1	PLDT Village, Bo. Talomo, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Moderate	6	≥1	Ortis Road, Ulas, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	6	≥1	Ortis Road, Ulas, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	4	≥1	Upper Rapnaga, Brgy. Bago Gallera Talumo Dist.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Moderate	4	≥1	Purok 16, Sitio Durian, Brgy. Bago Gallera	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Moderate	4	≥1	Upper Rapnaga, Brgy. Bago Gallera Talumo Dist.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	4	≥1	Brgy. Bago Gallera, Talomo District,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	4	≥1	Sandawa, McArthur Hi-Way, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Moderate	4	≥1	Sandawa, McArthur Hi-Way, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
GLOBE TELECOM, INC.	Moderate	3	<1	Km 12.5, Talomo Dist, Brgy. Catalunan Pequeno, Davao City, Davao del Sur	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33

Disaster Risk Assessment for Landslide

Severity of Consequence Estimation for Roads

Carlos P. Garcia Highway and Davao-Bukidnon Road have moderate severity of consequence. It can be noted that these road have areas with frequent likelihood of occurrence of landslide.

Table LU-216. Lifeline Utilities, Roads, Severity of Consequence Estimation Table for Landslide, Davao City

ROAD NAME	HAZARD		EXPOSURE			SENSITIVITY			SEVERITY OF CONSEQUENCE			
	HAZARD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE	EXPOSED LENGTH (LINEAR KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	GROUP 1	GROUP 2	GROUP 3	AVE.
Calinan-Baguio-Cadalian Road	H	1.0	0.8466	35,000,000	29,632,050	concrete	good	Yes	1	1	1	1.0
Carlos P. Garcia Highway	H	4.9	4.9353	60,000,000	296,118,000	concrete	good	Yes	2	2	2	2.0
Carlos P. Garcia Highway	M	4.9	0.6098	60,000,000	36,587,100	concrete	good	Yes	2	2	2	2.0
Davao-Bukidnon Road	VH	6.0	0.1525	40,000,000	6,100,120	concrete	good	Yes	2	2	2	2.0
Davao-Bukidnon Road	VH	6.0	0.0305	40,000,000	1,219,384	concrete	good	Yes	2	2	2	2.0
Davao-Bukidnon Road	VH	6.0	0.1078	40,000,000	4,310,200	concrete	good	Yes	2	2	2	2.0
Davao-Bukidnon Road	VH	6.0	0.1419	40,000,000	5,676,080	concrete	good	Yes	2	2	2	2.0
Davao-Bukidnon Road	VH	6.0	0.0376	40,000,000	1,505,592	concrete	good	Yes	2	2	2	2.0
Davao-Bukidnon Road	VH	6.0	0.1442	40,000,000	5,769,840	concrete	good	Yes	2	2	2	2.0
Davao-Bukidnon Road	VH	6.0	0.0636	40,000,000	2,544,348	concrete	good	Yes	2	2	2	2.0
Davao-Bukidnon Road	H	3.0	15.1655	40,000,000	606,620,000	concrete	good	Yes	1	1	1	1.0
Davao-Bukidnon Road	M	2.9	17.5150	40,000,000	700,600,000	concrete	good	Yes	1	1	1	1.0
Eden-Tagurano Road	H	1.0	0.1042	35,000,000	3,646,895	concrete	good	Yes	1	1	1	1.0
Eden-Tagurano Road	M	1.0	0.3792	35,000,000	13,273,470	concrete	good	Yes	1	1	1	1.0
Fatima-Malabog Road	H	1.0	8.8631	54,000,000	478,604,700	concrete	good	Yes	1	1	1	1.0
Fatima-Malabog Road	M	1.8	8.7231	54,000,000	471,045,780	concrete	good	Yes	1	1	1	1.0
Inawayan-Baracatan Road	H	1.0	1.8346	35,000,000	64,212,050	concrete	good	Yes	1	1	1	1.0
Inawayan-Baracatan Road	M	1.0	5.2520	35,000,000	183,818,600	concrete	good	Yes	1	1	1	1.0
Mabuhay-Pañalum-Paquibato Road	H	1.0	0.4214	44,000,000	18,542,700	concrete	good	Yes	1	1	1	1.0
Mabuhay-Pañalum-Paquibato Road	M	1.0	1.4726	44,000,000	64,793,080	concrete	good	Yes	1	1	1	1.0
Toril-Bayabas-Eden Road	H	1.0	0.8748	30,000,000	26,245,020	concrete	good	Yes	1	1	1	1.0
Toril-Bayabas-Eden Road	M	1.0	4.3880	30,000,000	131,640,600	concrete	good	Yes	1	1	1	1.0

Severity of Consequence Estimation for Bridges

Baracatan Bridge, Tagurano Bridge, and Crossing Malabog Bridge are susceptible to landslide. The likelihood of landslide occurrence in the location the bridges is rare. The severity of consequence for these bridges is low.

Table LU-217. Lifeline Utilities, Bridges, Severity of Consequence Table for Landslide, Davao City

BRIDGE NAME	TOTAL LENGTH (METERS)	ROAD CLASSIFICATION	REPLACEMENT COST PER LINE-AR METER	TOTAL COST PER HAZARD LENGTH	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE SCORE
Baracatan Br.	22.20	17min- 38 max	1,200,000.00	26,640,000.00	Bailey	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/ retrofitting using either national government fund resources or those funded by regional line agencies	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1.0
Crossing Malabog Br.	41.02		1,200,000.00	49,224,000.00		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/ retrofitting using either national government fund resources or those funded by regional line agencies	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1.0
Tagurano Br.	12.46	17min- 38 max	1,200,000.00	14,952,000.00	Bailey	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/ retrofitting using either national government fund resources or those funded by regional line agencies	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1.0

Severity of Consequence Estimation for Power Substations

Only Tibungco Substation is moderately susceptible to landslide and likelihood of landslide occurrence is also rare. The severity of consequence is low.

Table LU-218. Lifeline Utilities, Power Substations, Severity of Consequence Estimation for Landslide, Davao City

NAME OF POWER PLANT	HAZARD		EXPOSURE		SENSITIVITY/VULNERABILITY			SEVERITY OF CONSEQUENCE SCORE
	LANDSLIDE SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	
Tibungco Substation	Moderate	1	2,626.00	118 Million	a) Perimeter Fence :CHB Fence with top Guard Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: P.U. Panel walls and roof. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	1

Severity of Consequence Estimation for Level I Water System

Spring sources in Bunawan, Panacan, Daliao San Isidro are in areas with occasional likelihood of landslide occurrence. These areas have very high severity of occurrence estimation.

Table LU-219. Lifeline Utilities, Level Water Supply , Severity of Consequence Estimation for Landslide, Davao City

BARANGAY	LANDSLIDE SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE	RISK SCORE	
BUNAWAN	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
BUNAWAN	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
PANACAN	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
PANACAN	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
SAN ISIDRO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
SAN ISIDRO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH

Table LU-219. Lifeline Utilities, Level Water Supply , Severity of Consequence Estimation for Landslide, Davao City

BARANGAY	LANDSLIDE SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE	RISK SCORE	
BUNAWAN	M	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
BUNAWAN	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
BUNAWAN	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
BUNAWAN	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH

Table LU-219. Lifeline Utilities, Level Water Supply , Severity of Consequence Estimation for Landslide, Davao City

BARANGAY	LANDSLIDE SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE	RISK SCORE	
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	Yes because of the design of the casing of the well	None	YES. For funding proposal	4	16	HIGH

Severity of Consequence Estimation for Level II Water System

A total of 26 sources found in Carmen, Suawan, Tambobong, Salaysay, Marilog, Megkawayan, Gumitan, Lumiad, Marilog are situated in areas with occasional to frequent likelihood of landslide occurrence. Marilog and Tapak have frequent likelihood of landslide occurrence. As to the severity of consequence, a very high severity of consequence is expected to all 26 sources primarily because they are all spring sources and their sensitivity is very high without any hazard resistant design.

Table LU-220. Lifeline Utilities, Level II Water Supply, Severity of Consequence Estimation for Landslide, Davao City

BARANGAY	SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE
CARMEN	H	5	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4
SUAWAN	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
TAMBOBONG	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
SUAWAN	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
SALAYSAY	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
SUAWAN	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
SALAYSAY	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
SUAWAN	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
MARILOG	H	5.5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
MARILOG	M	5.5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
MEGKAWAYAN	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
MARILOG	M	5.5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
MARILOG	M	5.5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
MAGSAYSAY	H	4	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
MAGSAYSAY	H	4	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
LUMIAD	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
GUMITAN	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
LUMIAD	M	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
LUMIAD	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
LUMIAD	M	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
LUMIAD	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
LUMIAD	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
LUMIAD	M	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
MARILOG	H	5.5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
GUMITAN	M	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
MARILOG	M	5.5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
MARILOG	H	5.5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4
TAPAK	H	6	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4

Severity of Consequence Estimation for Level III Water System

Buhangin, Talomo, Tigatto, have moderate likelihood of landslide occurrence. While, barangays 19-B, Ma-a, Langub, Panacan, Catalunan Grande have occasional likelihood of landslide occurrence. Based on the assessment, a total of 11 barangays have high severity of consequence. These barangays are 19-B, Buhangin, Matina Pangi, Langub, Ma-a, Magtuod, Talomo, Panacan, Catalunan Grande, Matina Crossing, and Tigatto.

Table LU-221, Lifeline Utilities, Level III Water Supply System, Severity of Consequence Estimation for Landslide, Davao City

HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE
LOCATION	LANDSLIDE SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE AVERAGE
19-B	H	4	MLCSP	125.77	23.31	18.53%	40,100	934,586.10	Good	Yes	3
MA-A	M	4	MLCSP	195.26	0.72	0.37%	52,800	38,197.31	Good	Yes	2
BUHANGIN	H	5	MLCSP	370.76	338.29	91.24%	40,100	13,565,406.52	Good	Yes	3
19-B	H	4	MLCSP	36.42	15.04	41.30%	40,100	603,120.75	Good	Yes	3
MA-A	M	4	MLCSP	158.36	158.36	100.00%	11,200	1,773,660.28	Good	Yes	2
MATINA PANGI	H	6	MLCSP	925.09	546.53	59.08%	11,200	6,121,133.67	Good	Yes	3
MATINA PANGI	M	6	MLCSP	925.09	378.56	40.92%	11,200	4,239,843.29	Good	Yes	2
BUHANGIN	H	5	MLCSP	41.27	41.27	100.00%	40,100	1,654,764.08	Good	Yes	3
BUHANGIN	H	5	MLCSP	97.82	60.97	62.33%	40,100	2,445,063.47	Good	Yes	3
MA-A	H	4	MLCSP	1,572.53	1,153.29	73.34%	52,800	60,893,836.31	Good	Yes	3
MA-A	M	4	MLCSP	1,572.53	294.93	18.76%	52,800	15,572,258.33	Good	Yes	2
MATINA PANGI	H	6	MLCSP	1,741.74	62.67	3.60%	52,800	3,308,834.58	Good	Yes	3
MATINA PANGI	M	6	MLCSP	1,741.74	804.92	46.21%	52,800	42,499,546.42	Good	Yes	2
LANGUB	H	4	MLCSP	551.65	551.65	100.00%	52,800	29,126,895.54	Good	Yes	3
MATINA PANGI	H	6	MLCSP	459.75	144.78	31.49%	52,800	7,644,328.46	Good	Yes	3
MA-A	H	4	MLCSP	333.94	33.58	10.06%	52,800	1,772,995.35	Good	Yes	3
MAGTUOD	H	1	MLCSP	402.95	97.35	24.16%	52,800	5,139,854.85	Good	Yes	3
MAGTUOD	M	1	MLCSP	402.95	22.24	5.52%	52,800	1,174,049.93	Good	Yes	2
TALOMO	H	5	MLCSP	123.15	20.23	16.43%	52,800	1,068,243.32	Good	Yes	3
PANACAN	H	4	MLCSP	313.53	67.56	21.55%	20,800	1,405,303.91	Good	Yes	3
TIBUNGCO	M	1	MLCSP	979.15	268.19	27.39%	20,800	5,578,333.36	Good	Yes	2
CABANTIAN	M	1	MLCSP	749.75	354.52	47.29%	24,300	8,614,792.54	Good	Yes	2
CABANTIAN	M	1	MLCSP	10.65	10.65	100.00%	24,300	258,857.13	Good	Yes	2
CABANTIAN	M	1	MLCSP	10.88	10.88	100.00%	24,300	264,444.73	Good	Yes	2
CABANTIAN	M	1	MLCSP	150.43	150.43	100.00%	24,300	3,655,470.92	Good	Yes	2
CABANTIAN	M	1	MLCSP	307.81	90.51	29.40%	24,300	2,199,289.51	Good	Yes	2

Table LU-221, Lifeline Utilities, Level III Water Supply System, Severity of Consequence Estimation for Landslide, Davao City

HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE
LOCATION	LANDSLIDE SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE AVERAGE
CABANTIAN	M	1	MLCSP	53.14	53.14	100.00%	24,300	1,291,375.82	Good	Yes	2
CABANTIAN	M	1	MLCSP	67.94	42.79	62.98%	24,300	1,039,840.77	Good	Yes	2
BUHANGIN	H	5	MLCSP	146.53	113.10	77.18%	62,400	7,057,346.30	Good	Yes	3
BUHANGIN	H	5	MLCSP	19.25	19.25	100.00%	62,400	1,200,930.86	Good	Yes	3
CATALUNAN GRANDE	H	4	MLCSP	3,233.03	474.80	14.69%	17,700	8,403,921.24	Good	Yes	3
CATALUNAN GRANDE	M	4	MLCSP	3,233.03	479.85	14.84%	17,700	8,493,305.25	Good	Yes	2
MATINA CROSSING	H	6	MLCSP	1.97	1.97	100.00%	11,200	22,086.96	Good	Yes	3
MATINA CROSSING	H	6	MLCSP	282.18	282.18	100.00%	11,200	3,160,378.98	Good	Yes	3
CABANTIAN	M	1	MLCSP	22.45	0.89	3.96%	24,300	21,613.94	Good	Yes	2
TALOMO	H	5	MLCSP	1,112.19	649.36	58.39%	17,700	11,493,698.93	Good	Yes	3
MATINA PANGI	H	6	MLCSP	94.92	94.92	100.00%	17,700	1,680,046.81	Good	Yes	3
CATALUNAN GRANDE	H	4	MLCSP	884.15	29.34	3.32%	17,700	519,326.44	Good	Yes	3
MATINA PANGI	H	6	MLCSP	576.54	174.12	30.20%	11,200	1,950,089.90	Good	Yes	3
MATINA PANGI	M	6	MLCSP	576.54	402.42	69.80%	11,200	4,507,147.99	Good	Yes	2
MATINA PANGI	H	6	MLCSP	8.16	8.16	100.00%	11,200	91,381.32	Good	Yes	3
MA-A	H	4	MLCSP	978.39	644.74	65.90%	11,200	7,221,053.47	Good	Yes	3
MA-A	M	4	MLCSP	978.39	333.65	34.10%	11,200	3,736,893.23	Good	Yes	2
MATINA CROSSING	H	6	MLCSP	346.67	346.67	100.00%	11,200	3,882,752.30	Good	Yes	3
TIGATTO	H	5	MLCSP	2,289.22	18.87	0.82%	23,600	445,348.77	Good	Yes	3
PANACAN	H	4	MLCSP	666.86	125.15	18.77%	19,100.00	2,390,363.37	Good	Yes	3
PANACAN	M	4	MLCSP	666.86	398.24	59.72%	19,100.00	7,606,383.78	Good	Yes	2
MA-A	H	4	MLCSP	552.91	36.20	6.55%	52,800	1,911,143.74	Good	Yes	3
MA-A	M	4	MLCSP	552.91	50.01	9.05%	52,800	2,640,716.00	Good	Yes	2
BUHANGIN	H	5	MLCSP	269.69	148.86	55.20%	52,800	7,859,597.43	Good	Yes	3
CABANTIAN	M	1	MLCSP	587.28	207.79	35.38%	20,800	4,321,928.38	Good	Yes	2
BUHANGIN	H	5	MLCSP	395.71	300.11	75.84%	62,400	18,726,800.49	Good	Yes	3

Severity of Consequence Estimation for DCWD Wells

There are a total of two (2) wells found in Panacan an area with occasional/slight chance of landslide occurrence. There is however, low severity of consequence for these wells.

Table LU-222, Lifeline Utilities, DCWD Wells, Severity of Consequence Estimation for Landslide, Davao City

EXPOSURE					VULNERABILITY		SEVERITY OF CONSEQUENCE
LOCATION	SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE
Purok 27, Malagamot, Brgy. Panacan	M	4	6,500,000.00	6,500,000.00	GOOD	YES	1
Purok 24, Malagamot, Brgy. Panacan	H	4	6,500,000.00	6,500,000.00	GOOD	YES	1

Severity of Consequence Estimation for Cell Sites

For cell sites, a total of six (6) cell sites out of 24 are located in Matina Pangí and Matina Crossing. These cell sites have also a low severity of consequence score.

Table LU-223. Lifeline Utilities, Cell Sites, Severity of Consequence Estimation for Landslide, Davao City

NAME OF CELL SITE	HAZARD		EXPOSURE (Landslide -High)			SENSITIVITY/VULNERABILITY			SEVERITY OF CONSEQUENCE SCORE
	LANDSLIDE SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	
GLOBE TELECOM, INC.	High	5	Lloueras Bldg., McArthur Highway, Talomo (Pob.),	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	High	6	Telstar St., GSIS Subdivision, McArthur Hi-way, Brgy. Matina Crossing	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
DIGITEL MOBILE PHILIPPINES, INC.	High	5	Diversion Road, Bangkal, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
GLOBE TELECOM, INC.	High	6	Matina Shrine, Brgy. Matina Pangí	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	High	6	Shrine Hill, Brgy. Matina Pangí	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
DIGITEL MOBILE PHILIPPINES, INC.	High	6	Matina RS, Brgy. Matina Pangí	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33

Table LU-223. Lifeline Utilities, Cell Sites, Severity of Consequence Estimation for Landslide, Davao City

NAME OF CELL SITE	HAZARD		EXPOSURE (Landslide -High)			SENSITIVITY/VULNERABILITY			SEVERITY OF CONSEQUENCE SCORE
	LANDSLIDE SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	LOCATION	AREA OCCUPIED (HA)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN	
GLOBE TELECOM, INC.	High	4	lot 19 blk 17 Bacaca road El Rio Vista Buhangin (Pob.), Brgy. 19-B	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	High	5	796 Tigatto, Buhangin, Brgy. Tigatto	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	High	5	Brgy. Panorama, Brgy. Tigatto	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	High	1	Diversion Road, Brgy. Catitipan, Brgy. Communal	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	High	1	Communal Road, Buhangin District, Brgy. Communal	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	High	1	Water Tank, Palos Verdes Golf Course & Subd., Brgy. Mandug	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	High	1	Brgy. Malabog, Paquibato District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Moderate	1	Eden Nature Park, Brgy. Eden, Toril District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Moderate	6	Shrine Hill Matina RS, Brgy. Matina Pangi	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Moderate	4	Maa Rd., Sitio Bugac, Brgy. Maa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Moderate	4	Maa Rd., Sitio Bugac, Brgy. Maa,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Moderate	4	Maa Rd., Sitio Bugac, Brgy. Maa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Moderate	1	Brgy. Sirib, Calinan District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	1	Brgy. Mandug,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Moderate	1	Carnoustie St., Palos Verdes Compound Golf Club, Mandug	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
GLOBE TELECOM, INC.	Moderate	1	Buhisan St., Brgy. Tibungco,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33
SMART COMMUNICATIONS, INC.	Moderate	5	Sitio Lumondao,, Brgy. Marilog Proper, Marilog District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33

Risk Assessment for Roads

A total of 6.56 kilometers are at moderate risk to flood. Out of these, 4.04 kilometers are in Davao-Bukidnon Road, 1.35 kilometers are in C.P Garcia Highway, and 1.16 kilometers are located in McArthur Highway.

Table LU-224. Lifeline Utilities, Roads, Risk Assessment for Flood, Davao City

ROAD NAME	HAZARD	FLOOD DEPTH (METER)	LIKELIHOOD OF OCCURRENCE SCORE	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	SEVERITY OF CONSEQUENCE SCORE	RISK SCORE	RISK SCORE CATEGORY
2nd Avenue	HF	<1	1.0	0.0055	60,000,000	327,355	concrete	good	Yes	1.0	1.0	Low
Agdao Flyover	MF	<1	1.0	0.4734	56,000,000	26,508,216	concrete	good	Yes	1.0	1.0	Low
Calinan-Baguio-Cadalian Road	HF	<1	1.0	2.4488	35,000,000	85,708,700	concrete	good	Yes	1.0	1.0	Low
Calinan-Baguio-Cadalian Road	MF	<1	1.0	0.4303	35,000,000	15,059,240	concrete	good	Yes	1.0	1.0	Low
Carlos P. Garcia Highway	HF	≥1	6.0	0.1052	60,000,000	6,310,020	concrete	good	Yes	1.0	6.0	Moderate
Carlos P. Garcia Highway	HF	≥1	6.0	0.0399	60,000,000	2,394,378	concrete	good	Yes	1.0	6.0	Moderate
Carlos P. Garcia Highway	HF	≥1	5.0	0.0817	60,000,000	4,899,636	concrete	good	Yes	1.0	5.0	Moderate
Carlos P. Garcia Highway	HF	<1	1.0	0.3295	60,000,000	19,772,940	concrete	good	Yes	1.0	1.0	Low
Carlos P. Garcia Highway	HF	≥1	5.0	0.0314	60,000,000	1,886,508	concrete	good	Yes	1.0	5.0	Moderate
Carlos P. Garcia Highway	MF	≥1	6.0	0.3522	60,000,000	21,129,360	concrete	good	Yes	1.0	6.0	Moderate
Carlos P. Garcia Highway	MF	≥1	5.5	0.1119	60,000,000	6,711,120	concrete	good	Yes	1.0	5.5	Moderate
Carlos P. Garcia Highway	MF	≥1	4.0	0.0129	60,000,000	775,470	concrete	good	Yes	1.0	4.0	Low
Carlos P. Garcia Highway	HF	<1	1.0	0.0063	60,000,000	375,574	concrete	good	Yes	1.0	1.0	Low
Carlos P. Garcia Highway	VHF	≥1	6.0	0.3292	60,000,000	19,751,820	concrete	good	Yes	1.0	6.0	Moderate
Carlos P. Garcia Highway	VHF	≥1	4.5	0.2961	60,000,000	17,768,520	concrete	good	Yes	1.0	4.5	Moderate
Dacudao Avenue	MF	<1	1.0	1.1168	56,000,000	62,540,800	concrete	good	Yes	1.0	1.0	Low
Davao-Bukidnon Road	HF	<1	1.0	2.2435	40,000,000	89,739,600	concrete	good	Yes	1.0	1.0	Low
Davao-Bukidnon Road	HF	<1	1.0	0.5888	40,000,000	23,551,720	concrete	good	Yes	1.0	1.0	Low
Davao-Bukidnon Road	HF	<1	1.0	0.9692	40,000,000	38,769,520	concrete	good	Yes	1.0	1.0	Low
Davao-Bukidnon Road	HF	<1	1.0	0.3905	40,000,000	15,621,320	concrete	good	Yes	1.0	1.0	Low
Davao-Bukidnon Road	HF	<1	1.0	1.6118	40,000,000	64,471,600	concrete	good	Yes	1.0	1.0	Low
Davao-Bukidnon Road	HF	≥1	5.0	0.6323	40,000,000	25,293,080	concrete	good	Yes	1.0	5.0	Moderate
Davao-Bukidnon Road	HF	≥1	5.5	0.9835	40,000,000	39,340,080	concrete	good	Yes	1.0	5.5	Moderate
Davao-Bukidnon Road	HF	≥1	6.0	0.8472	40,000,000	33,889,920	concrete	good	Yes	1.0	6.0	Moderate
Davao-Bukidnon Road	MF	<1	1.0	0.2592	40,000,000	10,369,640	concrete	good	Yes	1.0	1.0	Low
Davao-Bukidnon Road	MF	<1	1.0	1.9633	40,000,000	78,531,600	concrete	good	Yes	1.0	1.0	Low
Davao-Bukidnon Road	MF	<1	1.0	1.1280	40,000,000	45,121,200	concrete	good	Yes	1.0	1.0	Low
Davao-Bukidnon Road	MF	<1	1.0	0.5791	40,000,000	23,165,360	concrete	good	Yes	1.0	1.0	Low
Davao-Bukidnon Road	MF	≥1	5.0	0.6943	40,000,000	27,773,760	concrete	good	Yes	1.0	5.0	Moderate
Davao-Bukidnon Road	MF	≥1	6.0	0.0412	40,000,000	1,647,920	concrete	good	Yes	1.0	6.0	Moderate
Davao-Bukidnon Road	MF	≥1	6.0	0.5601	40,000,000	22,405,360	concrete	good	Yes	1.0	6.0	Moderate
Davao-Bukidnon Road	VHF	≥1	4.0	0.3309	40,000,000	13,237,880	concrete	good	Yes	1.0	4.0	Low
Davao-Bukidnon Road	VHF	<1	1.0	2.0777	40,000,000	83,107,600	concrete	good	Yes	1.0	1.0	Low
Davao-Bukidnon Road	VHF	<1	2.3	1.6613	40,000,000	66,450,400	concrete	good	Yes	1.0	2.3	Low
Davao-Bukidnon Road	MF	≥1	5.0	0.2861	40,000,000	11,445,040	concrete	good	Yes	1.0	5.0	Moderate
Davao-Bukidnon Road	HF	<1	1.0	2.4449	40,000,000	97,797,600	concrete	good	Yes	1.0	1.0	Low
Davao - Agusan Highway	MF	<1	1.0	0.0825	56,000,000	4,621,092	concrete	good	Yes	1.0	1.0	Low

Table LU-224. Lifeline Utilities, Roads, Risk Assessment for Flood, Davao City

ROAD NAME	HAZARD	FLOOD DEPTH (METER)	LIKELIHOOD OF OCCURRENCE SCORE	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	SEVERITY OF CONSEQUENCE SCORE	RISK SCORE	RISK SCORE CATEGORY
Davao - Agusan Highway	MF	<1	1.0	0.0331	56,000,000	1,851,041	concrete	good	Yes	1.0	1.0	Low
Davao - Agusan Highway	MF	<1	1.0	0.0126	56,000,000	704,346	concrete	good	Yes	1.0	1.0	Low
Davao - Agusan Highway	HF	<1	1.0	0.2037	56,000,000	11,408,544	concrete	good	Yes	1.0	1.0	Low
Davao - Agusan Highway	HF	<1	1.0	0.1551	56,000,000	8,688,064	concrete	good	Yes	1.0	1.0	Low
Davao - Agusan Highway	MF	<1	1.0	0.6234	56,000,000	34,908,384	concrete	good	Yes	1.0	1.0	Low
Davao - Agusan Highway	MF	<1	1.0	0.0860	56,000,000	4,813,519	concrete	good	Yes	1.0	1.0	Low
Davao - Agusan Highway	MF	<1	1.0	0.0480	56,000,000	2,690,055	concrete	good	Yes	1.0	1.0	Low
Davao - Agusan Highway	MF	≥1	4.0	0.0329	56,000,000	1,843,610	concrete	good	Yes	1.0	4.0	Low
Davao - Agusan Highway	VHF	≥1	4.0	0.0842	56,000,000	4,716,370	concrete	good	Yes	1.0	4.0	Low
Davao - Agusan Highway	MF	≥1	4.0	0.1324	56,000,000	7,415,800	concrete	good	Yes	1.0	4.0	Low
Davao - Agusan Highway	HF	≥1	4.0	0.0685	56,000,000	3,835,726	concrete	good	Yes	1.0	4.0	Low
Davao - Agusan Highway	HF	<1	2.0	0.1062	56,000,000	5,948,488	concrete	good	Yes	1.0	2.0	Low
Davao - Agusan Highway	MF	≥1	4.0	0.0245	56,000,000	1,374,548	concrete	good	Yes	1.0	4.0	Low
Davao - Agusan Highway	HF	≥1	4.0	0.0880	56,000,000	4,928,465	concrete	good	Yes	1.0	4.0	Low
Davao - Agusan Highway	HF	≥1	4.0	0.0993	56,000,000	5,559,999	concrete	good	Yes	1.0	4.0	Low
Davao - Agusan Highway	MF	≥1	4.0	0.0226	56,000,000	1,262,839	concrete	good	Yes	1.0	4.0	Low
Davao - Agusan Highway	MF	≥1	4.0	0.0444	56,000,000	2,484,166	concrete	good	Yes	1.0	4.0	Low
Davao - Agusan Highway	HF	<1	1.0	0.0796	56,000,000	4,456,368	concrete	good	Yes	1.0	1.0	Low
Davao - Agusan Highway	VHF	<1	1.0	0.0262	56,000,000	1,469,451	concrete	good	Yes	1.0	1.0	Low
Don Julian Rodriguez Ave. (Maa Road)	HF	≥1	4.0	0.5272	28,000,000	14,760,536	concrete	good	Yes	1.0	4.0	Low
Don Julian Rodriguez Ave. (Maa Road)	MF	≥1	4.0	0.3069	28,000,000	8,593,004	concrete	good	Yes	1.0	4.0	Low
Don Julian Rodriguez Ave. (Maa Road)	MF	≥1	4.0	0.3612	28,000,000	10,113,488	concrete	good	Yes	1.0	4.0	Low
Eden-Tagurano Road	HF	<1	1.0	0.1210	35,000,000	4,235,595	concrete	good	Yes	1.0	1.0	Low
Inawayan-Baracatan Road	HF	<1	1.0	0.0328	35,000,000	1,146,572	concrete	good	Yes	1.0	1.0	Low
J.P. Cabaguio Avenue	MF	<1	1.0	1.4047	56,000,000	78,662,080	concrete	good	Yes	1.0	1.0	Low
Leon Garcia St.	MF	<1	1.0	0.2600	49,000,000	12,740,588	concrete	good	Yes	1.0	1.0	Low
Libby Road	MF	<1	1.0	0.0494	25,000,000	1,235,630	concrete	good	Yes	1.0	1.0	Low
Libby Road	HF	<1	1.0	0.0075	25,000,000	186,545	concrete	good	Yes	1.0	1.0	Low
Libby Road	MF	<1	2.3	1.7755	25,000,000	25,000,000	concrete	good	Yes	1.0	2.3	Low
Maa Radio Station St.	HF	≥1	4.0	0.1871	28,000,000	28,000,000	concrete	good	Yes	1.0	4.0	Low
Maa Radio Station St.	MF	≥1	4.0	0.1576	28,000,000	28,000,000	concrete	good	Yes	1.0	4.0	Low
Mabuhay-Pañalum-Paquibato Road	HF	<1	1.0	0.2632	44,000,000	44,000,000	concrete	good	Yes	1.0	1.0	Low
Mabuhay-Pañalum-Paquibato Road	MF	<1	1.0	0.1382	44,000,000	44,000,000	concrete	good	Yes	1.0	1.0	Low
Manggahan St.	HF	<1	1.0	0.5772	25,000,000	25,000,000	concrete	good	Yes	1.0	1.0	Low

Table LU-224. Lifeline Utilities, Roads, Risk Assessment for Flood, Davao City

ROAD NAME	HAZARD	FLOOD DEPTH (METER)	LIKELIHOOD OF OCCURRENCE SCORE	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	SEVERITY OF CONSEQUENCE SCORE	RISK SCORE	RISK SCORE CATEGORY
Mc. Arthur Highway	HF	<1	1.0	0.0730	56,000,000	56,000,000	concrete	good	Yes	1.0	1.0	Low
Mc. Arthur Highway	HF	≥1	6.0	0.1741	56,000,000	56,000,000	concrete	good	Yes	1.0	6.0	Moderate
Mc. Arthur Highway	HF	<1	3.0	0.7103	56,000,000	56,000,000	concrete	good	Yes	1.0	3.0	Low
Mc. Arthur Highway	HF	<1	2.5	0.1954	56,000,000	56,000,000	concrete	good	Yes	1.0	2.5	Low
Mc. Arthur Highway	MF	<1	1.0	0.2950	56,000,000	56,000,000	concrete	good	Yes	1.0	1.0	Low
Mc. Arthur Highway	MF	<1	1.0	0.7051	56,000,000	56,000,000	concrete	good	Yes	1.0	1.0	Low
Mc. Arthur Highway	MF	<1	1.0	0.1347	56,000,000	56,000,000	concrete	good	Yes	1.0	1.0	Low
Mc. Arthur Highway	MF	<1	1.0	0.2224	56,000,000	56,000,000	concrete	good	Yes	1.0	1.0	Low
Mc. Arthur Highway	MF	≥1	6.0	0.1283	56,000,000	56,000,000	concrete	good	Yes	1.0	6.0	Moderate
Mc. Arthur Highway	MF	≥1	4.0	0.2059	56,000,000	56,000,000	concrete	good	Yes	1.0	4.0	Low
Mc. Arthur Highway	MF	≥1	5.5	0.4105	56,000,000	56,000,000	concrete	good	Yes	1.0	5.5	Moderate
Mc. Arthur Highway	HF	<1	1.0	0.4010	56,000,000	56,000,000	concrete	good	Yes	1.0	1.0	Low
Mc. Arthur Highway	HF	<1	1.0	0.1792	56,000,000	56,000,000	concrete	good	Yes	1.0	1.0	Low
Mc. Arthur Highway	HF	<1	1.0	0.2129	56,000,000	56,000,000	concrete	good	Yes	1.0	1.0	Low
Mc. Arthur Highway	VHF	≥1	6.0	0.4510	56,000,000	56,000,000	concrete	good	Yes	1.0	6.0	Moderate
Mc. Arthur Highway	VHF	<1	1.0	0.2950	56,000,000	56,000,000	concrete	good	Yes	1.0	1.0	Low
Mc. Arthur Highway	MF	<1	3.0	1.1842	56,000,000	56,000,000	concrete	good	Yes	1.0	3.0	Low
Pakiputan Wharf Road	MF	<1	1.0	0.4554	56,000,000	56,000,000	concrete	good	Yes	1.0	1.0	Low
Pichon St.	HF	<1	1.0	0.1014	56,000,000	56,000,000	concrete	good	Yes	1.0	1.0	Low
Quimpo Boulevard	HF	≥1	1.0	0.5484	50,000,000	50,000,000	concrete	good	Yes	1.0	1.0	Low
Quimpo Boulevard	HF	≥1	1.0	0.0351	50,000,000	50,000,000	concrete	good	Yes	1.0	1.0	Low
Quimpo Boulevard	MF	≥1	1.0	0.3839	50,000,000	50,000,000	concrete	good	Yes	1.0	1.0	Low
Quimpo Boulevard	VHF	≥1	1.0	0.4730	50,000,000	50,000,000	concrete	good	Yes	1.0	1.0	Low
Quirino Avenue	VHF	≥1	1.4	0.2199	40,000,000	40,000,000	concrete	good	Yes	1.0	1.4	Low
Rafael Castillo St.	HF	<1	1.0	0.4003	86,000,000	86,000,000	concrete	good	Yes	1.0	1.0	Low
Rafael Castillo St.	MF	<1	1.0	0.8161	86,000,000	86,000,000	concrete	good	Yes	1.0	1.0	Low
Toril-Bayabas-Eden Road	HF	<1	1.0	0.2472	30,000,000	30,000,000	concrete	good	Yes	1.0	1.0	Low
Toril-Bayabas-Eden Road	HF	<1	1.0	0.2321	30,000,000	30,000,000	concrete	good	Yes	1.0	1.0	Low
Toril-Bayabas-Eden Road	HF	<1	1.0	0.0626	30,000,000	30,000,000	concrete	good	Yes	1.0	1.0	Low
Toril-Bayabas-Eden Road	MF	<1	1.0	0.2519	30,000,000	30,000,000	concrete	good	Yes	1.0	1.0	Low
Carlos P. Garcia Highway	HF	≥1	6.0	0.0003	60,000,000	60,000,000	concrete	good	Yes	1.0	6.0	Moderate
Carlos P. Garcia Highway	VHF	≥1	6.0	0.0003	60,000,000	60,000,000	concrete	good	Yes	1.0	6.0	Moderate
Davao-Bukidnon Road	HF	<1	1.0	0.0002	40,000,000	40,000,000	concrete	good	Yes	1.0	1.0	Low
Davao-Bukidnon Road	VHF	<1	1.0	0.0002	40,000,000	40,000,000	concrete	good	Yes	1.0	1.0	Low
J.P. Cabaguio Avenue	MF	<1	1.0	0.0001	56,000,000	56,000,000	concrete	good	Yes	1.0	1.0	Low
Pichon St.	HF	<1	1.0	0.0005	56,000,000	56,000,000	concrete	good	Yes	1.0	1.0	Low
Quimpo Boulevard	HF	<1	1.0	0.0001	50,000,000	50,000,000	concrete	good	Yes	1.0	1.0	Low

Table LU-224. Lifeline Utilities, Roads, Risk Assessment for Flood, Davao City

ROAD NAME	HAZARD	FLOOD DEPTH (METER)	LIKELIHOOD OF OCCURRENCE SCORE	EXPOSED LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	VALUE OF EXPOSED LIFELINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	SEVERITY OF CONSEQUENCE SCORE	RISK SCORE	RISK SCORE CATEGORY
Quimpo Boulevard	HF	<1	1.0	0.0001	50,000,000	50,000,000	concrete	good	Yes	1.0	1.0	Low
Quimpo Boulevard	VHF	<1	1.0	0.0001	50,000,000	50,000,000	concrete	good	Yes	1.0	1.0	Low
Quimpo Boulevard	HF	<1	1.0	0.0008	50,000,000	50,000,000	concrete	good	Yes	1.0	1.0	Low
Quimpo Boulevard	VHF	<1	1.0	0.0008	50,000,000	50,000,000	concrete	good	Yes	1.0	1.0	Low
Quirino Avenue	VHF	<1	1.0	0.0001	40,000,000	40,000,000	concrete	good	Yes	1.0	1.0	Low
Rafael Castillo St.	HF	<1	1.0	0.0003	86,000,000	86,000,000	concrete	good	Yes	1.0	1.0	Low
Rafael Castillo St.	MF	<1	1.0	0.0003	86,000,000	86,000,000	concrete	good	Yes	1.0	1.0	Low

Table LU-225. Disaster Risk Assessment Summary Matrix of Roads for Flood, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Carlos P. Garcia Highway	<ul style="list-style-type: none"> This road network are at moderate risk to flood. The road network has severity of consequence of 1. The flood level is ≥ 1 meters. A total of 0.827 kilometers of road network exposed at barangay Matina Crossing has moderate likelihood of flood occurrence. A total of 0.111852 kilometers of road network exposed at Talomo and Matina Crossing has frequent likelihood of flood occurrence. A total of 0.1131024 kilometers of road network exposed at barangay Tigatto and Buhangin has moderate likelihood of flood occurrence A total of 0.296142 kilometers of road network exposed at barangay Ma-a and Tigatto has an occasional/slight chance likelihood of flood occurrence The total value exposed line is ₱ 80,885,795.52 . 	<ul style="list-style-type: none"> There will be disruption for road access depending on the severity of impact. Traffic congestion (due re-routing). Delayed delivery of goods and services. Appropriation of fund for maintenance/ replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> Re-routing scheme within the affected areas. Crafting of contingency plans for emergency situation.

Table LU-225. Disaster Risk Assessment Summary Matrix of Roads for Flood, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Davao - Bukidnon Road	<ul style="list-style-type: none"> • This road network is at moderate risk to flood. • The road network has low severity of consequence estimation. • The flood level is ≥ 1 meters. • A total of 1.44858 kilometers of road network exposed at Barangay Tamugan has frequent likelihood of flood occurrence • A total of 0.983502 kilometers of road network exposed at Barangay Tamugan and Suawan has frequent likelihood of flood occurrence • A total of 1.612797 kilometers of road network exposed at Barangay Suawan and Talomo has moderate likelihood of flood occurrence. • The total value exposed line is ₱161,795,160.00 	<ul style="list-style-type: none"> • There will be disruption for road access depending on the severity of impact. • Traffic congestion (due re-routing). • Delayed of delivery of goods and services. • Appropriation of fund for maintenance/ replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> • Re-routing scheme within the affected areas. • Crafting of contingency plans for emergency situation.
Mc. Arthur Highway	<ul style="list-style-type: none"> • This road network is at moderate risk to flood. • The road network has low severity of consequence estimation. • The flood level is ≥ 1 meters. • A total of 0.753495 kilometers of road network exposed at Barangay Matina Crossing has frequent likelihood of occurrence (1-3 years). • A total of 0.410542 kilometers of road network exposed at Barangay Matina Crossing and Talomo has frequent likelihood of occurrence • The total value exposed line is ₱65,186,072.00 	<ul style="list-style-type: none"> • There will be disruption for road access depending on the severity of impact. • Traffic congestion (due re-routing). • Delay of delivery of goods and services. • Appropriation of fund for maintenance/ replacement based on the degree of damage to drainage lines. 	<ul style="list-style-type: none"> • Re-routing scheme within the affected areas. • Crafting of contingency plans for emergency situation.

Risk Assessment for Bridges

Matina Bridge, Pagan Grande, Pangi Bridge, and Tamugan bridge have high risk scores. It is noted that these bridges are in areas with frequent likelihood of flood occurrence and the flood level is >1 meters. The severity of consequence estimation of these bridges is moderate, which means that there will be a of less than six hours disruption once the area upon occurrence of extreme flooding event. Pangi Bridge with an exposed length of 121.69 meters has the highest exposed length. Damage to this bridge due to flood had been reported in June 2019.

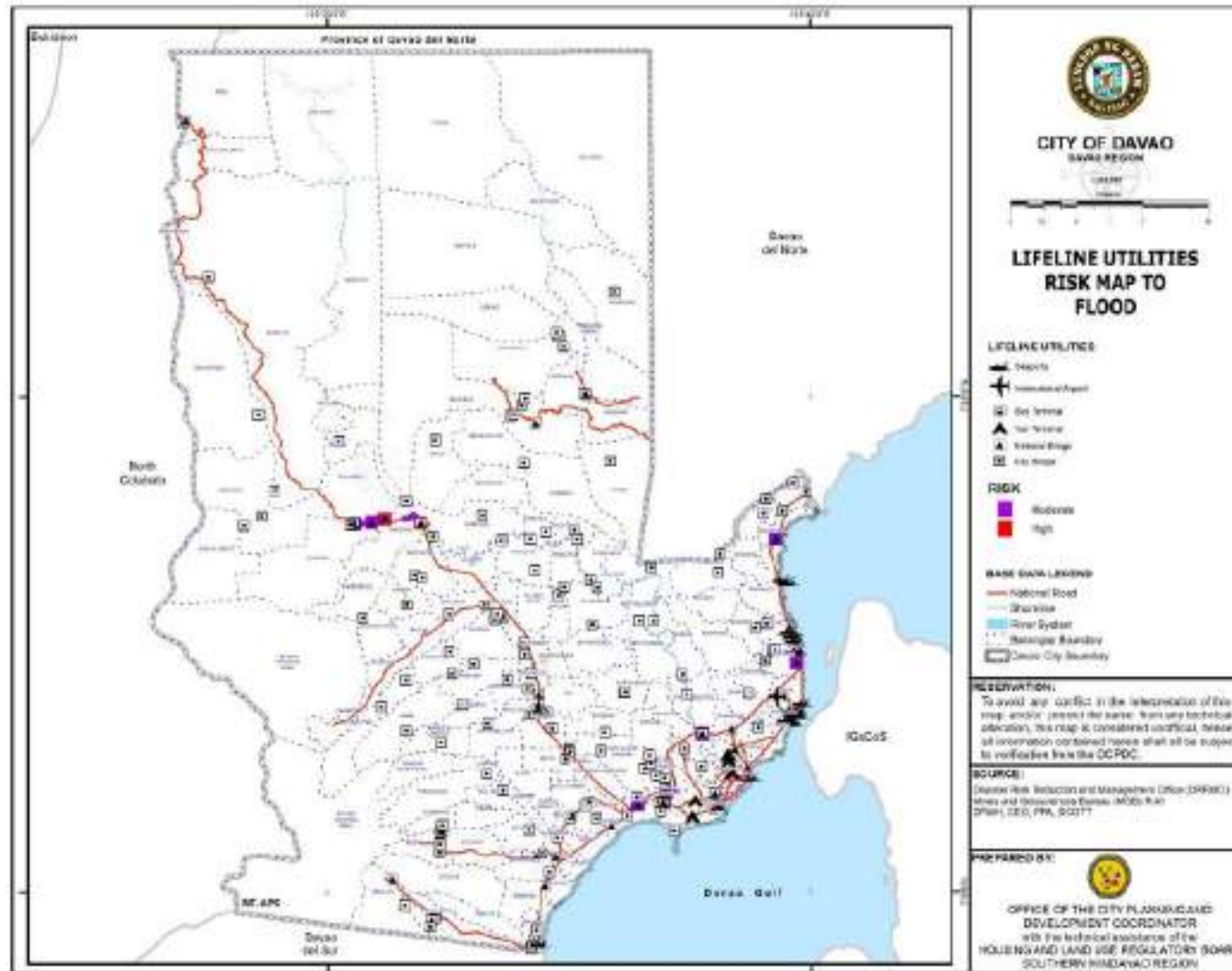
Table LU-226. Lifeline Utilities, Bridges, Disaster Risk Assessment for Flood, Davao City

BRIDGE NAME	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH (METER)	REPLACEMENT COST PER LINEAR METER	EXPOSED LENGTH (LINEAR METERS)	VALUE OF EXPOSED LIFE-LINE	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	SEVERITY OF CONSEQUENCE SCORE	RISK SCORE	RISK SCORE CATEGORY
Angalan Br. II	H	1	<1	1,200,000	11.92	14,304,000	Concrete	Good	Yes	1.0	1.0	Low
Angalan Br. III	H	1	<1	1,200,000	48.88	58,656,000	Concrete	Good	Yes	1.0	1.0	Low
Angalan Br. IV	H	1	<1	1,200,000	15.90	19,080,000	Concrete	Good	Yes	1.0	1.0	Low
Angalan Br. V	H	1	<1	1,200,000	18.00	21,600,000	Concrete	Good	Yes	1.0	1.0	Low
Angalan Br. VI	H	1	<1	1,200,000	45.00	54,000,000	Concrete	Good	Yes	1.0	1.0	Low
Bago Br.	H	1	<1	1,200,000	31.21	37,452,000	-	Good	Yes	1.0	1.0	Low
Bato Br.	H	1	<1	1,200,000	20.70	24,840,000	Concrete	Good	Yes	1.0	1.0	Low
Bolton Br. 1	H	1	<1	1,200,000	185.30	222,360,000	-	Good	Yes	1.0	1.0	Low
Bolton Br. 2	H	1	<1	1,200,000	196.88	236,256,000	-	Good	Yes	1.0	1.0	Low
Bunawan Br. 1	H	4	≥1	1,200,000	49.76	59,712,000	-	Good	Yes	2.0	8.0	Moderate
Bunawan Br. 2	H	4	≥1	1,200,000	47.79	57,348,000	-	Good	Yes	2.0	8.0	Moderate
Davao River Br.	H	4	≥1	1,200,000	141.11	169,332,000	-	Good	Yes	2.0	8.0	Moderate
Generoso Br. 1	H	1	<1	1,200,000	89.94	107,928,000	-	Good	Yes	1.0	1.0	Low
Generoso Br. 2	H	1	<1	1,200,000	87.60	105,120,000	-	Good	Yes	1.0	1.0	Low
Libby Br.	M	1	<1	1,200,000	24.69	29,628,000	-	Good	Yes	1.0	1.0	Low
Lipadas Br. I	M	1	<1	1,200,000	37.80	45,360,000	Concrete	Good	Yes	1.0	1.0	Low
Lipadas Br. II	M	1	<1	1,200,000	40.00	48,000,000	Concrete	Good	Yes	1.0	1.0	Low
Matina Br.	H	6	≥1	1,200,000	38.66	46,392,000	-	Good	Yes	2.0	12.0	High
Pagan Grande	H	6	≥1	1,200,000	45.48	54,576,000	Concrete	Good	Yes	2.0	12.0	High
Pagan Pequeño	H	5	≥1	1,200,000	89.93	107,916,000	Steel	Good	Yes	2.0	10.0	Moderate
Panacan Br.	H	4	≥1	1,200,000	23.53	28,236,000	-	Good	Yes	2.0	8.0	Moderate
Pangi Br.	H	6	≥1	1,200,000	121.69	146,028,000	-	Good	Yes	2.0	12.0	High
Piedad Br.	M	1	<1	1,200,000	47.82	57,384,000	Steel	Good	Yes	1.0	1.0	Low
Sasa Br.	H	1	<1	1,200,000	18.43	22,116,000	-	Good	Yes	1.0	1.0	Low
Suawan Br.	H	5	≥1	1,200,000	45.00	54,000,000	Concrete	Good	Yes	2.0	10.0	Moderate
Tagurano Br.	H	1	<1	1,200,000	12.46	14,952,000	Bailey	Good	Yes	1.0	1.0	Low
Talomo Br. 1	H	5	≥1	2,053,000	48.10	98,749,300	-	Good	Yes	2.0	10.0	Moderate
Talomo Br. 2	H	5	≥1	2,053,000	48.11	98,769,830	-	Good	Yes	2.0	10.0	Moderate
Tamugan Br.	H	6	≥1	1,200,000	104.96	125,952,000	Concrete	Good	Yes	2.0	12.0	High
Agdao Flyover	M	1	<1	1,200,000	382.98	459,576,000	Concrete	Good	Yes	1.0	1.0	Low
Angalan Br. I	H	1	<1	1,200,000	12.10	14,520,000	Concrete	Good	Yes	1.0	1.0	Low

Table LU-226. Lifeline Utilities, Bridges, Disaster Risk Assessment for Flood, Davao City

BRIDGE NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Bunawan Bridge I & II Davao River Bridge Panacan Bridge	<ul style="list-style-type: none"> ● This bridges are at moderate risk to flood. ● The bridge has moderate severity of consequence. ● These areas where these bridges are located have occasional to moderate likelihood of flood occurrence ● The flood level is ≥ 1 meters. ● A total of 97.55 meters of bridge length is susceptible to flood in Barangay Bunawan. ● A total of 141.11 meters of bridge length is susceptible to flood in Barangay Ma-a. ● A total of 23.53 meters bridge length is susceptible to flood in Barangay Panacan. ● The total value exposed line is ₱314,628,000.00. 	<ul style="list-style-type: none"> ● There will be disruption for road access depending on the degree of damage. ● Traffic congestion (due re-routing). ● Delayed delivery of goods and services. ● Appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> ● Re-routing scheme within the affected areas. ● Crafting of contingency plans for emergency situation.
Pagan Pequeño Suawan Bridge Talomo Bridge I & II	<ul style="list-style-type: none"> ● These bridges are at moderate risk to flood. ● Theses bridges have moderate severity of consequence, ● These bridges are in areas with moderate likelihood of occurrence (every 4-10 years). ● The flood level is ≥ 1 meters. ● A total of 134.93 meters of bridge length is susceptible to flood in Barangay Suawan. ● A total of 96.21 meters of bridge length is susceptible to flood in Barangay Talomo. ● The total value exposed line is ₱359,435,130.00 	<ul style="list-style-type: none"> ● There will be disruption for road access depending on the degree of damage. ● Traffic congestion (due re-routing). ● Delayed delivery of goods and services. ● Appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> ● Re-routing scheme within the affected areas. ● Crafting of contingency plans for emergency situation.
Matina Bridge Pagan Grande Pangi Bridge Tamugan Bridge	<ul style="list-style-type: none"> ● These bridges are at high risk to flood. ● These bridges are in areas with frequent likelihood of flood occurrence (every 1-3 years) ● Theses bridges have moderate severity of consequence ● The flood level is ≥ 1 meters. ● A total of 160.35 meters of bridge length is susceptible to flood in Barangay Matina Crossing. ● A total of 150.44 meters of bridge length is susceptible to flood in Barangay Tamugan. ● The total value exposed line is ₱372,948,000.0 	<ul style="list-style-type: none"> ● There will be disruption for road access depending on the degree of damage . ● Traffic congestion (due re-routing). ● Delayed delivery of goods and services. ● Appropriation of fund for maintenance/replacement based on the degree of damage. 	<ul style="list-style-type: none"> ● Re-routing scheme within the affected areas. ● Crafting of contingency plans for emergency situation.

Map 5.26 Lifeline Utilities, Risk Map to Flooding, Davao City



Risk Assessment for Power Substations

Calinan, Tugbok and Matina Substations are at moderate risk to flood. These substations are identified to be in areas with frequent likelihood of occurrence and low severity of consequence. Tugbok Substation has the largest occupied area of 1,809 square meters. This substation has been upgraded in the last 5 years and it has hazard resistant design for flood.

Table LU-227. Lifeline Utilities, Power Substations, Risk to Flood, Davao City

NAME OF POWER PLANT	HAZARD			EXPOSURE		SENSITIVITY/VULNERABILITY			SEVERITY OF CONSEQUENCE SCORE	RISK SCORE	RISK CATEGORY
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH (M)	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN			
Calinan Substation	High/Very High	5	≥1	1,000.00	140 Million	a) Perimeter Fence : Concrete High Wall Fence (5.5m HT) b) Control Building: Concrete Wall and Floor ; with Roofdeck c) Equipment Support : All Steel Structures	a) Operational b) Newly Upgraded	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	5	MODERATE
Tugbok Substation	High	6	≥1	1,809.00	130 Million	a) Perimeter Fence : Concrete High Wall Fence (2.5m HT); and 2" cyclone wire Fence along roadside b) Control Building: Prepainted Metal Sheet Cladding Wall and Concrete Floor ; Prepainted Roofing Sheet. c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance	1	6	MODERATE
Matina Substation	High	6	≥1	1,000.00	120 Million	a) Perimeter Fence : Concrete Fence (3.0m HT) b) Control Building: Concrete Wall and Floor ; PU Panel Roof c) Equipment Support : All Steel Structures	a) Operational b) Upgraded Within past 5 years	a) Typhoon Resistance b) Earthquake Resistance c) Fire Resistance d) Flood Resistance e) Oil Spill Resistance f) Sabotage & Terrorism	1	6	MODERATE
Pampanga Substation	Moderate	3	<1	1,031.00	118 Million	a) Perimeter Fence : Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: G.I. Sheet walls, not insulated. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	1	3	LOW

Table LU-228. Risk Assessment Analysis Matrix of Power Substations to Flood , Davao City

DECISION AREAS	TECHNICAL FINDINGS	PLANNING IMPLICATIONS	INTERVENTIONS
Brgy. Calinan (Calinan Substation)	<ul style="list-style-type: none"> ● This power substation is highly susceptible to flood . ● The area has moderate likelihood of occurrence of flood. ● The flood level is ≥ 1 meter. ● This power substation is at moderate risk to flood. ● DLPC Substations are constructed in a high elevated areas. ● All power substations are designed as resilient to hazards and properly managed by DLPC. 	<ul style="list-style-type: none"> ● Minimal to negligible implications 	<ul style="list-style-type: none"> ● Maintain/Upgrade all power utilise from time to time in order to cope with the current climate change. ● Government interventions by way of securing these facilities from man-made hazards. ● Ensure that contingency plan is ready when disaster occurs.
Brgy. Tugbok (Tugbok Substation)	<ul style="list-style-type: none"> ● This power substation is highly susceptible to flood. ● The area has frequent likelihood of flood occurrence. ● The flood level is ≥ 1 meter. ● This power substation is at moderate at risk to flood. ● DLPC Substations are constructed in a high elevated areas. ● All power substations are designed as resilient to hazards and properly managed by DLPC. 	<ul style="list-style-type: none"> ● Minimal to negligible implications 	<ul style="list-style-type: none"> ● Maintain/Upgrade all power utilise from time to time in order to cope with the current climate change. ● Government interventions by way of securing these facilities from man-made hazards. ● Ensure that contingency plan is ready when disaster occurs.
Brgy. Matina Crossing (Matina Substation)	<ul style="list-style-type: none"> ● This substation is highly susceptible to flood ● The area has frequent likelihood of flood occurrence ● The flood level is ≥ 1 meter. ● This power substation is at moderate risk to flood ● DLPC Substations are constructed in a high elevated areas. ● All power substations are designed as resilient to hazards and properly managed by DLPC. 	<ul style="list-style-type: none"> ● Minimal to negligible implications 	<ul style="list-style-type: none"> ● Maintain/Upgrade all power utilise from time to time in order to cope with the current climate change. ● Government interventions by way of securing these facilities from man-made hazards. ● Ensure that contingency plan is ready when disaster occurs.

Risk Assessment for Level I Water System

A total of 21 sources are at high risk to flood. Two sources in Bunawan, three (3) sources in Tibungco, two (2) in Panacan, two (2) sources in the Riverside, two (2) sources in Llzada, eight (8) sources in Sirawan and two (2) sources in Binugao are at risk of flood.

Table LU-229. Lifeline Utilities, Level Water System, Risk Assessment for Flood, Davao City

BARANGAY	FLOOD SUSCEPTIBILITY	DEPTH	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE	RISK SCORE	RISK CATEGORY
BUNAWAN	MF	>= 1 meter	6	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	18	HIGH
TIBUNGCO	HF	< = 1 meter	3	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	4	12	HIGH
TIBUNGCO	HF	< = 1 meter	3	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	4	12	HIGH
TIBUNGCO	HF	< = 1 meter	3	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	4	12	HIGH
PANACAN	HF	>= 1 meter	5	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
PANACAN	HF	>= 1 meter	5	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
TALOMO RIVER	MF			DEEPWELL	1,500,000.00	1,500,000.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is warranty 1 month if the waterpump is installed by the supplier	YES. For funding proposal	3	0	
ULA	MF	< = 1 meter	3	DEEPWELL	1,500,000.00	1,500,000.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is warranty 1 month if the waterpump is installed by the supplier	YES. For funding proposal	3	9	MODERATE

Table LU-229. Lifeline Utilities, Level Water System, Risk Assessment for Flood, Davao City

BARANGAY	FLOOD SUSCEPTIBILITY	DEPTH	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE	RISK SCORE	RISK CATEGORY
RIVERSIDE	MF	>= 1 meter	4	DEEPWELL	1,500,000.00	1,500,000.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	3	12	HIGH
DALIAO	MF	< = 1 meter	3	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	9	MODERATE
DALIAO	MF	< = 1 meter	3	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	9	MODERATE
DALIAO	MF	< = 1 meter	3	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	9	MODERATE
DALIAO	MF	< = 1 meter	3	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	9	MODERATE
DALIAO	MF	< = 1 meter	3	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	9	MODERATE
DALIAO	MF	< = 1 meter	3	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	9	MODERATE
DALIAO	MF	< = 1 meter	3	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	9	MODERATE
DALIAO	MF	< = 1 meter	3	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	9	MODERATE
DALIAO	MF	< = 1 meter	3	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	9	MODERATE
DALIAO	MF	< = 1 meter	3	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	9	MODERATE
LIZADA	MF	> = 1 meter	5	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	15	HIGH
LIZADA	MF	>= 1 meter	5	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	15	HIGH
LIZADA	MF	>= 1 meter	5	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	15	HIGH
LIZADA	HF	>= 1 meter	5	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	12	HIGH
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	12	HIGH
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	12	HIGH

Table LU-229. Lifeline Utilities, Level Water System, Risk Assessment for Flood, Davao City

BARANGAY	FLOOD SUSCEPTIBILITY	DEPTH	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE	RISK SCORE	RISK CATEGORY
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	12	HIGH
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	12	HIGH
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	12	HIGH
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	12	HIGH
SIRAWAN	MF	>= 1 meter	4	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	3	12	HIGH
BINUGAO	HF	< = 1 meter	3	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	4	12	HIGH
BINUGAO	HF	< = 1 meter	3	SPRING	41,586.32	41,586.32	FAIR	None	None	YES. For funding proposal	4	12	HIGH

Table LU-230, Risk Assessment Summary Matrix, Level I Water System for Flood, Davao City

	TECHNICAL FINDINGS	IMPLICATIONS	PROJECTS PROGRAMS AND LEGISLATIONS
BUNAWAN	<p>1.FLOOD SUSCEPTIBILITY: 2 units are moderately susceptible to flood 2.DEPTH:>= 1 meter 3. LIKELIHOOD OF OCCURRENCE SCORE:6 4. TYPE:SPRING 5. REPLACEMENT COST:₱41586.32 6. EXISTING CONDITION:FAIR 7. HAZARD RESISTANT DESIGN: None 8 .INSURANCE COVERAGE : None 9. AVAILABILITY OF GOVERNMENT RESOURCES : YES. For funding proposal 10. SEVERITY OF CONSEQUENCE:3 11. RISK SCORE :18 12. RISK CATEGORY :HIGH</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
TIBUNGCO	<p>1. FLOOD SUSCEPTIBILITY : 3 units are highly susceptible to flood 2. DEPTH:< = 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:3 4. TYPE:SPRING 5. REPLACEMENT COST:₱41586.32 6. EXISTING CONDITION:FAIR 7. HAZARD RESISTANT DESIGN: None 8. INSURANCE COVERAGE: None 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal 10. SEVERITY OF CONSEQUENCE: 4 11. RISK SCORE: 12 12. RISK CATEGORY :HIGH</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-230, Risk Assessment Summary Matrix, Level I Water System for Flood, Davao City

	TECHNICAL FINDINGS	IMPLICATIONS	PROJECTS PROGRAMS AND LEGISLATIONS
PANACAN	<p>1. FLOOD SUSCEPTIBILITY : 2 units are highly susceptible to flood 2.DEPTH:> = 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:5 4. TYPE:SPRING 5.REPLACEMENT COST: ₱41586.32 6. EXISTING CONDITION:FAIR 7. HAZARD RESISTANT DESIGN: None 8. INSURANCE COVERAGE : None 9. AVAILABILITY OF GOVERNMENT RESOURCES :YES. For funding proposal 10. SEVERITY OF CONSEQUENCE: 4 11. RISK SCORE: 20 12.RISK CATEGORY :HIGH</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
RIVERSIDE	<p>1. FLOOD SUSCEPTIBILITY : One unit is highly susceptible to flood 2:DEPTH: < = 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE: 3 4. TYPE: DEEP WELL 5. REPLACEMENT COST: ₱1,500,000 6.EXISTING CONDITION:FAIR 7. HAZARD RESISTANT DESIGN: Yes because of the design of the casing of the well 8.INSURANCE COVERAGE : There is no insurance coverage but there is warranty 1 month if the waterpump is installed by the supplier 9. AVAILABILITY OF GOVERNMENT RESOURCES :YES. For funding proposal 10. SEVERITY OF CONSEQUENCE:3 11. RISK SCORE :12 12. RISK CATEGORY :HIGH</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-230, Risk Assessment Summary Matrix, Level I Water System for Flood, Davao City

	TECHNICAL FINDINGS	IMPLICATIONS	PROJECTS PROGRAMS AND LEGISLATIONS
LIZADA	<p>1. FLOOD SUSCEPTIBILITY: one is highly susceptible to flood, three units are moderately susceptible to flood</p> <p>2:DEPTH: > = 1 meter</p> <p>3.LIKELIHOOD OF OCCURRENCE SCORE: 5</p> <p>4. TYPE: SPRING</p> <p>5. REPLACEMENT COST: ₱41,586.32 (A total cost of ₱332,690.56 for units with moderate flood susceptibility , for units with high flood ₱41586.32)</p> <p>6.EXISTING CONDITION:FAIR</p> <p>7. HAZARD RESISTANT DESIGN: None</p> <p>8.INSURANCE COVERAGE: None</p> <p>9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal</p> <p>10. SEVERITY OF CONSEQUENCE: 3 for those which are moderately susceptible, and 4 for those which are highly susceptible to flood.</p> <p>11. RISK SCORE: 15/20</p> <p>12. RISK CATEGORY :HIGH</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-230, Risk Assessment Summary Matrix, Level I Water System for Flood, Davao City

	TECHNICAL FINDINGS	IMPLICATIONS	PROJECTS PROGRAMS AND LEGISLATIONS
SIRAWAN	<p>1. FLOOD SUSCEPTIBILITY: eight units are moderately susceptible to flood. 2:DEPTH: >= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE: 4 4. TYPE: SPRING 5. REPLACEMENT COST: ₱41,586.32 (₱322,690 -total cost for those exposed in moderate flood) 6.EXISTING CONDITION:FAIR 7. HAZARD RESISTANT DESIGN: None 8.INSURANCE COVERAGE : None 9. AVAILABILITY OF GOVERNMENT RESOURCES :YES. For funding proposal 10. SEVERITY OF CONSEQUENCE:3 11. RISK SCORE :12 12. RISK CATEGORY :HIGH</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
BINUGAO	<p>1. FLOOD SUSCEPTIBILITY: two units are highly susceptible to flood 2:DEPTH: <= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE: 3 4. TYPE: SPRING 5. REPLACEMENT COST: ₱41,586.32 6.EXISTING CONDITION:FAIR 7. HAZARD RESISTANT DESIGN: None 8.INSURANCE COVERAGE: None 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal 10. SEVERITY OF CONSEQUENCE: 4 11. RISK SCORE: 12 12. RISK CATEGORY :HIGH</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-230, Risk Assessment Summary Matrix, Level I Water System for Flood, Davao City

	TECHNICAL FINDINGS	IMPLICATIONS	PROJECTS PROGRAMS AND LEGISLATIONS
Ula	<p>1. FLOOD SUSCEPTIBILITY: 1 well highly susceptible to flood 2:DEPTH: <= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE: 3 4. TYPE: DEEP WELL 5. REPLACEMENT COST: ₱1,500,000 6.EXISTING CONDITION:FAIR 7. HAZARD RESISTANT DESIGN: Yes because of the casing of the well 8.INSURANCE COVERAGE : None, but there is one year warranty if he pump is installed by the supplier. 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal 10. SEVERITY OF CONSEQUENCE: 3 11. RISK SCORE: 9 12. RISK CATEGORY : MODERATE</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Daliao	<p>1. FLOOD SUSCEPTIBILITY: 10 spring sources moderately susceptible to flood 2:DEPTH: <= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE: 3 4. TYPE: Spring 5. REPLACEMENT COST: ₱41586.32 6.EXISTING CONDITION:FAIR 7. HAZARD RESISTANT DESIGN: None 8.INSURANCE COVERAGE : None. 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal 10. SEVERITY OF CONSEQUENCE: 3 11. RISK SCORE :9 12. RISK CATEGORY : MODERATE</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Risk Assessment for Level II Water System

Only one spring source is at high risk to flood. This spring source is located in an area with improbable likelihood of flood occurrence and the severity of consequence is high. The flood level is more than 1 meter and the replacement cost of such spring source is 41,586.32.

Two spring sources in Binugao and one spring source in Salaysay are at moderate risk to flood. These sources are in areas with improbable for flood and each are also exposed to moderate severity of consequence.

Table LU-231 Lifeline Utilities, Level II Water System, Risk Assessment for Flood , Davao City

BARANGAY	FLOOD SUSCEPTIBILITY	DEPTH	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE	RISK SCORE	RISK CATEGORY
BINUGAO	HF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	2	6	MODERATE
SIRAWAN	HF	>= 1 meter	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
BINUGAO	MF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	2	6	MODERATE
SIRAWAN	MF	>= 1 meter	4	2HP	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	4	16	HIGH
SIRAWAN	MF	>= 1 meter	4	2HP	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	4	16	HIGH
MARAPANGI	MF	>= 1 meter	6	2HP	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	4	24	HIGH
DALIAON PLANTATION	HF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	12	HIGH
WAAN	VHF	>= 1 meter	4	18GS20	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	4	16	HIGH
WAAN	VHF	>= 1 meter	4	2HP	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	4	16	HIGH

Table LU-231 Lifeline Utilities, Level II Water System, Risk Assessment for Flood , Davao City

BARANGAY	FLOOD SUSCEPTIBILITY	DEPTH	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE	RISK SCORE	RISK CATEGORY
TIGATTO	HF	>= 1 meter	6	2HP	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	4	24	HIGH
LOS AMIGOS	MF	>= 1 meter	5	3HP	60,500.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	2	10	MODERATE
LOS AMIGOS	MF	>= 1 meter	5	2HP	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	2	10	MODERATE
LOS AMIGOS	MF	>= 1 meter	5	1HP	31,000.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	2	10	MODERATE
BAGUIO	HF	<= 1 meter	3	3HP	60,500.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	2	6	MODERATE
TALANDANG	MF	<= 1 meter	3	2HP	46,200.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	2	6	MODERATE
MALAGOS	HF	>= 1 meter	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	2	8	MODERATE
GUMALANG	MF	>= 1 meter	4	3HP	60,500.00	FAIR	Yes because of the design of the casing of the well	There is no insurance coverage but there is one (1) month warranty if the waterpump is installed by the supplier	YES. For funding proposal	2	8	MODERATE
SALAYSAY	HF	<= 1 meter	3	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	2	6	MODERATE

Table LU-232 Lifeline Utilities, Level II Water System, Risk Assessment for Flood , Davao City

DECISION AREAS	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Binugao	<p>1. FLOOD SUSCEPTIBILITY:HF 2. DEPTH:<= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:3 4.TYPE:SPRING 5.REPLACEMENT COST:41586.32 5.EXISTING CONDITION:FAIR 6.HAZARD RESISTANT DESIGN:None 7.INSURANCE COVERAGE: None 8.AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal 9.SEVERITY OF CONSEQUENCE2RISK SCORE: 6 10.RISK CATEGORY: MODERATE</p>	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<p>Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials.</p>
Binugao	<p>1.FLOOD SUSCEPTIBILITY:MF 2 .DEPTH<= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:3 4.TYPE:SPRING 5.REPLACEMENT COST: Php 41586.3 6.EXISTING CONDITION:FAIR 7.HAZARD RESISTANT DESIGN;None 8.INSURANCE COVERAGE: None 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal 10. SEVERITY OF CONSEQUENCE:2 11.RISK SCORE: 6 12. RISK CATEGORY: MODERATE</p>	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
SIRAWAN	<p>1.FLOOD SUSCEPTIBILITY:HF 2.DEPTH>= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:4 4. TYPE: SPRING 5.REPLACEMENT COST: Php 41586.32 6.EXISTING CONDITION:FAIR 7.HAZARD RESISTANT DESIGN: None 8. INSURANCE COVERAGE; None 9.AVAILABILITY OF GOVERNMENT RESOURCES: YES 10. SEVERITY OF CONSEQUENCE:4 11.RISK SCORE: 16 12. RISK CATEGORYHIGH</p>	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-232. Lifeline Utilities, Level II Water System, Risk Assessment for Flood, Davao City

DECISION AREAS	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Sirawan	1.FLOOD SUSCEPTIBILITY:MF 2.DEPTH:>= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:4 4.TYPE:2HP Well 5. REPLACEMENT COST: Php 4,6200 6.EXISTING CONDITION:FAIR 7.HAZARD RESISTANT DESIGN:Yes 8. INSURANCE COVERAGE: No 9. AVAILABILITY OF GOVERNMENT RESOURCES YES 10. SEVERITY OF CONSEQUENCE:4 11.RISK SCORE 16 12.RISK CATEGORY:HIGH	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
SIRAWAN	1.FLOOD SUSCEPTIBILITY:MF 2.DEPTH>= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:4 4.TYPE:2HP REPLACEMENT COST: Php 4,6200 5.EXISTING CONDITION:FAIR 6.HAZARD RESISTANT DESIGN:Yes 7.INSURANCE COVERAGE: NO 8. AVAILABILITY OF GOVERNMENT RESOURCES: YES. 9. SEVERITY OF CONSEQUENCE:4 10. RISK SCORE 16RISK CATEGORY:HIGH	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
MARAPANGI	1. FLOOD SUSCEPTIBILITY: MF 2.DEPTH>= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:6 4.TYPE:2HP Well 5. REPLACEMENT COST: Php 46,200 6.EXISTING CONDITION:FAIR 7.HAZARD RESISTANT DESIGN: Yes 8. INSURANCE COVERAGE: NONE AVAILABILITY OF GOVERNMENT RESOURCES YES. 10. SEVERITY OF CONSEQUENCE:4 11.RISK SCORE: 24 12.RISK CATEGORY:HIGH	9. <ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-232. Lifeline Utilities, Level II Water System, Risk Assessment for Flood, Davao City

DECISION AREAS	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
DALIAON PLAN-TATION	1. FLOOD SUSCEPTIBILITY:HF 2.DEPTH:<= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE3 4.TYPE:SPRING 5.REPLACEMENT COST: Php 41,586.32 6.EXISTING CONDITION:FAIR 7.HAZARD RESISTANT DESIGN: None 8.INSURANCE COVERAGE: None 9,.AVAILABILITY OF GOVERNMENT RESOURCES: YES 10. SEVERITY OF CONSEQUENCE:4 11.RISK SCORE: 12 12.RISK CATEGORY:HIGH	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
WAAN	1.FLOOD SUSCEPTIBILITY:VHF 2.DEPTH:>= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:4 4.TYPE:18GS20 Well 5.REPLACEMENT COST: Php 46,200 6.EXISTING CONDITION:FAIR 7. HAZARD RESISTANT DESIGN: Yes 8. INSURANCE COVERAGE: None 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. 10.SEVERITY OF CONSEQUENCE:4 11.RISK SCORE:16 12.RISK CATEGORY:HIGH	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
WAAN	1.FLOOD SUSCEPTIBILITY:VHF 2.DEPTH:>= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:4 4.TYPE; 2HP Well 5. REPLACEMENT COST: Php 46,200 6.EXISTING CONDITION:FAIR 7.HAZARD RESISTANT DESIGN: Yes 8. INSURANCE COVERAGE: None 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. 10.SEVERITY OF CONSEQUENCE:4 11.RISK SCORE: 16 12.RISK CATEGORYHIGH	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

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DECISION AREAS	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
TIGATTO	1.FLOOD SUSCEPTIBILITY:VHF 2.DEPTH:>= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:6 4.TYPE; 2HP Well 5. REPLACEMENT COST: Php 46,200 6.EXISTING CONDITION:FAIR 7.HAZARD RESISTANT DESIGN: Yes 8. INSURANCE COVERAGE: None 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. 10.SEVERITY OF CONSEQUENCE:4 11.RISK SCORE: 24 12.RISK CATEGORYHIGH	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
LOS AMIGOS	1.FLOOD SUSCEPTIBILITY: MF 2.DEPTH:>= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:5 4.TYPE: 3HP Well 5. REPLACEMENT COST: Php 60,500 6.EXISTING CONDITION:FAIR 7.HAZARD RESISTANT DESIGN: Yes 8. INSURANCE COVERAGE: None 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. 10.SEVERITY OF CONSEQUENCE:2 11.RISK SCORE: 10 12.RISK CATEGORY: MODERATE	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
LOS AMIGOS	1.FLOOD SUSCEPTIBILITY: MF 2.DEPTH:>= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:5 4.TYPE: 2HP Well 5. REPLACEMENT COST: Php 46,200 6.EXISTING CONDITION:FAIR 7.HAZARD RESISTANT DESIGN: Yes 8. INSURANCE COVERAGE: None 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. 10.SEVERITY OF CONSEQUENCE:2 11.RISK SCORE: 10 12.RISK CATEGORY: MODERATE	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-232. Lifeline Utilities, Level II Water System, Risk Assessment for Flood, Davao City

DECISION AREAS	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
LOS AMIGOS	1.FLOOD SUSCEPTIBILITY: MF 2.DEPTH:>= 1 meter 3 .LIKELIHOOD OF OCCURRENCE SCORE:5 4.TYPE: 1HP Well 5. REPLACEMENT COST: Php 31,000 6.EXISTING CONDITION:FAIR 7.HAZARD RESISTANT DESIGN: Yes 8. INSURANCE COVERAGE: None 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. 10.SEVERITY OF CONSEQUENCE:2 11.RISK SCORE: 10 12.RISK CATEGORY: MODERATE	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
BAGUIO	1.FLOOD SUSCEPTIBILITY: MF 2.DEPTH:>= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:3 4.TYPE: 3HP Well 5. REPLACEMENT COST: Php 60,500 6.EXISTING CONDITION:FAIR 7.HAZARD RESISTANT DESIGN: Yes 8. INSURANCE COVERAGE: None 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. 10.SEVERITY OF CONSEQUENCE:2 11.RISK SCORE: 6 12.RISK CATEGORY: MODERATE	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
TALANDANG	1.FLOOD SUSCEPTIBILITY: MF 2.DEPTH:>= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:3 4.TYPE: 2HP Well 5. REPLACEMENT COST: Php 46,200 6.EXISTING CONDITION:FAIR 7.HAZARD RESISTANT DESIGN: Yes 8. INSURANCE COVERAGE: None 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. 10.SEVERITY OF CONSEQUENCE:2 11.RISK SCORE: 6 12.RISK CATEGORY: MODERATE	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-232. Lifeline Utilities, Level II Water System, Risk Assessment for Flood, Davao City

DECISION AREAS	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
MALAGOS	1.FLOOD SUSCEPTIBILITY: MF 2 .DEPTH:>= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:4 4.TYPE: SPRING 5. REPLACEMENT COST: Php 41,586 6.EXISTING CONDITION:FAIR 7.HAZARD RESISTANT DESIGN: Yes 8. INSURANCE COVERAGE: None 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. 10.SEVERITY OF CONSEQUENCE:2 11.RISK SCORE: 8 12.RISK CATEGORY: MODERATE	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
GUMALANG	1.FLOOD SUSCEPTIBILITY: MF 2.DEPTH:>= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:4 4.TYPE: 3HP Well 5. REPLACEMENT COST: Php 60,500 6.EXISTING CONDITION:FAIR 7.HAZARD RESISTANT DESIGN: Yes 8. INSURANCE COVERAGE: None 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. 10.SEVERITY OF CONSEQUENCE:2 11.RISK SCORE: 8 12.RISK CATEGORY: MODERATE	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
SALAYSAY	1.FLOOD SUSCEPTIBILITY: HF 2.DEPTH:>= 1 meter 3.LIKELIHOOD OF OCCURRENCE SCORE:3 4.TYPE: SPRING 5. REPLACEMENT COST: Php 41,586 6.EXISTING CONDITION:FAIR 7.HAZARD RESISTANT DESIGN: Yes 8. INSURANCE COVERAGE: None 9. AVAILABILITY OF GOVERNMENT RESOURCES: YES. 10.SEVERITY OF CONSEQUENCE:2 11.RISK SCORE: 6 12.RISK CATEGORY: MODERATE	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Risk Assessment for Level III Water System

Out of 385 mainline pipes which are highly susceptible to flood with moderate severity of consequence rating, only 116 lines are at high risk to flood, while others are at moderate risk. These mainlines are found in 19-B, Ma-a, Mandug, Matina aplaya, Matina crossing, Matina Pang, Talomo, Tigatto and Tugbok. These areas are identified to have frequent likelihood of occurrence for flood. As to the severity of consequence all 385 mainlines have moderate severity of consequence which means that there will be disruption of service by less than six hours in case of extreme flooding occurrence.

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		RISK		
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE	RISK SCORE	RISK CATEGORY
CALINAN	VHF	5	>= 1 meter	MLCSP	30.35	30.35	100.00%	11,200	339,954.43	Good	Yes	2	10	MODERATE
CALINAN	HF	5	>= 1 meter	MLCSP	177.15	85.89	48.48%	12,500	1,073,606.74	Good	Yes	2	10	MODERATE
CALINAN	VHF	5	>= 1 meter	MLCSP	177.15	91.26	51.52%	12,500	1,140,743.07	Good	Yes	2	10	MODERATE
WANGAN	HF	4	>= 1 meter	MLCSP	26.05	20.62	79.16%	12,500	257,799.02	Good	Yes	2	8	MODERATE
CALINAN	HF	5	>= 1 meter	MLCSP	22.81	22.81	100.00%	12,500	285,146.15	Good	Yes	2	10	MODERATE
RIVERSIDE	MF	4	>= 1 meter	MLCSP	47.65	47.65	100.00%	17,700	843,361.22	Good	Yes	1	4	LOW
RIVERSIDE	VHF	4	>= 1 meter	MLCSP	22.74	22.74	100.00%	11,200	254,712.19	Good	Yes	2	8	MODERATE
CALINAN	HF	5	>= 1 meter	MLCSP	87.38	87.38	100.00%	12,500	1,092,252.20	Good	Yes	2	10	MODERATE
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	175.51	175.51	100.00%	23,600	4,141,923.89	Good	Yes	1	3	LOW
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	131.04	28.80	21.98%	11,200	322,583.05	Good	Yes	1	3	LOW
WILFREDO AQUINO	MF	3	<= 1 meter	MLCSP	49.80	22.26	44.69%	19,100	425,133.61	Good	Yes	1	3	LOW
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	17.76	17.76	100.00%	23,600	419,054.35	Good	Yes	1	3	LOW
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	63.34	63.34	100.00%	23,600	1,494,814.43	Good	Yes	1	3	LOW
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	158.17	158.17	100.00%	17,700	2,799,697.32	Good	Yes	1	4	LOW
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	669.08	604.49	90.35%	17,700	10,699,497.84	Good	Yes	1	4	LOW

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
DUMOY	MF	4	>= 1 meter	MLCSP	387.05	51.53	13.31%	23,600	1,216,017.06	Good	Yes	1	4	LOW
BAGO APLAYA	HF	5	>= 1 meter	MLCSP	196.79	106.54	54.14%	19,100	2,034,983.29	Good	Yes	2	10	MODERATE
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	196.79	90.25	45.86%	19,100	1,723,794.82	Good	Yes	1	5	MODERATE
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	229.30	229.30	100.00%	17,700	4,058,617.12	Good	Yes	1	4	LOW
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	3.93	3.93	100.00%	17,700	69,491.79	Good	Yes	1	5	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	414.12	44.64	10.78%	52,800	2,356,854.84	Good	Yes	1	6	MODERATE
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	61.88	61.88	100.00%	11,200	693,038.72	Good	Yes	2	12	HIGH
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	278.85	18.19	6.52%	48,500	882,104.31	Good	Yes	2	12	HIGH
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	278.85	126.37	45.32%	48,500	6,128,822.82	Good	Yes	1	6	MODERATE
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	146.85	146.85	100.00%	48,500	7,122,117.80	Good	Yes	2	12	HIGH
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	96.58	96.58	100.00%	11,200	1,081,646.77	Good	Yes	1	6	MODERATE
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	38.24	38.24	100.00%	11,200	428,306.93	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	154.20	154.20	100.00%	11,200	1,726,986.01	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	149.77	149.77	100.00%	11,200	1,677,406.35	Good	Yes	2	12	HIGH
TALOMO	MF	6	>= 1 meter	MLCSP	101.51	49.78	49.04%	44,200	2,200,388.79	Good	Yes	1	6	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	177.49	109.99	61.97%	48,500	5,334,540.68	Good	Yes	1	6	MODERATE
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	301.96	74.05	24.52%	11,200	829,392.67	Good	Yes	2	12	HIGH
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	301.96	7.28	2.41%	11,200	81,489.35	Good	Yes	1	6	MODERATE
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	301.96	220.22	72.93%	11,200	2,466,512.48	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	174.49	174.49	100.00%	11,200	1,954,283.52	Good	Yes	2	12	HIGH

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	109.92	106.03	96.46%	11,200	1,187,564.30	Good	Yes	2	12	HIGH
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	109.92	2.66	2.42%	11,200	29,766.71	Good	Yes	2	12	HIGH
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	265.80	112.32	42.26%	48,500	5,447,278.09	Good	Yes	2	12	HIGH
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	265.80	153.34	57.69%	48,500	7,436,856.32	Good	Yes	2	12	HIGH
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	326.59	326.59	100.00%	11,200	3,657,808.07	Good	Yes	2	12	HIGH
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	9.95	8.67	87.17%	48,500	420,653.55	Good	Yes	2	12	HIGH
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	9.95	1.00	10.05%	48,500	48,492.41	Good	Yes	2	12	HIGH
TALOMO	MF	6	>= 1 meter	MLCSP	571.17	571.17	100.00%	40,100	22,903,954.61	Good	Yes	1	6	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	95.28	46.82	49.13%	56,500	2,645,150.26	Good	Yes	1	6	MODERATE
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	90.43	90.43	100.00%	23,600	2,134,058.68	Good	Yes	1	3	LOW
BAGO GAL-LERA	MF	4	>= 1 meter	MLCSP	554.62	74.23	13.38%	17,700	1,313,927.57	Good	Yes	1	4	LOW
BAGO APLAYA	HF	5	>= 1 meter	MLCSP	407.29	223.09	54.77%	23,600	5,264,920.18	Good	Yes	2	10	MODERATE
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	407.29	99.67	24.47%	23,600	2,352,240.17	Good	Yes	1	5	MODERATE
TALOMO	HF	6	>= 1 meter	MLCSP	235.84	231.11	98.00%	44,200	10,215,265.83	Good	Yes	2	12	HIGH
TALOMO	MF	6	>= 1 meter	MLCSP	235.84	4.72	2.00%	44,200	208,671.61	Good	Yes	1	6	MODERATE
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	301.54	301.54	100.00%	48,500	14,624,619.12	Good	Yes	2	12	HIGH
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	534.66	413.54	77.35%	11,200	4,631,636.11	Good	Yes	2	12	HIGH
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	534.66	117.78	22.03%	11,200	1,319,130.05	Good	Yes	2	12	HIGH
TALOMO	HF	6	>= 1 meter	MLCSP	21.82	21.82	100.00%	44,200	964,632.34	Good	Yes	2	12	HIGH
TALOMO	HF	6	>= 1 meter	MLCSP	18.45	18.45	100.00%	48,500	894,896.75	Good	Yes	2	12	HIGH

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	95.18	95.18	100.00%	11,200	1,065,981.85	Good	Yes	2	12	HIGH
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	9.02	9.02	100.00%	23,600	212,982.05	Good	Yes	1	3	LOW
15-B	MF	3	<= 1 meter	MLCSP	339.50	28.77	8.47%	23,600	678,929.00	Good	Yes	1	3	LOW
MA-A	MF	6	>= 1 meter	MLCSP	249.82	68.62	27.47%	48,500	3,327,983.27	Good	Yes	1	6	MODERATE
MA-A	MF	6	>= 1 meter	MLCSP	13.06	13.06	100.00%	20,800	271,606.67	Good	Yes	1	6	MODERATE
MA-A	HF	6	>= 1 meter	MLCSP	385.14	194.93	50.61%	19,100	3,723,163.40	Good	Yes	2	12	HIGH
MA-A	MF	6	>= 1 meter	MLCSP	385.14	188.62	48.97%	19,100	3,602,678.47	Good	Yes	1	6	MODERATE
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	69.02	32.52	47.12%	11,200	364,269.06	Good	Yes	1	6	MODERATE
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	72.60	72.60	100.00%	48,500	3,521,279.10	Good	Yes	2	12	HIGH
TALOMO	MF	6	>= 1 meter	MLCSP	4.59	4.59	100.00%	48,500	222,529.50	Good	Yes	1	6	MODERATE
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	221.24	201.95	91.28%	48,500	9,794,419.92	Good	Yes	2	12	HIGH
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	221.24	19.29	8.72%	48,500	935,623.28	Good	Yes	1	6	MODERATE
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	20.09	18.95	94.31%	11,200	212,247.87	Good	Yes	2	12	HIGH
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	20.09	0.87	4.32%	11,200	9,719.49	Good	Yes	2	12	HIGH
TALOMO	HF	6	>= 1 meter	MLCSP	78.13	78.13	100.00%	56,500	4,414,178.58	Good	Yes	2	12	HIGH
TALOMO	HF	6	>= 1 meter	MLCSP	294.59	248.74	84.44%	52,800	13,133,705.33	Good	Yes	2	12	HIGH
TALOMO	MF	6	>= 1 meter	MLCSP	294.59	45.84	15.56%	52,800	2,420,405.09	Good	Yes	1	6	MODERATE
TALOMO	HF	6	>= 1 meter	MLCSP	79.51	79.51	100.00%	48,500	3,856,188.05	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	47.99	47.99	100.00%	11,200	537,538.17	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	14.63	14.63	100.00%	11,200	163,861.08	Good	Yes	2	12	HIGH

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	38.75	38.75	100.00%	11,200	433,955.09	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	87.81	87.81	100.00%	11,200	983,437.05	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	28.56	28.56	100.00%	11,200	319,903.47	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	34.89	34.89	100.00%	11,200	390,739.44	Good	Yes	2	12	HIGH
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	341.35	341.35	100.00%	17,700	6,041,918.36	Good	Yes	1	4	LOW
TALOMO	MF	6	>= 1 meter	MLCSP	92.43	62.21	67.30%	19,100	1,188,123.25	Good	Yes	1	6	MODERATE
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	453.44	331.11	73.02%	19,100	6,324,279.36	Good	Yes	1	5	MODERATE
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	610.30	130.39	21.36%	40,100	5,228,542.68	Good	Yes	1	5	MODERATE
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	6.83	6.83	100.00%	11,200	76,452.88	Good	Yes	1	3	LOW
2-A	HF	4	>= 1 meter	MLCSP	127.25	71.13	55.89%	19,100	1,358,531.44	Good	Yes	2	8	MODERATE
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	1,007.28	169.94	16.87%	40,100	6,814,564.07	Good	Yes	1	5	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	85.41	85.41	100.00%	17,700	1,511,758.40	Good	Yes	1	6	MODERATE
TALOMO	HF	6	>= 1 meter	MLCSP	154.59	154.59	100.00%	19,100	2,952,640.96	Good	Yes	2	12	HIGH
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	96.40	48.77	50.59%	23,600	1,150,888.59	Good	Yes	1	5	MODERATE
DUMOY	MF	4	>= 1 meter	MLCSP	269.22	269.22	100.00%	17,700	4,765,245.66	Good	Yes	1	4	LOW
TALOMO	HF	6	>= 1 meter	MLCSP	119.84	119.84	100.00%	56,500	6,771,073.36	Good	Yes	2	12	HIGH
TALOMO	HF	6	>= 1 meter	MLCSP	55.82	10.74	19.24%	56,500	606,908.26	Good	Yes	2	12	HIGH
TALOMO	MF	6	>= 1 meter	MLCSP	55.82	45.08	80.76%	56,500	2,547,112.14	Good	Yes	1	6	MODERATE
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	31.66	31.66	100.00%	11,200	354,610.44	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	91.74	91.74	100.00%	11,200	1,027,477.53	Good	Yes	2	12	HIGH

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
TALOMO	MF	6	>= 1 meter	MLCSP	8.64	8.64	100.00%	24,300	209,916.38	Good	Yes	1	6	MODERATE
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	39.25	39.25	100.00%	24,300	953,864.99	Good	Yes	1	5	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	4.63	4.63	100.00%	40,100	185,572.61	Good	Yes	1	6	MODERATE
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	41.60	41.60	100.00%	40,100	1,668,190.99	Good	Yes	1	5	MODERATE
DUMOY	MF	4	>= 1 meter	MLCSP	588.61	315.81	53.65%	23,600	7,453,051.75	Good	Yes	1	4	LOW
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	837.76	18.62	2.22%	20,800	387,342.57	Good	Yes	1	4	LOW
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	1,033.58	171.98	16.64%	24,300	4,179,001.54	Good	Yes	1	5	MODERATE
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	13.77	13.77	100.00%	44,200	608,726.32	Good	Yes	1	5	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	219.87	219.87	100.00%	44,200	9,718,130.18	Good	Yes	1	6	MODERATE
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	7.87	7.87	100.00%	44,200	347,705.99	Good	Yes	1	5	MODERATE
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	471.07	405.51	86.08%	17,700	7,177,564.11	Good	Yes	1	4	LOW
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	423.27	423.27	100.00%	24,300	10,285,515.43	Good	Yes	1	4	LOW
BAGO GALLERA	MF	4	>= 1 meter	MLCSP	207.43	207.43	100.00%	19,100	3,961,967.92	Good	Yes	1	4	LOW
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	239.57	239.57	100.00%	19,100	4,575,759.49	Good	Yes	1	3	LOW
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	53.67	53.67	100.00%	23,600	1,266,711.33	Good	Yes	1	3	LOW
UBALDE	HF	3	<= 1 meter	MLCSP	21.83	8.77	40.17%	23,600	206,884.64	Good	Yes	2	6	MODERATE
UBALDE	HF	3	<= 1 meter	MLCSP	56.80	56.80	100.00%	23,600	1,340,392.27	Good	Yes	2	6	MODERATE
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	16.87	16.87	100.00%	11,200	188,999.06	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	32.12	32.12	100.00%	11,200	359,744.40	Good	Yes	2	12	HIGH
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	11.21	11.21	100.00%	11,200	125,578.12	Good	Yes	2	12	HIGH

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY			RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE	RISK SCORE	RISK CATEGORY
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	21.56	21.56	100.00%	11,200	241,514.23	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	143.01	143.01	100.00%	11,200	1,601,695.69	Good	Yes	2	12	HIGH
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	42.88	42.88	100.00%	11,200	480,233.29	Good	Yes	2	12	HIGH
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	224.73	123.86	55.11%	11,200	1,387,193.76	Good	Yes	2	12	HIGH
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	224.73	100.87	44.89%	11,200	1,129,778.32	Good	Yes	1	6	MODERATE
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	69.27	69.27	100.00%	11,200	775,815.66	Good	Yes	1	6	MODERATE
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	40.60	40.60	100.00%	11,200	454,761.77	Good	Yes	1	6	MODERATE
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	166.62	44.36	26.62%	11,200	496,785.38	Good	Yes	1	6	MODERATE
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	73.05	73.05	100.00%	11,200	818,111.64	Good	Yes	1	6	MODERATE
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	38.45	38.45	100.00%	11,200	430,616.62	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	42.39	42.39	100.00%	11,200	474,764.83	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	43.58	43.58	100.00%	11,200	488,151.94	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	52.77	52.77	100.00%	11,200	590,990.62	Good	Yes	2	12	HIGH
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	72.06	72.06	100.00%	11,200	807,034.52	Good	Yes	1	3	LOW
SASA	MF	3	<= 1 meter	MLCSP	460.10	95.78	20.82%	12,500	1,197,307.55	Good	Yes	1	3	LOW
PAMPANGA	HF	3	<= 1 meter	MLCSP	118.53	5.00	4.22%	19,100	95,536.43	Good	Yes	2	6	MODERATE
PAMPANGA	MF	3	<= 1 meter	MLCSP	118.53	14.98	12.64%	19,100	286,066.10	Good	Yes	1	3	LOW
PAMPANGA	MF	3	<= 1 meter	MLCSP	45.71	45.71	100.00%	19,100	873,145.47	Good	Yes	1	3	LOW
PAMPANGA	MF	3	<= 1 meter	MLCSP	12.43	12.43	100.00%	17,700	220,059.13	Good	Yes	1	3	LOW
SASA	HF	3	<= 1 meter	MLCSP	75.16	75.16	100.00%	17,700	1,330,375.08	Good	Yes	2	6	MODERATE

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
PAMPANGA	HF	3	<= 1 meter	MLCSP	223.75	13.90	6.21%	17,700	246,040.60	Good	Yes	2	6	MODERATE
PAMPANGA	MF	3	<= 1 meter	MLCSP	223.75	209.85	93.79%	17,700	3,714,415.17	Good	Yes	1	3	LOW
SASA	HF	3	<= 1 meter	MLCSP	96.35	61.06	63.38%	12,500	763,277.77	Good	Yes	2	6	MODERATE
PAMPANGA	MF	3	<= 1 meter	MLCSP	23.61	23.61	100.00%	17,700	417,867.81	Good	Yes	1	3	LOW
PAMPANGA	MF	3	<= 1 meter	MLCSP	23.06	23.06	100.00%	17,700	408,076.97	Good	Yes	1	3	LOW
PAMPANGA	MF	3	<= 1 meter	MLCSP	336.36	336.36	100.00%	19,100	6,424,543.28	Good	Yes	1	3	LOW
SASA	MF	3	<= 1 meter	MLCSP	507.32	87.14	17.18%	17,700	1,542,450.63	Good	Yes	1	3	LOW
MA-A	HF	6	>= 1 meter	MLCSP	485.34	348.23	71.75%	20,800	7,243,095.80	Good	Yes	2	12	HIGH
MA-A	MF	6	>= 1 meter	MLCSP	485.34	137.11	28.25%	20,800	2,851,902.57	Good	Yes	1	6	MODERATE
MA-A	HF	6	>= 1 meter	MLCSP	195.26	194.54	99.63%	52,800	10,271,615.79	Good	Yes	2	12	HIGH
MA-A	HF	6	>= 1 meter	MLCSP	26.39	10.29	39.01%	52,800	543,552.17	Good	Yes	2	12	HIGH
MA-A	MF	6	>= 1 meter	MLCSP	26.39	12.31	46.64%	52,800	649,948.37	Good	Yes	1	6	MODERATE
CABANTIAN	HF	3	<= 1 meter	MLCSP	115.82	5.59	4.83%	23,600	132,013.54	Good	Yes	2	6	MODERATE
CABANTIAN	HF	3	<= 1 meter	MLCSP	55.93	5.20	9.29%	20,800	108,112.63	Good	Yes	2	6	MODERATE
BAGO GAL-LERA	MF	4	>= 1 meter	MLCSP	502.30	489.24	97.40%	20,800	10,176,090.46	Good	Yes	1	4	LOW
BAGO GAL-LERA	MF	4	>= 1 meter	MLCSP	1,206.78	663.83	55.01%	20,800	13,807,712.83	Good	Yes	1	4	LOW
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	282.05	104.91	37.19%	20,800	2,182,079.41	Good	Yes	1	5	MODERATE
BAGO GAL-LERA	MF	4	>= 1 meter	MLCSP	1,304.14	505.33	38.75%	20,800	10,510,909.32	Good	Yes	1	4	LOW
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	555.53	280.59	50.51%	20,800	5,836,210.47	Good	Yes	1	5	MODERATE
BAGO GAL-LERA	MF	4	>= 1 meter	MLCSP	703.04	186.97	26.59%	20,800	3,889,005.93	Good	Yes	1	4	LOW

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	282.09	104.92	37.19%	20,800	2,182,435.01	Good	Yes	1	5	MODERATE
19-B	VHF	6	>= 1 meter	MLCSP	260.30	181.38	69.68%	40,100	7,273,386.27	Good	Yes	2	12	HIGH
19-B	VHF	6	>= 1 meter	MLCSP	245.54	229.36	93.41%	40,100	9,197,391.05	Good	Yes	2	12	HIGH
19-B	VHF	6	>= 1 meter	MLCSP	202.41	191.74	94.72%	40,100	7,688,611.26	Good	Yes	2	12	HIGH
WILFREDO AQUINO	MF	3	<= 1 meter	MLCSP	190.87	190.87	100.00%	19,100	3,645,677.98	Good	Yes	1	3	LOW
PACIANO BANGOY	MF	3	<= 1 meter	MLCSP	25.58	25.58	100.00%	11,200	286,538.24	Good	Yes	1	3	LOW
PACIANO BANGOY	MF	3	<= 1 meter	MLCSP	82.20	38.83	47.24%	11,200	434,887.20	Good	Yes	1	3	LOW
PACIANO BANGOY	MF	3	<= 1 meter	MLCSP	171.17	171.17	100.00%	11,200	1,917,049.11	Good	Yes	1	3	LOW
WILFREDO AQUINO	MF	3	<= 1 meter	MLCSP	3.66	3.66	100.00%	19,100	69,828.95	Good	Yes	1	3	LOW
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	111.52	111.52	100.00%	19,100	2,130,060.54	Good	Yes	1	3	LOW
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	37.85	37.85	100.00%	11,200	423,879.17	Good	Yes	2	12	HIGH
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	20.10	20.10	100.00%	12,500	251,279.71	Good	Yes	1	3	LOW
2-A	HF	4	>= 1 meter	MLCSP	7.32	7.32	100.00%	17,700	129,588.49	Good	Yes	2	8	MODERATE
WILFREDO AQUINO	MF	3	<= 1 meter	MLCSP	15.86	15.86	100.00%	11,200	177,609.43	Good	Yes	1	3	LOW
PACIANO BANGOY	MF	3	<= 1 meter	MLCSP	5.45	5.45	100.00%	11,200	61,000.44	Good	Yes	1	3	LOW
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	421.48	421.48	100.00%	23,600	9,947,033.00	Good	Yes	1	3	LOW
MA-A	HF	6	>= 1 meter	MLCSP	163.35	37.27	22.82%	48,500	1,807,495.21	Good	Yes	2	12	HIGH
MA-A	MF	6	>= 1 meter	MLCSP	163.35	126.08	77.18%	48,500	6,114,738.65	Good	Yes	1	6	MODERATE
MA-A	HF	6	>= 1 meter	MLCSP	16.15	16.15	100.00%	48,500	783,164.31	Good	Yes	2	12	HIGH
2-A	VHF	4	>= 1 meter	MLCSP	103.21	100.64	97.51%	48,500	4,881,152.37	Good	Yes	2	8	MODERATE

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
BUCANA	HF	4	>= 1 meter	MLCSP	307.67	145.29	47.22%	48,500	7,046,671.07	Good	Yes	2	8	MODERATE
BUCANA	VHF	4	>= 1 meter	MLCSP	307.67	162.06	52.67%	48,500	7,860,024.19	Good	Yes	2	8	MODERATE
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	208.98	208.98	100.00%	11,200	2,340,545.48	Good	Yes	2	12	HIGH
BAGO GAL-LERA	HF	4	>= 1 meter	MLCSP	23.71	23.71	100.00%	20,800	493,220.95	Good	Yes	2	8	MODERATE
BAGO APLAYA	HF	5	>= 1 meter	MLCSP	545.52	206.38	37.83%	20,800	4,292,659.76	Good	Yes	2	10	MODERATE
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	545.52	339.14	62.17%	20,800	7,054,117.92	Good	Yes	1	5	MODERATE
BAGO GAL-LERA	MF	4	>= 1 meter	MLCSP	4.41	4.41	100.00%	19,100	84,321.31	Good	Yes	1	4	LOW
BAGO APLAYA	MF	5	>= 1 meter	MLCSP	8.71	8.71	100.00%	19,100	166,445.55	Good	Yes	1	5	MODERATE
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	294.00	48.42	16.47%	11,200	542,262.94	Good	Yes	2	12	HIGH
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	294.00	244.32	83.10%	11,200	2,736,355.39	Good	Yes	2	12	HIGH
CABANTIAN	HF	3	< = 1 meter	MLCSP	24.78	6.12	24.70%	20,800	127,307.73	Good	Yes	2	6	MODERATE
A. ANGLI-ONGTO	HF	3	< = 1 meter	MLCSP	456.48	13.91	3.05%	20,800	289,354.82	Good	Yes	2	6	MODERATE
A. ANGLI-ONGTO	HF	3	< = 1 meter	MLCSP	96.58	7.64	7.91%	20,800	158,946.15	Good	Yes	2	6	MODERATE
MA-A	MF	6	>= 1 meter	MLCSP	224.84	46.31	20.60%	20,800	963,336.96	Good	Yes	1	6	MODERATE
MA-A	MF	6	>= 1 meter	MLCSP	40.19	40.19	100.00%	23,600	948,374.19	Good	Yes	1	6	MODERATE
MA-A	MF	6	>= 1 meter	MLCSP	35.26	35.26	100.00%	24,300	856,782.33	Good	Yes	1	6	MODERATE
MA-A	MF	6	>= 1 meter	MLCSP	22.76	22.76	100.00%	33,200	755,489.19	Good	Yes	1	6	MODERATE
MA-A	MF	6	>= 1 meter	MLCSP	319.83	105.56	33.01%	40,100	4,232,900.15	Good	Yes	1	6	MODERATE
SASA	HF	3	< = 1 meter	MLCSP	317.51	212.79	67.02%	17,700	3,766,457.38	Good	Yes	2	6	MODERATE
SASA	HF	3	< = 1 meter	MLCSP	317.51	61.19	19.27%	17,700	1,082,991.95	Good	Yes	2	6	MODERATE

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
MA-A	HF	6	>= 1 meter	MLCSP	1,572.53	124.31	7.90%	52,800	6,563,342.88	Good	Yes	2	12	HIGH
MATINA PANGI	HF	6	>= 1 meter	MLCSP	1,741.74	163.78	9.40%	52,800	8,647,760.47	Good	Yes	2	12	HIGH
MATINA PANGI	MF	6	>= 1 meter	MLCSP	1,741.74	644.38	37.00%	52,800	34,023,354.13	Good	Yes	1	6	MODERATE
MATINA PANGI	MF	6	>= 1 meter	MLCSP	1,741.74	65.99	3.79%	52,800	3,484,287.76	Good	Yes	1	6	MODERATE
MATINA PANGI	HF	6	>= 1 meter	MLCSP	168.64	158.75	94.14%	52,800	8,381,934.80	Good	Yes	2	12	HIGH
MATINA PANGI	MF	6	>= 1 meter	MLCSP	168.64	9.89	5.86%	52,800	522,181.24	Good	Yes	1	6	MODERATE
MATINA PANGI	HF	6	>= 1 meter	MLCSP	459.75	186.78	40.63%	52,800	9,861,865.53	Good	Yes	2	12	HIGH
MATINA PANGI	MF	6	>= 1 meter	MLCSP	459.75	72.40	15.75%	52,800	3,822,872.60	Good	Yes	1	6	MODERATE
SASA	MF	3	<= 1 meter	MLCSP	196.05	107.31	54.74%	19,100	2,049,600.75	Good	Yes	1	3	LOW
TALOMO	HF	6	>= 1 meter	MLCSP	5.47	5.47	100.00%	24,300	132,904.86	Good	Yes	2	12	HIGH
TALOMO	HF	6	>= 1 meter	MLCSP	88.89	88.89	100.00%	24,300	2,160,046.41	Good	Yes	2	12	HIGH
TALOMO	HF	6	>= 1 meter	MLCSP	2.35	2.35	100.00%	24,300	57,077.72	Good	Yes	2	12	HIGH
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	625.57	524.62	83.86%	20,800	10,912,108.86	Good	Yes	2	12	HIGH
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	625.57	99.60	15.92%	20,800	2,071,647.35	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	98.18	98.18	100.00%	20,800	2,042,215.47	Good	Yes	2	12	HIGH
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	665.27	665.27	100.00%	19,100	12,706,576.48	Good	Yes	2	12	HIGH
TIGATTO	HF	6	>= 1 meter	MLCSP	831.97	64.00	7.69%	23,600	1,510,483.69	Good	Yes	2	12	HIGH
TIGATTO	VHF	6	>= 1 meter	MLCSP	831.97	458.47	55.11%	23,600	10,819,788.44	Good	Yes	2	12	HIGH
BAGO APLAYA	HF	5	>= 1 meter	MLCSP	28.02	28.02	100.00%	17,700	495,998.17	Good	Yes	2	10	MODERATE
BAGO GAL-LERA	MF	4	>= 1 meter	MLCSP	11.23	11.23	100.00%	17,700	198,832.14	Good	Yes	1	4	LOW

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
PAMPANGA	MF	3	<= 1 meter	MLCSP	3.45	3.45	100.00%	19,100	65,948.62	Good	Yes	1	3	LOW
LUBOGAN	HF	4	>= 1 meter	MLCSP	426.38	168.90	39.61%	17,700	2,989,489.76	Good	Yes	2	8	MODERATE
LUBOGAN	HF	4	>= 1 meter	MLCSP	47.96	47.96	100.00%	17,700	848,958.43	Good	Yes	2	8	MODERATE
LUBOGAN	HF	4	>= 1 meter	MLCSP	12.19	12.19	100.00%	17,700	215,693.75	Good	Yes	2	8	MODERATE
LUBOGAN	HF	4	>= 1 meter	MLCSP	137.93	137.93	100.00%	17,700	2,441,444.09	Good	Yes	2	8	MODERATE
LUBOGAN	HF	4	>= 1 meter	MLCSP	282.38	282.38	100.00%	17,700	4,998,077.73	Good	Yes	2	8	MODERATE
SASA	MF	3	<= 1 meter	MLCSP	31.74	28.84	90.85%	17,700	510,430.02	Good	Yes	1	3	LOW
SASA	MF	3	<= 1 meter	MLCSP	24.48	24.48	100.00%	17,700	433,259.68	Good	Yes	1	3	LOW
SASA	MF	3	<= 1 meter	MLCSP	96.01	96.01	100.00%	17,700	1,699,332.84	Good	Yes	1	3	LOW
PANACAN	MF	5	>= 1 meter	MLCSP	907.37	3.35	0.37%	17,700	59,246.14	Good	Yes	1	5	MODERATE
SASA	MF	3	<= 1 meter	MLCSP	1.65	1.65	100.00%	17,700	29,120.39	Good	Yes	1	3	LOW
PANACAN	MF	5	>= 1 meter	MLCSP	505.50	33.39	6.60%	17,700	590,916.81	Good	Yes	1	5	MODERATE
PANACAN	VHF	5	>= 1 meter	MLCSP	505.50	85.39	16.89%	17,700	1,511,413.01	Good	Yes	2	10	MODERATE
PANACAN	MF	5	>= 1 meter	MLCSP	505.50	95.73	18.94%	17,700	1,694,338.97	Good	Yes	1	5	MODERATE
PANACAN	HF	5	>= 1 meter	MLCSP	505.50	75.91	15.02%	17,700	1,343,694.52	Good	Yes	2	10	MODERATE
PANACAN	HF	5	>= 1 meter	MLCSP	505.50	59.91	11.85%	17,700	1,060,447.61	Good	Yes	2	10	MODERATE
LUBOGAN	HF	4	>= 1 meter	MLCSP	561.09	179.66	32.02%	17,700	3,180,019.64	Good	Yes	2	8	MODERATE
TUGBOK	MF	6	>= 1 meter	MLCSP	433.44	184.44	42.55%	33,200	6,123,513.42	Good	Yes	1	6	MODERATE
TUGBOK	HF	6	>= 1 meter	MLCSP	286.54	79.53	27.76%	17,700	1,407,668.34	Good	Yes	2	12	HIGH
TUGBOK	MF	6	>= 1 meter	MLCSP	286.54	207.01	72.24%	17,700	3,664,051.20	Good	Yes	1	6	MODERATE

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
MINTAL	HF	5	>= 1 meter	MLCSP	88.59	88.59	100.00%	20,800	1,842,749.98	Good	Yes	2	10	MODERATE
MINTAL	HF	5	>= 1 meter	MLCSP	206.93	24.58	11.88%	20,800	511,194.16	Good	Yes	2	10	MODERATE
MINTAL	VHF	5	>= 1 meter	MLCSP	206.93	22.63	10.94%	20,800	470,717.04	Good	Yes	2	10	MODERATE
MINTAL	HF	5	>= 1 meter	MLCSP	206.93	159.72	77.19%	20,800	3,322,197.39	Good	Yes	2	10	MODERATE
CATALUNAN GRANDE	HF	3	<= 1 meter	MLCSP	885.89	41.16	4.65%	20,800	856,087.73	Good	Yes	2	6	MODERATE
CATALUNAN GRANDE	MF	3	<= 1 meter	MLCSP	885.89	272.28	30.74%	20,800	5,663,500.28	Good	Yes	1	3	LOW
CATALUNAN GRANDE	VHF	3	<= 1 meter	MLCSP	885.89	100.91	11.39%	20,800	2,098,930.41	Good	Yes	2	6	MODERATE
CATALUNAN GRANDE	MF	3	<= 1 meter	MLCSP	1,109.93	88.11	7.94%	20,800	1,832,682.41	Good	Yes	1	3	LOW
TUGBOK	HF	6	>= 1 meter	MLCSP	156.72	156.72	100.00%	33,200	5,203,127.42	Good	Yes	2	12	HIGH
TUGBOK	HF	6	>= 1 meter	MLCSP	866.82	505.59	58.33%	33,200	16,785,479.32	Good	Yes	2	12	HIGH
TUGBOK	VHF	6	>= 1 meter	MLCSP	866.82	308.15	35.55%	33,200	10,230,710.59	Good	Yes	2	12	HIGH
TUGBOK	HF	6	>= 1 meter	MLCSP	866.82	52.67	6.08%	33,200	1,748,513.20	Good	Yes	2	12	HIGH
MINTAL	HF	5	>= 1 meter	MLCSP	545.75	545.75	100.00%	33,200	18,118,752.26	Good	Yes	2	10	MODERATE
MINTAL	HF	5	>= 1 meter	MLCSP	10.49	10.49	100.00%	33,200	348,357.30	Good	Yes	2	10	MODERATE
STO. NIÑO	MF	4	>= 1 meter	MLCSP	483.18	163.39	33.82%	20,800	3,398,553.28	Good	Yes	1	4	LOW
STO. NIÑO	HF	4	>= 1 meter	MLCSP	483.18	279.44	57.83%	20,800	5,812,349.43	Good	Yes	2	8	MODERATE
MINTAL	MF	5	>= 1 meter	MLCSP	631.75	91.03	14.41%	20,800	1,893,510.62	Good	Yes	1	5	MODERATE
MINTAL	HF	5	>= 1 meter	MLCSP	631.75	540.72	85.59%	20,800	11,246,887.38	Good	Yes	2	10	MODERATE
MINTAL	HF	5	>= 1 meter	MLCSP	11.85	11.85	100.00%	33,200	393,442.70	Good	Yes	2	10	MODERATE
TUGBOK	HF	6	>= 1 meter	MLCSP	256.82	256.82	100.00%	33,200	8,526,574.85	Good	Yes	2	12	HIGH

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
CATALUNAN GRANDE	MF	3	< = 1 meter	MLCSP	222.21	20.49	9.22%	20,800	426,121.55	Good	Yes	1	3	LOW
TUGBOK	HF	6	>= 1 meter	MLCSP	79.26	79.26	100.00%	17,700	1,402,971.03	Good	Yes	2	12	HIGH
TUGBOK	HF	6	>= 1 meter	MLCSP	20.77	20.77	100.00%	17,700	367,714.98	Good	Yes	2	12	HIGH
TUGBOK	HF	6	>= 1 meter	MLCSP	304.69	304.69	100.00%	33,200	10,115,780.21	Good	Yes	2	12	HIGH
TUGBOK	HF	6	>= 1 meter	MLCSP	291.67	77.19	26.47%	33,200	2,562,798.95	Good	Yes	2	12	HIGH
TUGBOK	MF	6	>= 1 meter	MLCSP	291.67	214.48	73.53%	33,200	7,120,694.94	Good	Yes	1	6	MODERATE
TUGBOK	VHF	6	>= 1 meter	MLCSP	36.45	36.45	100.00%	11,200	408,196.63	Good	Yes	2	12	HIGH
MINTAL	VHF	5	>= 1 meter	MLCSP	667.99	101.31	15.17%	12,500	1,266,313.19	Good	Yes	2	10	MODERATE
MINTAL	HF	5	>= 1 meter	MLCSP	667.99	310.22	46.44%	12,500	3,877,728.55	Good	Yes	2	10	MODERATE
MINTAL	HF	5	>= 1 meter	MLCSP	192.23	192.23	100.00%	12,500	2,402,869.93	Good	Yes	2	10	MODERATE
MINTAL	HF	5	>= 1 meter	MLCSP	332.13	332.13	100.00%	12,500	4,151,646.00	Good	Yes	2	10	MODERATE
TUGBOK	MF	6	>= 1 meter	MLCSP	5.07	5.07	100.00%	11,200	56,766.60	Good	Yes	1	6	MODERATE
TUGBOK	MF	6	>= 1 meter	MLCSP	5.62	5.62	100.00%	17,700	99,561.31	Good	Yes	1	6	MODERATE
TIGATTO	VHF	6	>= 1 meter	MLCSP	1,076.29	733.65	68.16%	23,600	17,314,053.37	Good	Yes	2	12	HIGH
PANACAN	HF	5	>= 1 meter	MLCSP	1,093.70	44.03	4.03%	17,700	779,381.95	Good	Yes	2	10	MODERATE
SASA	HF	3	< = 1 meter	MLCSP	79.92	79.92	100.00%	19,100	1,526,436.01	Good	Yes	2	6	MODERATE
PAMPANGA	MF	3	< = 1 meter	MLCSP	18.37	18.37	100.00%	19,100	350,812.53	Good	Yes	1	3	LOW
SASA	HF	3	< = 1 meter	MLCSP	169.79	73.23	43.13%	19,100	1,398,724.05	Good	Yes	2	6	MODERATE
SASA	HF	3	< = 1 meter	MLCSP	169.79	96.55	56.87%	19,100	1,844,190.05	Good	Yes	2	6	MODERATE
PAMPANGA	HF	3	< = 1 meter	MLCSP	276.83	65.98	23.83%	19,100	1,260,178.77	Good	Yes	2	6	MODERATE

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LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
PAMPANGA	MF	3	<= 1 meter	MLCSP	276.83	210.86	76.17%	19,100	4,027,355.00	Good	Yes	1	3	LOW
TALOMO	MF	6	>= 1 meter	MLCSP	254.75	159.31	62.54%	24,300	3,871,332.57	Good	Yes	1	6	MODERATE
BAGO GAL-LERA	MF	4	>= 1 meter	MLCSP	226.66	226.66	100.00%	24,300	5,507,858.76	Good	Yes	1	4	LOW
BAGO APLA-YA	MF	5	>= 1 meter	MLCSP	222.14	186.83	84.10%	24,300	4,539,970.42	Good	Yes	1	5	MODERATE
BAGO APLA-YA	MF	5	>= 1 meter	MLCSP	62.16	62.16	100.00%	24,300	1,510,400.83	Good	Yes	1	5	MODERATE
LOS AMIGOS	HF	5	>= 1 meter	MLCSP	1,475.26	51.37	3.48%	20,800	1,068,510.91	Good	Yes	2	10	MODERATE
LOS AMIGOS	MF	5	>= 1 meter	MLCSP	1,475.26	1,244.28	84.34%	20,800	25,881,005.15	Good	Yes	1	5	MODERATE
RIVERSIDE	HF	4	>= 1 meter	MLCSP	1,675.88	839.64	50.10%	20,800	17,464,409.89	Good	Yes	2	8	MODERATE
RIVERSIDE	MF	4	>= 1 meter	MLCSP	1,675.88	836.24	49.90%	20,800	17,393,831.22	Good	Yes	1	4	LOW
ULA	MF	3	<= 1 meter	MLCSP	598.81	214.10	35.75%	17,700	3,789,522.40	Good	Yes	1	3	LOW
TACUNAN	HF	3	<= 1 meter	MLCSP	714.88	148.72	20.80%	17,700	2,632,342.13	Good	Yes	2	6	MODERATE
TACUNAN	MF	3	<= 1 meter	MLCSP	714.88	324.24	45.35%	17,700	5,738,970.63	Good	Yes	1	3	LOW
MATINA PANGI	HF	6	>= 1 meter	MLCSP	455.49	223.69	49.11%	17,700	3,959,348.95	Good	Yes	2	12	HIGH
MATINA PANGI	MF	6	>= 1 meter	MLCSP	455.49	231.79	50.89%	17,700	4,102,767.12	Good	Yes	1	6	MODERATE
CATALUNAN GRANDE	MF	3	<= 1 meter	MLCSP	3,233.03	315.15	9.75%	17,700	5,578,236.62	Good	Yes	1	3	LOW
MINTAL	HF	5	>= 1 meter	MLCSP	34.60	34.60	100.00%	33,200	1,148,758.95	Good	Yes	2	10	MODERATE
MINTAL	HF	5	>= 1 meter	MLCSP	11.83	11.83	100.00%	33,200	392,602.03	Good	Yes	2	10	MODERATE
PANACAN	HF	5	>= 1 meter	MLCSP	371.63	67.51	18.16%	19,100	1,289,349.67	Good	Yes	2	10	MODERATE
PANACAN	HF	5	>= 1 meter	MLCSP	670.83	279.20	41.62%	19,100	5,332,748.00	Good	Yes	2	10	MODERATE
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	18.07	18.07	100.00%	11,200	202,382.31	Good	Yes	2	12	HIGH

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LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	24.03	24.03	100.00%	11,200	269,095.96	Good	Yes	2	12	HIGH
TIGATTO	VHF	6	>= 1 meter	MLCSP	979.68	280.80	28.66%	23,600	6,626,846.64	Good	Yes	2	12	HIGH
TIGATTO	VHF	6	>= 1 meter	MLCSP	933.96	25.15	2.69%	23,600	593,437.36	Good	Yes	2	12	HIGH
TIGATTO	VHF	6	>= 1 meter	MLCSP	569.71	52.58	9.23%	23,600	1,240,867.61	Good	Yes	2	12	HIGH
MANDUG	VHF	6	>= 1 meter	MLCSP	403.25	90.74	22.50%	23,600	2,141,406.19	Good	Yes	2	12	HIGH
MANDUG	VHF	6	>= 1 meter	MLCSP	403.25	309.63	76.78%	23,600	7,307,197.82	Good	Yes	2	12	HIGH
MANDUG	VHF	6	>= 1 meter	MLCSP	1,005.97	92.98	9.24%	23,600	2,194,379.96	Good	Yes	2	12	HIGH
BAGO APLA-YA	HF	5	>= 1 meter	MLCSP	215.20	45.16	20.99%	23,600	1,065,798.62	Good	Yes	2	10	MODERATE
BAGO APLA-YA	MF	5	>= 1 meter	MLCSP	215.20	76.34	35.47%	23,600	1,801,688.04	Good	Yes	1	5	MODERATE
BAGO APLA-YA	HF	5	>= 1 meter	MLCSP	458.49	163.75	35.71%	23,600	3,864,400.08	Good	Yes	2	10	MODERATE
BAGO APLA-YA	MF	5	>= 1 meter	MLCSP	458.49	79.14	17.26%	23,600	1,867,760.13	Good	Yes	1	5	MODERATE
BAGO APLA-YA	HF	5	>= 1 meter	MLCSP	39.30	39.30	100.00%	17,700	695,588.26	Good	Yes	2	10	MODERATE
BAGO APLA-YA	HF	5	>= 1 meter	MLCSP	223.51	64.71	28.95%	40,100	2,594,857.85	Good	Yes	2	10	MODERATE
BAGO APLA-YA	MF	5	>= 1 meter	MLCSP	223.51	75.18	33.63%	40,100	3,014,642.26	Good	Yes	1	5	MODERATE
BAGO APLA-YA	HF	5	>= 1 meter	MLCSP	463.42	158.54	34.21%	40,100	6,357,490.38	Good	Yes	2	10	MODERATE
BAGO APLA-YA	MF	5	>= 1 meter	MLCSP	463.42	76.23	16.45%	40,100	3,056,768.22	Good	Yes	1	5	MODERATE
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	922.60	576.96	62.54%	17,700	10,212,176.05	Good	Yes	2	12	HIGH
MATINA APLAYA	MF	6	>= 1 meter	MLCSP	1,041.85	875.00	83.99%	17,700	15,487,428.48	Good	Yes	1	6	MODERATE
MATINA APLAYA	VHF	6	>= 1 meter	MLCSP	1,041.85	45.78	4.39%	17,700	810,386.24	Good	Yes	2	12	HIGH
COMMUNAL	HF	4	>= 1 meter	MLCSP	60.14	4.28	7.12%	20,800	89,079.81	Good	Yes	2	8	MODERATE

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
COMMUNAL	HF	4	>= 1 meter	MLCSP	152.96	13.89	9.08%	20,800	288,966.05	Good	Yes	2	8	MODERATE
TUGBOK	HF	6	>= 1 meter	MLCSP	786.72	786.72	100.00%	33,200	26,119,095.17	Good	Yes	2	12	HIGH
MINTAL	HF	5	>= 1 meter	MLCSP	103.31	103.31	100.00%	33,200	3,429,775.79	Good	Yes	2	10	MODERATE
TUGBOK	HF	6	>= 1 meter	MLCSP	68.54	68.54	100.00%	33,200	2,275,654.23	Good	Yes	2	12	HIGH
ILANG	HF	3	<= 1 meter	MLCSP	1,814.79	32.40	1.79%	23,600	764,634.75	Good	Yes	2	6	MODERATE
ILANG	VHF	3	<= 1 meter	MLCSP	1,814.79	19.49	1.07%	23,600	459,886.66	Good	Yes	2	6	MODERATE
TIBUNGCO	HF	3	<= 1 meter	MLCSP	559.79	25.62	4.58%	23,600	604,638.28	Good	Yes	2	6	MODERATE
CATALUNAN GRANDE	MF	3	<= 1 meter	MLCSP	7.05	6.88	97.59%	20,800	143,111.50	Good	Yes	1	3	LOW
CATALUNAN GRANDE	MF	3	<= 1 meter	MLCSP	46.53	46.53	100.00%	20,800	967,901.25	Good	Yes	1	3	LOW
CATALUNAN GRANDE	MF	3	<= 1 meter	MLCSP	47.91	47.91	100.00%	20,800	996,577.17	Good	Yes	1	3	LOW
CATALUNAN GRANDE	MF	3	<= 1 meter	MLCSP	103.67	103.67	100.00%	20,800	2,156,362.46	Good	Yes	1	3	LOW
MATINA CROSSING	MF	6	>= 1 meter	MLCSP	390.95	14.61	3.74%	17,700	258,639.62	Good	Yes	1	6	MODERATE
TUGBOK	HF	6	>= 1 meter	MLCSP	177.45	177.45	100.00%	17,700	3,140,926.42	Good	Yes	2	12	HIGH
TUGBOK	HF	6	>= 1 meter	MLCSP	721.72	630.04	87.30%	17,700	11,151,705.86	Good	Yes	2	12	HIGH
TUGBOK	MF	6	>= 1 meter	MLCSP	721.72	91.68	12.70%	17,700	1,622,817.75	Good	Yes	1	6	MODERATE
CALINAN	VHF	5	>= 1 meter	MLCSP	64.47	47.96	74.39%	12,500	599,502.55	Good	Yes	2	10	MODERATE
CALINAN	HF	5	>= 1 meter	MLCSP	64.47	16.51	25.61%	12,500	206,343.98	Good	Yes	2	10	MODERATE
CALINAN	VHF	5	>= 1 meter	MLCSP	248.50	79.38	31.95%	12,500	992,298.79	Good	Yes	2	10	MODERATE
CALINAN	HF	5	>= 1 meter	MLCSP	248.50	169.11	68.05%	12,500	2,113,890.18	Good	Yes	2	10	MODERATE
TIGATTO	HF	6	>= 1 meter	MLCSP	2,289.22	368.62	16.10%	23,600	8,699,321.27	Good	Yes	2	12	HIGH

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
TIGATTO	VHF	6	>= 1 meter	MLCSP	2,289.22	478.61	20.91%	23,600	11,295,116.96	Good	Yes	2	12	HIGH
MINTAL	MF	5	>= 1 meter	MLCSP	855.48	414.87	48.50%	17,700	7,343,195.66	Good	Yes	1	5	MODERATE
MINTAL	HF	5	>= 1 meter	MLCSP	855.48	440.61	51.50%	17,700	7,798,877.67	Good	Yes	2	10	MODERATE
MINTAL	HF	5	>= 1 meter	MLCSP	772.18	100.79	13.05%	17,700	1,784,009.69	Good	Yes	2	10	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	6.06	6.06	100.00%	24,300	147,334.92	Good	Yes	1	6	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	428.56	277.64	64.79%	48,500	13,465,694.50	Good	Yes	1	6	MODERATE
TALOMO	HF	6	>= 1 meter	MLCSP	114.61	111.56	97.35%	48,500	5,410,901.81	Good	Yes	2	12	HIGH
TALOMO	MF	6	>= 1 meter	MLCSP	114.61	3.04	2.65%	48,500	147,497.48	Good	Yes	1	6	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	39.38	39.38	100.00%	20,800	819,088.14	Good	Yes	1	6	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	569.71	569.71	100.00%	20,800	11,850,023.60	Good	Yes	1	6	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	16.21	16.21	100.00%	17,700	287,004.35	Good	Yes	1	6	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	5.75	5.75	100.00%	20,800	119,647.21	Good	Yes	1	6	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	437.34	437.34	100.00%	20,800	9,096,746.13	Good	Yes	1	6	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	328.00	328.00	100.00%	17,700	5,805,524.72	Good	Yes	1	6	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	0.61	0.61	100.00%	17,700	10,821.60	Good	Yes	1	6	MODERATE
PANACAN	HF	5	>= 1 meter	MLCSP	666.86	24.42	3.66%	19,100	466,326.79	Good	Yes	2	10	MODERATE
MA-A	VHF	6	>= 1 meter	MLCSP	552.91	120.09	21.72%	52,800	6,340,703.79	Good	Yes	2	12	HIGH
TIGATTO	HF	6	>= 1 meter	MLCSP	427.36	83.03	19.43%	52,800	4,383,792.77	Good	Yes	2	12	HIGH
TIGATTO	VHF	6	>= 1 meter	MLCSP	427.36	97.57	22.83%	52,800	5,151,941.35	Good	Yes	2	12	HIGH
MA-A	VHF	6	>= 1 meter	MLCSP	87.21	87.21	100.00%	52,800	4,604,804.58	Good	Yes	2	12	HIGH

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN		RISK SCORE	RISK CATEGORY
TALOMO	MF	6	>= 1 meter	MLCSP	353.39	353.39	100.00%	44,200	15,619,726.82	Good	Yes	1	6	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	316.94	224.70	70.90%	44,200	9,931,537.61	Good	Yes	1	6	MODERATE
TALOMO	MF	6	>= 1 meter	MLCSP	1,258.03	280.51	22.30%	20,800	5,834,606.33	Good	Yes	1	6	MODERATE
PACIANO BANGOY	MF	3	<= 1 meter	MLCSP	71.18	71.18	100.00%	11,200	797,268.43	Good	Yes	1	3	LOW
PACIANO BANGOY	MF	3	<= 1 meter	MLCSP	2.02	2.02	100.00%	11,200	22,571.60	Good	Yes	1	3	LOW
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	24.87	24.87	100.00%	23,600	586,835.02	Good	Yes	1	3	LOW
AGDAO PROPER	MF	3	<= 1 meter	MLCSP	5.86	5.86	100.00%	23,600	138,379.33	Good	Yes	1	3	LOW
MATINA APLAYA	MF	6	>= 1 meter	MLCSP	341.23	341.23	100.00%	17,700	6,039,772.22	Good	Yes	1	6	MODERATE
MATINA APLAYA	MF	6	>= 1 meter	MLCSP	266.89	44.03	16.50%	17,700	779,318.34	Good	Yes	1	6	MODERATE
LOS AMIGOS	VHF	5	>= 1 meter	MLCSP	8.80	8.80	100.00%	17,700	155,795.50	Good	Yes	2	10	MODERATE
LOS AMIGOS	VHF	5	>= 1 meter	MLCSP	2.67	2.67	100.00%	17,700	47,241.74	Good	Yes	2	10	MODERATE
LOS AMIGOS	VHF	5	>= 1 meter	MLCSP	2.22	2.22	100.00%	17,700	39,310.16	Good	Yes	2	10	MODERATE
LOS AMIGOS	HF	5	>= 1 meter	MLCSP	815.72	260.44	31.93%	17,700	4,609,772.90	Good	Yes	2	10	MODERATE
LOS AMIGOS	MF	5	>= 1 meter	MLCSP	815.72	2.08	0.25%	17,700	36,790.58	Good	Yes	1	5	MODERATE
LOS AMIGOS	VHF	5	>= 1 meter	MLCSP	815.72	553.20	67.82%	17,700	9,791,610.28	Good	Yes	2	10	MODERATE
LOS AMIGOS	MF	5	>= 1 meter	MLCSP	359.81	359.81	100.00%	17,700	6,368,712.51	Good	Yes	1	5	MODERATE
LOS AMIGOS	MF	5	>= 1 meter	MLCSP	16.73	16.73	100.00%	17,700	296,074.96	Good	Yes	1	5	MODERATE
WILFREDO AQUINO	MF	3	<= 1 meter	MLCSP	49.80	0.37	0.73%	19,100	6,983.75	Good	Yes	1	3	LOW
MATINA CROSSING	HF	6	>= 1 meter	MLCSP	301.96	0.41	0.14%	11,200	4,612.83	Good	Yes	2	12	HIGH
MATINA CROSSING	VHF	6	>= 1 meter	MLCSP	301.96	0.41	0.14%	11,200	4,612.83	Good	Yes	2	12	HIGH

Table LU-233. Lifeline Utilities, Level III Water System, Risk Assessment for Flood, Davao City

LOCATION	HAZARD			EXPOSURE						VULNERABILITY		RISK		
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	FLOOD DEPTH	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE	RISK SCORE	RISK CATEGORY
2-A	VHF	4	>= 1 meter	MLCSP	103.21	0.06	0.06%	48,500	3,073.25	Good	Yes	2	8	MODERATE
TACUNAN	HF	3	<= 1 meter	MLCSP	714.88	1.87	0.26%	17,700	33,145.93	Good	Yes	2	6	MODERATE
TACUNAN	MF	3	<= 1 meter	MLCSP	714.88	1.87	0.26%	17,700	33,145.93	Good	Yes	1	3	LOW
PANACAN	HF	5	>= 1 meter	MLCSP	670.83	1.22	0.18%	19,100	23,271.84	Good	Yes	2	10	MODERATE
MANDUG	VHF	6	>= 1 meter	MLCSP	403.25	2.89	0.72%	23,600	68,126.58	Good	Yes	2	12	HIGH
MANDUG	VHF	6	>= 1 meter	MLCSP	403.25	2.89	0.72%	23,600	68,126.58	Good	Yes	2	12	HIGH
COMMUNAL	HF	4	>= 1 meter	MLCSP	60.14	26.77	44.52%	20,800	556,909.62	Good	Yes	2	8	MODERATE
COMMUNAL	HF	4	>= 1 meter	MLCSP	60.14	26.77	44.52%	20,800	556,909.62	Good	Yes	2	8	MODERATE
COMMUNAL	HF	4	>= 1 meter	MLCSP	152.96	33.32	21.78%	20,800	693,001.54	Good	Yes	2	8	MODERATE
COMMUNAL	HF	4	>= 1 meter	MLCSP	152.96	33.32	21.78%	20,800	693,001.54	Good	Yes	2	8	MODERATE

Disaster Risk Assessment for DCWD Wells

A total of 12 wells located in Talomo, Bago-Aplaya, Tugbok and Los Amigos are at moderate risk to flood. Interventions for this are retrofitting of structures to prevent damage due to flood.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
19-B	<ul style="list-style-type: none"> ● There are three pipelines which are highly susceptible to flood ● The area has frequent likelihood of flood occurrence ● The flood level is ≥ 1 m. ● A total of 602.47 meters of pipes are highly susceptible to flood ● The total value of exposed line is ₱24,159,388.58 ● The area is at high risk to flood 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water Works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
Ma-a	<ul style="list-style-type: none"> ● There are nine pipelines which are highly susceptible to flood ● There are 11 lines which are moderately susceptible ● The area has frequent likelihood of occurrence of flood. ● The flood level is ≥ 1 m. ● A total of 113 meters of pipes are highly susceptible to flood. A total of 8595.86 meters are moderately susceptible to flood ● The total value of lines highly susceptible is ₱41,880,937.93. The total value of lines moderately susceptible to flood ₱24,575,740.8. ● The pipes in these area have low severity of consequence. ● The area is at high and moderate risk to flood 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Mandug	<ul style="list-style-type: none"> • There are five water lines which are highly susceptible to flood • The landslide in the area is frequent likelihood of occurrence of flood. • The flood level is ≥ 1 m. • The exposed length is 499 meters • The total impact value is ₱11,779,237.14 • The area is at high risk to flood 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. • The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
Matina Aplaya	<ul style="list-style-type: none"> • There are 24 water lines which are exposed to high flood. • There are 3 lines which are to moderately susceptible • There likelihood of flood occurrence in this area is frequent • The flood level is ≥ 1 m. • The total length highly susceptible to flood is 2,714.47 meters. The total length moderately susceptible to flood is 1,260.25 meters • The total impact value for pipes highly susceptible to flood is ₱40,659,365. The total impact value for pipes moderately susceptible to flood is ₱25 22,306,519.04 • The area is at high and moderate risk to flood. 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. • The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Matina Crossing	<ul style="list-style-type: none"> • There are 33 water lines which are highly susceptible to flood. • There are 11 water lines which are moderately susceptible to flood • The area has frequent likelihood of flood occurrence. • The flood level is ≥ 1 m. • A total of 3,793.03 meters is highly susceptible to flood. A total of 624.79 meters is moderately susceptible to flood. • The total impact value of pipes highly susceptible to flood is ₱86,388,798.71. The total impact value for pipes moderately susceptible to flood is ₱12,525,743.69 • There area has low of severity of consequence • The area is at high and moderate risk to flood. 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. • Strict implementation of material specification standards and construction (National Building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. • The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
Matina Pangri	<ul style="list-style-type: none"> • There are 4 water lines which are highly susceptible to flood. • There are 5 lines which are moderately susceptible to flood • This has frequent likelihood of flood occurrence • The flood level is ≥ 1 m. • The total 733 meters is highly susceptible to flood. A total of 1,024.45 meters is moderately susceptible to flood. • The total impact value for pipes highly susceptible to flood is ₱30,850,909.74. The total impact value for pipes moderately susceptible to flood is ₱45,955,462.86 • The pipes have low of severity of consequence. • The area is at high and moderate risk to flood. 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. • The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Talomo	<ul style="list-style-type: none"> ● There are 13 water lines which are highly susceptible to flood ● There are 28 water lines moderately susceptible to flood ● The area has frequent likelihood of flood occurrence ● The flood level is ≤ 1 m. ● A total of 1,171 meters is highly susceptible to flood. A total of 4,005 meters is moderately susceptible to flood. ● The total impact value for portions of pipes highly susceptible to flood is P51,570,420.27. The total impact value for portions of pipes moderately susceptible to flood is ₱130,559,694.3 ● There is low severity of consequence in the event of flood. ● The area is at high and moderate risk to flood . 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
Tigatto	<ul style="list-style-type: none"> ● 10 main water lines are highly susceptible to flood. ● There is frequent likelihood of flood occurrence in the area ● The flood level is ≥ 1 m ● The total exposed length is 2,642.46 meters. ● The total impact value is ₱67,635,649.47 ● There is low severity of consequence in the event of flood. ● The area is at high risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Tugbok	<ul style="list-style-type: none"> ● 15 main water lines are highly susceptible to flood ● 6 main water lines are moderately susceptible to flood ● There is frequent likelihood of flood occurrence in the area ● The flood level is ≥ 1 m. ● A total of 3,540.60 meters is highly susceptible to flood. The total 708.30 meters is moderately susceptible to flood. ● The total impact value of main water lines highly susceptible to flood is ₱101,446,917.2. The total impact value of main water lines moderately susceptible to flood ₱687,045.32. ● There is low severity of consequence in the event of flood. ● The area is at high risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
Barangay 2-A	<ul style="list-style-type: none"> ● There are 2 water lines which are exposed to high flood. ● There is occasional likelihood of occurrence of flood in the area. ● The flood level is ≤ 1 m. ● The total exposed length is 179.15 m. ● The total impact value is ₱6,372,345.56 ● There is low severity of consequence in the event of flood. ● The area is at moderate risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Angliongto	<ul style="list-style-type: none"> • There are 2 water lines highly susceptible to flood. • There is improbable likelihood of occurrence of flood in the area. • The flood level is ≤ 1 m. • The total exposed length is 21.55 meters • The total impact value is ₱448,300.97 • There is low severity of consequence in the event of flood. • The area is at moderate risk to flood. 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. • The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
BAGO-APLAYA	<ul style="list-style-type: none"> • There are 9 main water lines highly susceptible to flood; 23 main water lines are moderately susceptible to flood • There is moderate likelihood of occurrence of flood in the area. • The flood level is ≥ 1 m. • The total exposed length is 3,578.16 meters. • The total impact value is ₱91,356.18 • There is low severity of consequence in the event of flood. • The area is at moderate risk to flood. 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. • The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
BAGO GALLERA	<ul style="list-style-type: none"> • There is 1 main water line highly susceptible to flood. • There is occasional likelihood of flood occurrence in the area • The flood level is ≤ 1 m. • The total exposed length is 23.71 meters. • The total impact value is ₱493,420 • There is low severity of consequence in the event of flood. • The area is at moderate risk to flood. 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. • The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
BUCANA	<ul style="list-style-type: none"> • There are two water lines highly susceptible to flood • There is occasional likelihood of flood occurrence in the area • The flood level is ≥ 1 m. • The total exposed length is 307.35 meters • The total impact value is ₱14,906,695 • There is low severity of consequence in the event of flood. • The area is at moderate risk to flood. 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. • The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
CABANTIAN	<ul style="list-style-type: none"> ● There are three main water lines highly susceptible to flood. ● There is improbable likelihood of flood occurrence in the area. ● The flood level is <=1 m. ● The total exposed length is 16.71 meters. ● The total impact value is ₱367,433.81. ● There is low severity of consequence in the event of flood. ● The area is at moderate risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
CALINAN	<ul style="list-style-type: none"> ● There are 9 main water lines highly susceptible to flood ● There is moderate likelihood of occurrence of flood in the area. ● The flood level is <=1 m. ● The total exposed length is 630.65 meters. ● The total impact value is ₱P 7,843,738.2. ● There is low severity of consequence in the event of flood. ● The area is at moderate risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
CATALUNAN GRANDE	<ul style="list-style-type: none"> ● There are 2 main water lines which highly susceptible to flood. ● There is improbable likelihood of flood occurrence. ● The flood level is <=1 m. ● The total exposed length is 432 meters ● The total impact value is ₱2,955,018 ● There is low severity of consequence in the event of flood. ● The area is at moderate risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
COMMUNAL	<ul style="list-style-type: none"> ● There are 6 main water lines which are highly susceptible to flood ● There is occasional likelihood of flood occurrence ● The flood level is <=1 m. ● The total exposed length is 138.35 meters. ● The total impact value is ₱2,877,868.19. ● There is low severity of consequence in the event of flood. ● The area is at moderate risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
ILANG	<ul style="list-style-type: none"> ● There are 2 main water lines which are highly susceptible to flood. ● There is improbable likelihood of flood occurrence in the area. ● The flood level is ≥ 1 m. ● The total exposed length is 51.88 meters. ● The total impact value is ₱ 1,224,521.41. ● There is low severity of consequence in the event of flood. ● The area is at moderate risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
LOS AMIGOS	<ul style="list-style-type: none"> ● There are 10 main water lines which are highly susceptible to flood. ● There is moderate likelihood of flood occurrence in the area. ● The flood level is ≥ 1 m. ● The total exposed length is 2,501.59 meters. ● The total impact value is ₱48,294,824.69. ● There is low severity of consequence in the event of flood. ● The area is at moderate risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
LUBOGAN	<ul style="list-style-type: none"> ● There are 6 main water lines which are highly susceptible to flood. ● There is occasional likelihood of flood occurrence in the area. ● The flood level is <=1 m. ● The total exposed length is 829.01 meters. ● The total impact value is ₱14,673,683.4. ● There is low severity of consequence in the event of flood. ● The area is at moderate risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
MINTAL	<ul style="list-style-type: none"> ● There are 19 main water lines which highly susceptible to flood ● There is frequent likelihood of flood occurrence in the area. ● The flood level is >=1 m. ● The total of 829.01 meters is highly susceptible to flood; a total of 3,537.25 meters is moderately susceptible to flood. ● The total impact value is ₱ 14,673,683.4 for lines highly susceptible. A total of impact value for main water lines moderately susceptible to flood is ₱71, 543,586.31. ● There is low severity of consequence in the event of flood. ● The area is at moderate risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
PAMPANGA	<ul style="list-style-type: none"> • There are 3 main water lines which are highly susceptible to flood • There is improbable likelihood of flood occurrence in the area. • The flood level is <=1 m. • The exposed length susceptible to flood is 84.88 meters. • The total impact value for pipes susceptible to flood is ₱1,601,675.80. • There is low severity of consequence in the event of flood. • The area is at moderate risk to flood. 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. • The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
PANACAN	<ul style="list-style-type: none"> • There are 11 main water lines which are highly susceptible to flood. • There is moderate likelihood of flood occurrence in the area. • The flood level is >=1 m. • The exposed length for pipes susceptible is 770.04 meters. • The total impact value is ₱14,151,135.32 • There is low severity of consequence in the event of flood. • The area is at moderate risk to flood. 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. • The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Riverside	<ul style="list-style-type: none"> • There are 2 main water lines which are highly susceptible to flood. • There is occasional likelihood of flood occurrence. • The flood level is <=1 m. • The exposed length susceptible to flood is 862.37 meters • The total impact value is ₱ 17,719,122.08 • There is low severity of consequence in the event of flood. • The area is at moderate risk to flood. 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. • The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
Sasa	<ul style="list-style-type: none"> • There are 7 main water lines which are highly susceptible to flood. • There is improbable likelihood of flood occurrence in the area. • The flood level is <=1 m. • The exposed length is 659.90 meters • The total impact value is ₱ 11,712,452.3 • There is low severity of consequence in the event of flood. • The area is at moderate risk to flood. 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. • There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. • The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Sto.Nino	<ul style="list-style-type: none"> ● There is 1 main water line which is highly susceptible to flood ● The area has occasional likelihood of flood occurrence. ● The flood level is <=1 m. ● The exposed length is 279.44 meters. ● The total impact value is ₱5,812,749.43. ● There is low severity of consequence in the event of flood. ● The area is at moderate risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
Tacunan	<ul style="list-style-type: none"> ● There are 2 main water lines which are highly susceptible to flood. ● The area has improbable likelihood of flood occurrence in the area. ● The flood level is <=1 m. ● The exposed length is 150.59 meters. ● The total impact value is ₱ 2,665,488.06 ● There is low severity of consequence in the event of flood. ● The area is at moderate risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Material ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Tibungco	<ul style="list-style-type: none"> ● There is 1 main water line highly susceptible to flood. ● The area has is improbable likelihood of flood occurrence ● The flood level is ≥ 1 m. ● The exposed length is 25.62 meters. ● The total impact value is ₱ 604,638 ● There is low severity of consequence in the event of flood. ● The area is at moderate risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Material ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
Wangan	<ul style="list-style-type: none"> ● There is 1 main water line highly susceptible to flood. ● The area has occasional likelihood of flood occurrence. ● The flood level is ≥ 1 m. ● The exposed length is 20.62 meters. ● The total impact value is ₱250,799. ● There is low severity of consequence in the event of flood. ● The area is at moderate risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-234. Risk Assessment Summary Matrix of Level III Water System for Flood, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Ubalde	<ul style="list-style-type: none"> There are 2 main water lines highly susceptible to flood The area has improbable likelihood of flood occurrence The flood level is <=1 m. The exposed length is 65.56 meters The total impact value is ₱ 1,547,276.90. There is low severity of consequence in the event of flood. The area is at moderate risk to flood. 	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards

Risk Assessment for DCWD Wells

All DCWD wells have moderate risk rating, this is attributed to the low severity of consequence.

Table LU-235. Lifeline Utilities, DCWD Wells for Flood, Davao City

LOCATION	FLOOD	DEPTH	LIKELIHOOD OF OCCURRENCE SCORE	REPLACEMENT COST COS	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE	RISK SCORE	RATING
Km. 7, Talomo Sump Bangkal, Brgy. Talomo	HF	>= 1 meter	6	6,500,000.00	6,500,000.00	GOOD	YES	NO		1	6	MODERATE
UUHSA, Brgy. Talomo	MF	>= 1 meter	6	6,500,000.00	6,500,000.00	GOOD	YES	NO		1	6	MODERATE
Km. 8 Ulas, Brgy. Talomo	MF	>= 1 meter	6	6,500,000.00	6,500,000.00	GOOD	YES	NO		1	6	MODERATE
Puan Junction, Brgy. Talomo	MF	>= 1 meter	6	6,500,000.00	6,500,000.00	GOOD	YES	NO		1	6	MODERATE

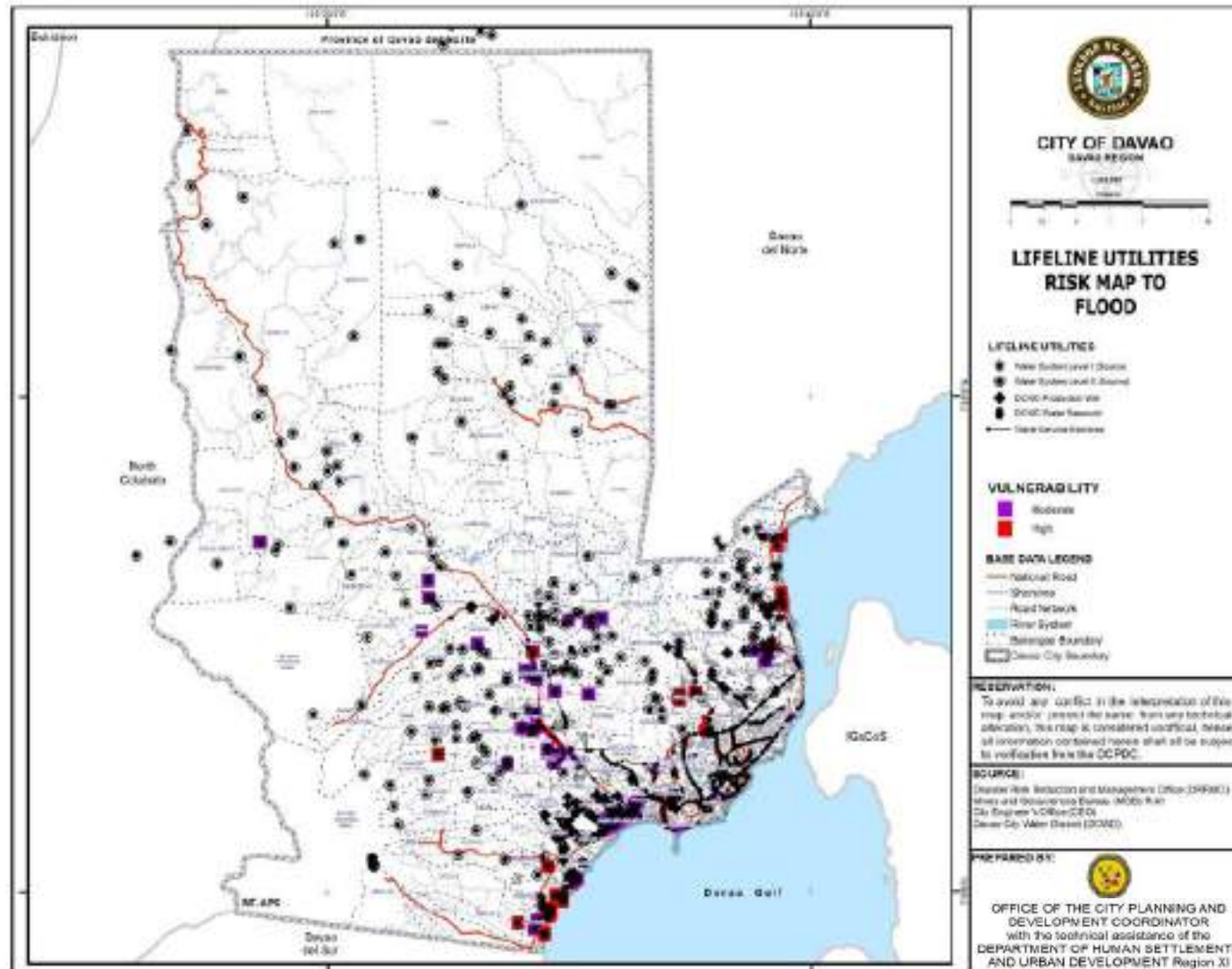
Table LU-235. Lifeline Utilities, DCWD Wells for Flood, Davao City

LOCATION	FLOOD	DEPTH	LIKELIHOOD OF OCCURRENCE SCORE	REPLACEMENT COST COS	VALUE OF EXISTING LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE	RISK SCORE	RATING
Davao-Cotabato Road, near Bago Bridge, Brgy. Bago Aplaya	HF	>= 1 meter	5	6,500,000.00	6,500,000.00	GOOD	YES	NO		1	5	MODERATE
Catotal Subdivision near Block 22, Brgy. Bago Aplaya	HF	>= 1 meter	5	6,500,000.00	6,500,000.00	GOOD	YES	NO		1	5	MODERATE
Gallera de Oro Subdivision near Block 8, Brgy. Bago Aplaya	MF	>= 1 meter	5	6,500,000.00	6,500,000.00	GOOD	YES	NO		1	5	MODERATE
Along Apo Golf Road, Brgy. Bago Aplaya	MF	>= 1 meter	5	6,500,000.00	6,500,000.00	GOOD	YES	NO		1	5	MODERATE
Sitio Mahayahay, Brgy. Tugbok	MF	>= 1 meter	6	6,500,000.00	6,500,000.00	GOOD	YES	NO		1	6	MODERATE
Sitio Mahayahay, Brgy. Tugbok	MF	>= 1 meter	6	6,500,000.00	6,500,000.00	GOOD	YES	NO		1	6	MODERATE
Tugbok Quarry, Along Davao Bukidnon Road, Brgy. Tugbok	HF	>= 1 meter	6	6,500,000.00	6,500,000.00	GOOD	YES	NO		1	6	MODERATE
Los Amigos	VHF	>= 1 meter	5	6,500,000.00	6,500,000.00	GOOD	YES	NO		1	5	MODERATE

Table LU-236. Risk Assessment Summary Matrix of DCWD Wells for Flood , Davao City

LOCATION	TECHNICAL FINDINGS	PLANNING IMPLICATIONS	POLICY INTERVENTIONS
Barangay Talomo	Four wells are at moderate risk to flood	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. Strict implementation of material specification standards and construction
Bago Aplaya	Four wells are at moderate risk to flood	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. Strict implementation of material specification standards and construction
Tugbok	Three wells are at moderate risk to flood	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. Strict implementation of material specification standards and construction
Los Amigos	One well is at moderate risk to flood	<ul style="list-style-type: none"> There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. Strict implementation of material specification standards and construction

Map 5.27 Lifeline Utilities, Risk Map to Flooding, Davao City



Risk Assessment for Cell sites

All of the 26 cell sites are in moderate risk. There are located in areas with improbable to frequent likelihood of occurrence. The severity of consequence however, is low.

Table LU-237, Lifeline Utilities Risk to Flood, Cell Sites, Davao City

NAME OF CELL SITE	HAZARD			EXPOSURE (FLOOD -VERY HIGH)			SENSITIVITY/VULNERABILITY			SEVERITY OF CONSEQUENCE SCORE	RISK SCORE	RISK CATEGORY
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	EXPECTED FLOOD DEPTH (M)	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN			
GLOBE TELECOM, INC.	Very High	6	≥1	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	Very High	6	≥1	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
SMART COMMUNICATIONS, INC.	Very High	6	≥1	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	Very High	6	≥1	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
SMART COMMUNICATIONS, INC.	Very High	6	≥1	Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
SMART COMMUNICATIONS, INC.	Very High	6	≥1	Centerpoint Mall, Brgy. Matina Crossing,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	Very High	3	<1	Peralta Property, Seminary Rd., Brgy Catalunan Grande Talomo District,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	4	Low
SMART COMMUNICATIONS, INC.	Very High	6	≥1	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	High	6	≥1	Mc Arthur Hiway, Brgy. 74-A, Matina Crossing	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	High	3	<1	Magno Prop., No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	4	Low

Table LU-237, Lifeline Utilities Risk to Flood, Cell Sites, Davao City

NAME OF CELL SITE	HAZARD			EXPOSURE (FLOOD -VERY HIGH)			SENSITIVITY/VULNERABILITY			SEVERITY OF CONSEQUENCE SCORE	RISK SCORE	RISK CATEGORY
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	EXPECTED FLOOD DEPTH (M)	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN			
SMART COMMUNICATIONS, INC.	High	3	<1	No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	4	Low
SMART COMMUNICATIONS, INC.	High	4	≥1	#88 Maya St., Brgy. 76A, Ecoland, Brgy. Bucana	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	5.33	Moderate
SMART COMMUNICATIONS, INC.	Moderate	6	≥1	National Highway, Times Beach, Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
SMART COMMUNICATIONS, INC.	Moderate	5	≥1	Crossing Puan, McArthur Highway, Brgy. Bago Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	6.67	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	5	≥1	Brgy. Bago Aplaya, Talomo District	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	6.67	Moderate
SMART COMMUNICATIONS, INC.	Moderate	6	≥1	PLDT Village, Bo. Talomo, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
SMART COMMUNICATIONS, INC.	Moderate	6	≥1	PLDT Village, Bo. Talomo, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
SMART COMMUNICATIONS, INC.	Moderate	6	≥1	Ortis Road, Ulas, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	6	≥1	Ortis Road, Ulas, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	4	≥1	Upper Rapnaga, Brgy. Bago Galleria Talumo Dist.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	5.33	Moderate
SMART COMMUNICATIONS, INC.	Moderate	4	≥1	Purok 16, Sitio Durian, Brgy. Bago Galleria	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	5.33	Moderate
SMART COMMUNICATIONS, INC.	Moderate	4	≥1	Upper Rapnaga, Brgy. Bago Galleria Talumo Dist.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	5.33	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	4	≥1	Brgy. Bago Galleria, Talomo District,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	5.33	Moderate

Table LU-237. Lifeline Utilities Risk to Flood, Cell Sites, Davao City

NAME OF CELL SITE	HAZARD			EXPOSURE (FLOOD -VERY HIGH)			SENSITIVITY/VULNERABILITY			SEVERITY OF CONSEQUENCE SCORE	RISK SCORE	RISK CATEGORY
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	EXPECTED FLOOD DEPTH (M)	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN			
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	4	≥1	Sandawa, McArthur Hi-Way, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	5.33	Moderate
SMART COMMUNICATIONS, INC.	Moderate	4	≥1	Sandawa, McArthur Hi-Way, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	5.33	Moderate
GLOBE TELECOM, INC.	Moderate	3	<1	Km 12.5, Talomo Dist, Brgy. Catalunan Pequeno, Davao City, Davao del Sur	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	4	Low

Table LU-238. Disaster Risk Assessment Summary Matrix for Lifeline Utilities, Flood, Davao City

DECISION AREAS	TECHNICAL FINDINGS	PLANNING IMPLICATIONS	INTERVENTIONS
Brgy. Matina Aplaya	<ul style="list-style-type: none"> 5 cell sites are highly susceptible to flood and one cell site is moderately susceptible to flood The areas has frequent likelihood of flood occurrence. The flood level is ≥1 meter. 6 cell sites are at moderate risk to flood Cell sites are constructed in a high elevated areas. 	<ul style="list-style-type: none"> There will be possible drop down of communication signal. Mitigation measures are expensive. 	<ul style="list-style-type: none"> Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. Government interventions by way of securing these facilities from man-made hazards. Ensure structural mitigation to prevent landslide. Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.
Brgy. Matina Crossing	<ul style="list-style-type: none"> Two cell sites are highly susceptible to flood. The area has frequent likelihood of occurrence of flood. The flood level is ≥1 meter. 2 cell sites are at moderate risk to flood Cell sites are constructed in a high elevated areas. 	<ul style="list-style-type: none"> There will be possible drop down of communication signal. Mitigation measures are expensive. 	<ul style="list-style-type: none"> Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. Government interventions by way of securing these facilities from man-made hazards. Ensure structural mitigation to prevent landslide. Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.

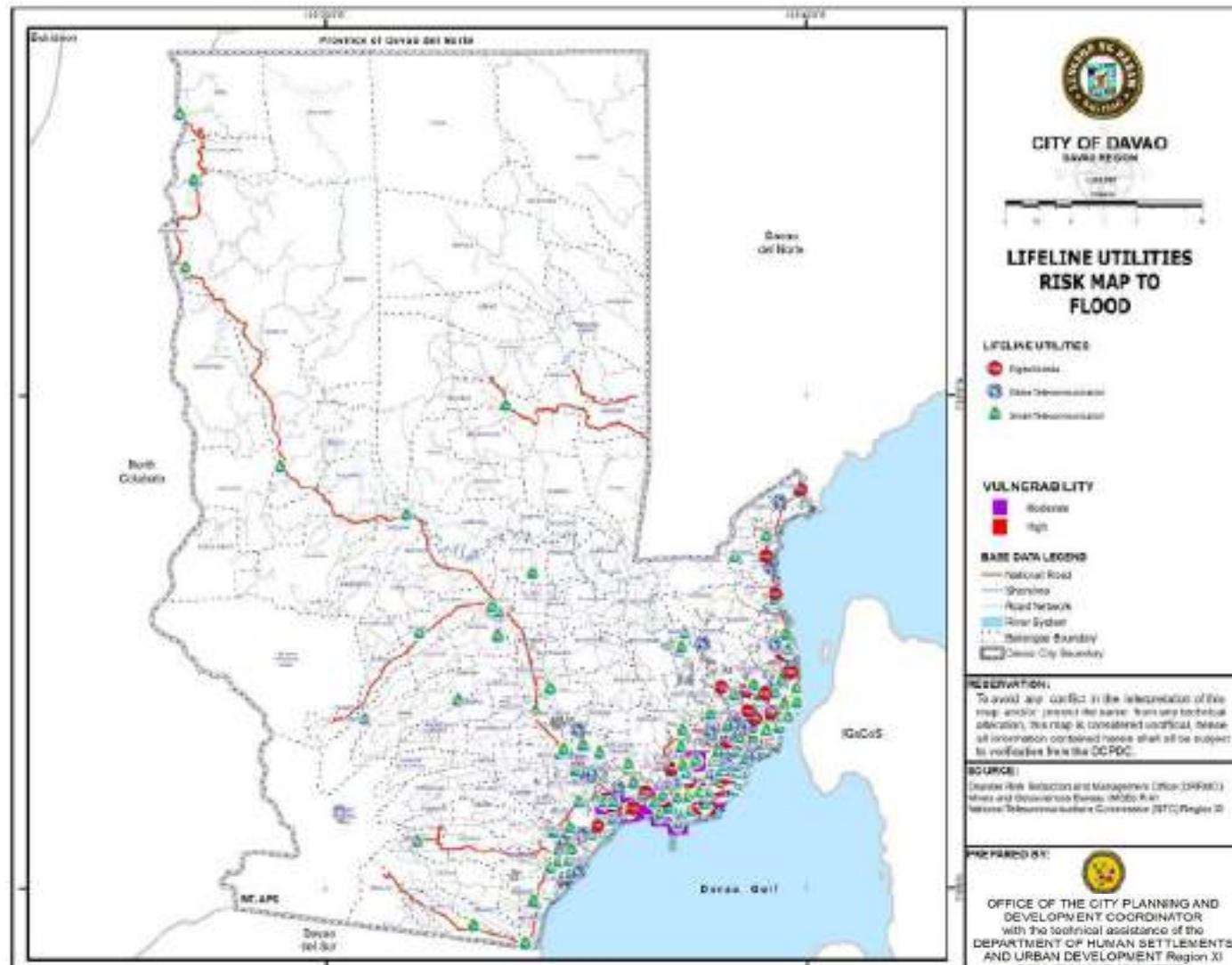
Table LU-238. Disaster Risk Assessment Summary Matrix for Lifeline Utilities, Flood, Davao City

DECISION AREAS	TECHNICAL FINDINGS	PLANNING IMPLICATIONS	INTERVENTIONS
Brgy. Maa	<ul style="list-style-type: none"> ● One cell site is highly susceptible to flood ● The area has frequent likelihood of flood occurrence. ● Flood level is ≥ 1 meter. ● One cell site is at moderate risk to flood. ● Cell sites are constructed in a high elevated areas. 	<ul style="list-style-type: none"> ● There will be possible drop down of communication signal. ● Mitigation measures are expensive. 	<ul style="list-style-type: none"> ● Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. ● Government interventions by way of securing these facilities from man-made hazards. ● Ensure structural mitigation to prevent landslide. ● Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.
Brgy. Bucana	<ul style="list-style-type: none"> ● One cell site is highly susceptible to flood, and 2 cell sites are moderately susceptible to flood ● The area has occasional slight chance of flood occurrence ● The flood level is ≥ 1 meter. ● 3 cell sites are at moderate risk to flood ● Cell sites are constructed in a high elevated areas. 	<ul style="list-style-type: none"> ● There will be possible drop down of communication signal. ● Mitigation measures are expensive. 	<ul style="list-style-type: none"> ● Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. ● Government interventions by way of securing these facilities from man-made hazards. ● Ensure structural mitigation to prevent landslide. ● Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.
Brgy. Bago Aplaya	<ul style="list-style-type: none"> ● 2 cell sites are moderately susceptible to flood ● The area has have moderate likelihood of flood occurrence. ● The flood level is ≥ 1 meter. ● 2 cell sites are at moderate risk to flood ● Cell sites are constructed in a high elevated areas. 	<ul style="list-style-type: none"> ● There will be possible drop down of communication signal. ● Mitigation measures are expensive. 	<ul style="list-style-type: none"> ● Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. ● Government interventions by way of securing these facilities from man-made hazards. ● Ensure structural mitigation to prevent landslide. ● Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.
Brgy. Talomo Proper	<ul style="list-style-type: none"> ● 4 cell sites are moderately susceptible to flood ● The area has frequent likelihood of flood occurrence. ● The flood level is ≥ 1 meter. ● 4 cell sites are at moderate risk to flood. ● Cell sites are constructed in a high elevated areas. 	<ul style="list-style-type: none"> ● There will be possible drop down of communication signal. ● Mitigation measures are expensive. 	<ul style="list-style-type: none"> ● Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. ● Government interventions by way of securing these facilities from man-made hazards. ● Ensure structural mitigation to prevent landslide. ● Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.

Table LU-239. Disaster Risk Assessment Summary Matrix of Cell Sites for Flood, Davao City

DECISION AREAS	TECHNICAL FINDINGS	PLANNING IMPLICATIONS	INTERVENTIONS
Brgy. Bago Gallera	<ul style="list-style-type: none"> ● 4 cell sites are moderately susceptible to flood ● The area has occasional slight chance of flood occurrence ● The flood level is ≥ 1 meter. ● 4 cell sites are at moderate risk to flood. ● Cell sites are constructed in a high elevated areas. 	<ul style="list-style-type: none"> ● There will be possible drop down of communication signal. ● Mitigation measures are expensive. 	<ul style="list-style-type: none"> ● Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. ● Government interventions by way of securing these facilities from man-made hazards. ● Ensure structural mitigation to prevent landslide. ● Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.

Map 5.28 Lifeline Utilities, Risk Map to Flooding, Davao City



Disaster Risk Assessment for Roads

Out of 72.06 kilometers which are moderately and highly susceptible to landslide, 0.67 kilometers of Davao-Bukidnon Road is at high risk of landslide, while 5.57 kilometers of C.P Garcia Highway is moderately at risk of landslide. The remaining length or 64.82 kilometers are at low risk of landslide.

Table LU-240. Lifeline Utilities, Roads, Disaster Risk Assessment for Landslide, Davao City

ROAD NAME	TOTAL LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	TOTAL COST PER HAZARD LENGTH	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	LIKELIHOOD OF OCCURRENCE SCORE	SEVERITY OF CONSEQUENCE SCORE	RISK SCORE	RISK SCORE CATEGORY
Calinan-Baguio-Cadalian Road	0.84663	35,000,000.00	29,632,050.00	concrete	good	Yes	-	Quick Response fund	H	1.0	1.0	1.0	Low
Carlos P. Garcia Highway	4.9353	60,000,000.00	296,118,000.00	concrete	good	Yes	-	Quick Response fund	H	4.9	2.0	9.8	Moderate
Carlos P. Garcia Highway	0.609785	60,000,000.00	36,587,100.00	concrete	good	Yes	-	Quick Response fund	M	4.9	2.0	9.8	Moderate
Davao-Bukidnon Road	0.152503	40,000,000.00	6,100,120.00	concrete	good	Yes	-	Quick Response fund	VH	6.0	2.0	12.0	High
Davao-Bukidnon Road	0.0304846	40,000,000.00	1,219,384.00	concrete	good	Yes	-	Quick Response fund	VH	6.0	2.0	12.0	High
Davao-Bukidnon Road	0.107755	40,000,000.00	4,310,200.00	concrete	good	Yes	-	Quick Response fund	VH	6.0	2.0	12.0	High
Davao-Bukidnon Road	0.141902	40,000,000.00	5,676,080.00	concrete	good	Yes	-	Quick Response fund	VH	6.0	2.0	12.0	High
Davao-Bukidnon Road	0.0376398	40,000,000.00	1,505,592.00	concrete	good	Yes	-	Quick Response fund	VH	6.0	2.0	12.0	High
Davao-Bukidnon Road	0.144246	40,000,000.00	5,769,840.00	concrete	good	Yes	-	Quick Response fund	VH	6.0	2.0	12.0	High
Davao-Bukidnon Road	0.0636087	40,000,000.00	2,544,348.00	concrete	good	Yes	-	Quick Response fund	VH	6.0	2.0	12.0	High
Davao-Bukidnon Road	15.1655	40,000,000.00	606,620,000.00	concrete	good	Yes	-	Quick Response fund	H	3.0	1.0	3.0	Low
Davao-Bukidnon Road	17.515	40,000,000.00	700,600,000.00	concrete	good	Yes	-	Quick Response fund	M	2.9	1.0	2.9	Low
Eden-Tagurano Road	0.104197	35,000,000.00	3,646,895.00	concrete	good	Yes	-	Quick Response fund	H	1.0	1.0	1.0	Low
Eden-Tagurano Road	0.379242	35,000,000.00	13,273,470.00	concrete	good	Yes	-	Quick Response fund	M	1.0	1.0	1.0	Low
Fatima-Malabog Road	8.86305	54,000,000.00	478,604,700.00	concrete	good	Yes	-	Quick Response fund	H	1.0	1.0	1.0	Low
Fatima-Malabog Road	8.72307	54,000,000.00	471,045,780.00	concrete	good	Yes	-	Quick Response fund	M	1.8	1.0	1.8	Low

Table LU-240. Lifeline Utilities, Roads, Disaster Risk Assessment for Landslide, Davao City

ROAD NAME	TOTAL LENGTH (KILOMETERS)	REPLACEMENT COST PER LINEAR KILOMETER	TOTAL COST PER HAZARD LENGTH	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	HAZARD	LIKELIHOOD OF OCCURRENCE SCORE	SEVERITY OF CONSEQUENCE SCORE	RISK SCORE	RISK SCORE CATEGORY
Inawayan-Baracatan Road	1.83463	35,000,000.00	64,212,050.00	concrete	good	Yes	-	Quick Response fund	H	1.0	1.0	1.0	Low
Inawayan-Baracatan Road	5.25196	35,000,000.00	183,818,600.00	concrete	good	Yes	-	Quick Response fund	M	1.0	1.0	1.0	Low
Mabuhay-Pañalum-Paquibato Road	0.421425	44,000,000.00	18,542,700.00	concrete	good	Yes	-	Quick Response fund	H	1.0	1.0	1.0	Low
Mabuhay-Pañalum-Paquibato Road	1.47257	44,000,000.00	64,793,080.00	concrete	good	Yes	-	Quick Response fund	M	1.0	1.0	1.0	Low
Toril-Bayabas-Eden Road	0.874834	30,000,000.00	26,245,020.00	concrete	good	Yes	-	Quick Response fund	H	1.0	1.0	1.0	Low
Toril-Bayabas-Eden Road	4.38802	30,000,000.00	131,640,600.00	concrete	good	Yes	-	Quick Response fund	M	1.0	1.0	1.0	Low

Table LU-241. Disaster Risk Assessment Summary Matrix of Roads for Landslide, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Carlos P. Garcia Highway	<ul style="list-style-type: none"> ● This road network at moderate risk of landslide. ● The road network has a risk score of 9.8 ● The road network has moderate severity of consequence rating. ● A total of 5.545085 kilometers of road network is susceptible to landslide. Portions of these road network are in Ma-a, Talomo, Matina Pangi, Matina Crossing, Langub, and Buhangin. ● The area has moderate likelihood of landslide occurrence. ● The total value exposed line is Php 332,705,100.00 	<ul style="list-style-type: none"> ● There will be damage to the roads especially within those areas that have frequent likelihood of occurrence and severity. ● There will be disruption for road access. ● Traffic congestion (due re-routing). 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Strengthen the slope protection projects by concerned agencies.
Davao - Bukidnon Road	<ul style="list-style-type: none"> ● The road network is at high risk of landslide. ● The road network has a risk score of 12. ● The road network has moderate severity of consequence rating ● A total of 60.8778641 kilometers is susceptible to landslide. Portions of these road network are located in Barangay Marilog, an area with frequent likelihood of landslide occurrence. ● The total value exposed line is Php 27,125,564.00 	<ul style="list-style-type: none"> ● Delay of delivery of goods and services. ● Cost for maintenance/replacement based on the degree of damage. 	

Disaster Risk Assessment for Bridges

Baracatan Bridge, Crossing Malabog Bridge, and Tagurano Bridge which are susceptible to landslide. These bridges are located in areas with very rare likelihood of landslide occurrence. The severity of consequence score for these bridges is low.

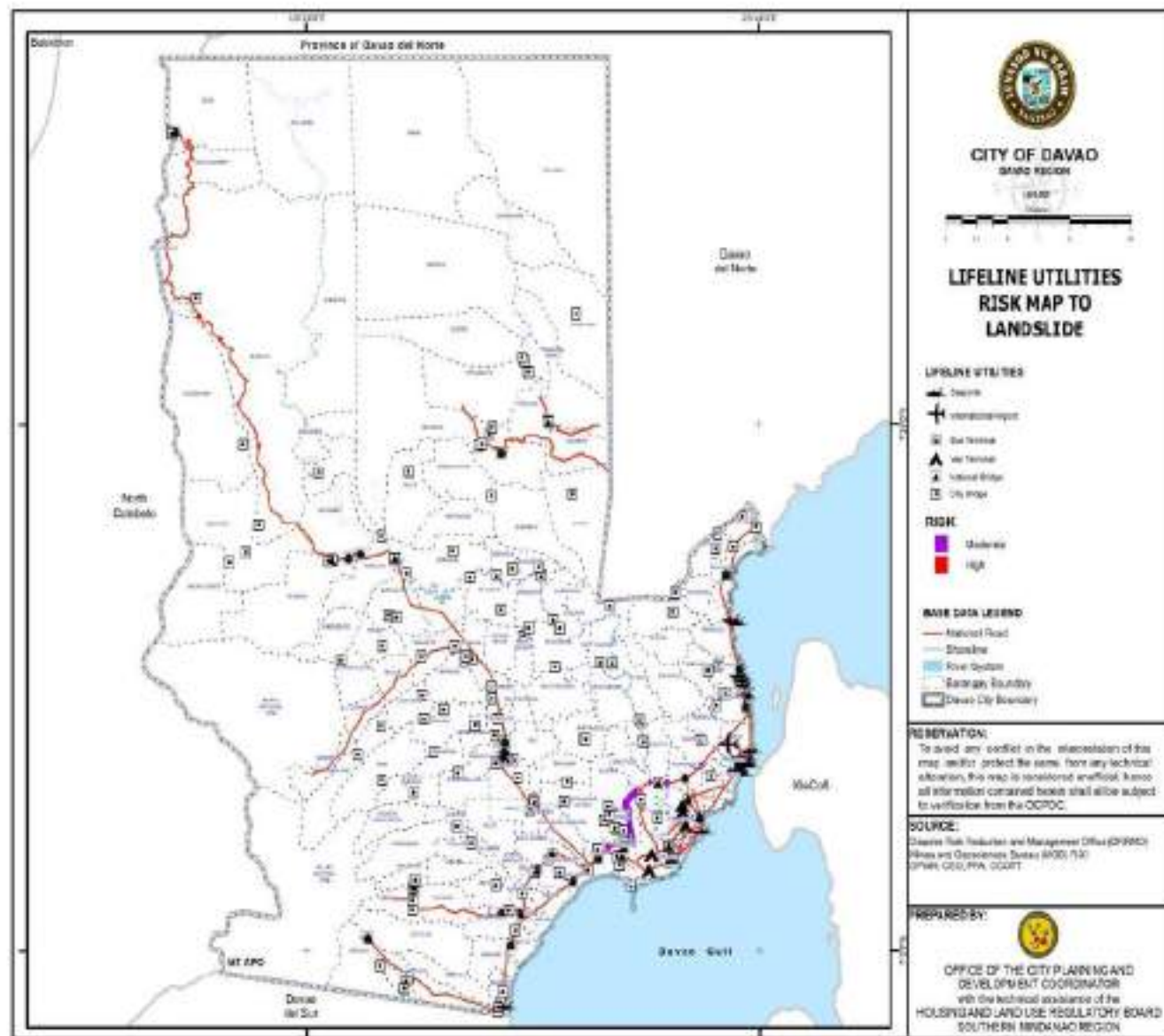
Table LU-242. Lifeline Utilities, Bridges, Disaster Risk Assessment Table for Landslide, Davao City

BRIDGE NAME	TOTAL LENGTH (METERS)	ROAD CLASSIFICATION	REPLACEMENT COST PER LINEAR METER	TOTAL COST PER HAZARD LENGTH	SURFACE TYPE	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABLE GOVERNMENT RESOURCES	LIKELIHOOD OF OCCURRENCE SCORE	SEVERITY OF CONSEQUENCE SCORE	RISK SCORE	RISK SCORE CATEGORY
Baracatan Br.	22.20	17min- 38 max	1,200,000.00	26,640,000.00	Bailey	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1.0	1.0	1.0	Low
Crossing Malabog Br.	41.02		1,200,000.00	49,224,000.00		Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1.0	1.0	1.0	Low
Tagurano Br.	12.46	17min- 38 max	1,200,000.00	14,952,000.00	Bailey	Good	Yes	All existing bridges do not have damage insurance coverage. Addressing damages are mostly done thru repairs/retrofitting using either national government fund resources or those funded by regional line agencies	Regional DPWH has available financial resources to fund national bridges improvements but fund availability will depend on their current priorities. Also, LGU can impose special levy taxes for project benefitting its local constituents but local capacities may not be able to pay the additional taxes	1.0	1.0	1.0	Low

Table LU-242. Lifeline Utilities, Bridges, Disaster Risk Assessment Table for Landslide, Davao City

ROAD NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Baracatan Bridge Crossing Malabog Bridge Tagurano Bridge	<ul style="list-style-type: none"> • These bridges have low risk of landslide. 	<ul style="list-style-type: none"> • Minimal to negligible implications. 	<ul style="list-style-type: none"> • Government interventions by securing these utilities from man-made hazards. • Maintain these utilities to cope with the current climate change.

Map 5.29 Lifeline Utilities, Risk Map to Landslide, Davao City



Disaster Risk Assessment for Power Substations

Tibungco Substation, which is the sole substation susceptible to landslide has low risk assessment this is due to the very rare likelihood of landslide occurrence and low severity of consequence.

Table LU-243. Lifeline Utilities, Power Substations, Disaster Risk Assessment Table for Landslide, Davao City

NAME OF POWER PLANT	HAZARD		EXPOSURE		SENSITIVITY/VULNERABILITY			SEVERITY OF CONSEQUENCE SCORE	RISK SCORE	RISK CATEGORY
	SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	AREA OCCUPIED (SQ.M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN			
Tibungco Substation	Moderate	1	2,626.00	118 Million	a) Perimeter Fence :CHB Fence with top Guard Cyclone Wire (2") on G.I. Pipe Frame b) Control Building: P.U. Panel walls and roof. c) Equipment Support : All Galvanized Steel Structures	a) Operational b) Last upgraded 10 yrs ago.	b) Earthquake Resistance d) Flood Resistance e) Oil Spill Resistance	1	1	LOW

Table LU-244. Disaster Risk Assessment Summary Matrix for Power Substations for Landslide, Davao City

DECISION AREAS	TECHNICAL FINDINGS	PLANNING IMPLICATIONS	INTERVENTIONS
Brgy. Tibungco (Tibungco Substation)	<ul style="list-style-type: none"> The power substation is moderately susceptible to landslide. The area has very rare likelihood of landslide occurrence This power substation is at low risk to landslide All power substations are designed as resilient to hazards and properly managed by DLPC. 	<ul style="list-style-type: none"> Minimal to negligible implications 	<ul style="list-style-type: none"> Maintain/Upgrade all power utilizes from time to time in order to cope with the current climate change. Government interventions by way of securing these facilities from man-made hazards. Ensure that contingency plan is ready when disaster occurs.

Disaster Risk Assessment for Level I Water System

Spring sources in Bunawan, Panacan, Daliao San Isidro are at high risk to landslide incidents. These areas have occasional likelihood of landslide occurrence. Landslide in these areas could cause very high severity of consequence.

Table LU-245. Lifeline Utilities, Level I Water Supply , Risk Assessment for Landslide, Davao City

BARANGAY	LANDSLIDE SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSUR- ANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE	RISK SCORE	
BUNAWAN	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
BUNAWAN	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
BUNAWAN	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
PANACAN	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
PANACAN	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
SAN ISIDRO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
SAN ISIDRO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
BUNAWAN	M	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
BUNAWAN	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
BUNAWAN	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
BUNAWAN	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH

Table LU-245. Lifeline Utilities, Level I Water Supply , Risk Assessment for Landslide, Davao City

BARANGAY	LANDSLIDE SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT	SEVERITY OF CONSEQUENCE	RISK SCORE	
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
DALIAO	L	4	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH

Table LU-246. Risk Assessment Summary Matrix of Level I Water for Landslide, Davao City

DECISION AREAS	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
BUNAWAN(6 spring -LOW flood)	<ol style="list-style-type: none"> 1. LANDSLIDE SUSCEPTIBILITY :L/M 2. LIKELIHOOD OF OCCURRENCE:4 3. TYPE:SPRING 4. REPLACEMENT COST:41586.325 5. EXISTING CONDITION:FAIR 6. HAZARD RESISTANT DESIGN: None. 7. INSURANCE COVERAGE : None. 8. AVAILABILITY OF GOVERNMENT RESOURCES :YES. For funding proposal 9. SEVERITY OF CONSEQUENCE:4 10. RISK SCORE:16 11. RISK CATEGORY:HIGH 	<p>There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage.</p>	<p>Strengthen contingency plans for alternative methods of water supply delivery to affected areas.</p> <p>Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.</p>
PANACAN (2 springh)	<ol style="list-style-type: none"> 1. LANDSLIDE SUSCEPTIBILITY :L 2. LIKELIHOOD OF OCCURRENCE:5 3. TYPE:SPRING 4 4. REPLACEMENT COST:41586.325 5. EXISTING CONDITION:FAIR 6. HAZARD RESISTANT DESIGN: None. 7. INSURANCE COVERAGE :None 8. AVAILABILITY OF GOVERNMENT RESOURCES :YES. For funding proposal 9. SEVERITY OF CONSEQUENCE:4 10. RISK SCORE:20 11. RISK CATEGORY:HIGH 	<p>There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage.</p>	<p>Strengthen contingency plans for alternative methods of water supply delivery to affected areas.</p> <p>Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.</p>
SAN ISIDRO (2 WELLS)	<ol style="list-style-type: none"> 1. LANDSLIDE SUSCEPTIBILITY :L 2. LIKELIHOOD OF OCCURRENCE:5 3. TYPE:SPRING 4 4. REPLACEMENT COST:41586.325 5. EXISTING CONDITION:FAIR 6. HAZARD RESISTANT DESIGN: None. 7. INSURANCE COVERAGE :None. 8. AVAILABILITY OF GOVERNMENT RESOURCES :YES. For funding proposal 9. SEVERITY OF CONSEQUENCE:4 10. RISK SCORE:20 11. RISK CATEGORY:HIGH 	<p>There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage.</p>	<p>Strengthen contingency plans for alternative methods of water supply delivery to affected areas.</p> <p>Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.</p>

Table LU-246. Risk Assessment Summary Matrix of Level I Water for Landslide, Davao City

DECISION AREAS	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
DALIAO (24)	1. LANDSLIDE SUSCEPTIBILITY :L 2. LIKELIHOOD OF OCCURRENCE:4 3. TYPE:SPRING 4. REPLACEMENT COST:41586.325 5. EXISTING CONDITION:FAIR 6. HAZARD RESISTANT DESIGN: None. 7. INSURANCE COVERAGE :None. 8. AVAILABILITY OF GOVERNMENT RESOURCES :YES. For funding proposal 9. SEVERITY OF CONSEQUENCE:4 10. RISK SCORE:16 11. RISK CATEGORY:HIGH	There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage.	Strengthen contingency plans for alternative methods of water supply delivery to affected areas. Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Disaster Risk Assessment for Level II Water System

For Level II Water System, a total of 28 spring sources and one well are at high risk of landslide. These are found in barangays Callawa, Carmen, Gumitan, Lumiad, Magsaysay, Marilog, Megkwayan, Suawan, Tambobong and Tapak. This is attributed to the occasional to frequent occurrence of landslide in these areas. A very

Table LU-247. Lifeline Utilities, Level II Water System, Disaster Risk Assessment Table for Landslide, Davao City

BARANGAY	SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE	RISK SCORE	RISK CATEGORY
CARMEN	H	5	SPRING	41,586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
SUAWAN	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
TAMBOBONG	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
CALLAWA	M	4	18GS15	46200	FAIR	yes	none, but there is one year warranty if the pump is installed by the supplier	YES. For funding proposal	4	16	HIGH
SUAWAN	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH

Table LU-247. Lifeline Utilities, Level II Water System, Disaster Risk Assessment Table for Landslide, Davao City

BARANGAY	SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE	RISK SCORE	RISK CATEGORY
SALAYSAY	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
SUAWAN	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
SALAYSAY	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
SUAWAN	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
MARILOG	H	5.5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	22	HIGH
MARILOG	M	5.5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	22	HIGH
MEGKAWAYAN	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
MARILOG	M	5.5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	22	HIGH
MARILOG	M	5.5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	22	HIGH
MAGSAYSAY	H	4	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
MAGSAYSAY	H	4	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	16	HIGH
LUMIAD	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
GUMITAN	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
LUMIAD	M	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
LUMIAD	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
LUMIAD	M	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
LUMIAD	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
LUMIAD	H	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH

Table LU-247. Lifeline Utilities, Level II Water System, Disaster Risk Assessment Table for Landslide, Davao City

BARANGAY	SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	TYPE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSURANCE COVERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE	RISK SCORE	RISK CATEGORY
LUMIAD	M	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
MARILOG	H	5.5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	22	HIGH
GUMITAN	M	5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	20	HIGH
MARILOG	M	5.5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	22	HIGH
MARILOG	H	5.5	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	22	HIGH
TAPAK	H	6	SPRING	41586.32	FAIR	None	None	YES. For funding proposal	4	24	HIGH

Table LU-248. Risk Assessment Summary Matrix of Level II Water Supply System for Landslide, Davao City

DECISION AREAS	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
CALLAWA	<p>1. Flood Susceptibility: M 2. Likelihood of Occurrence Score: 4 3. TYPE: 18GS15 4. REPLACEMENT COST: 46200 5. EXISTING CONDITION: FAIR 6 . HAZARD RESISTANT DESIGN: Yes because of the design of the casing of the well 7. INSURANCE COVERAGE: There is no insurance coverage but there is warranty 1 month if the water pump is installed by the supplier 8. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal. 9. SEVERITY OF CONSEQUENCE:4 10. Risk Score: 16 11. Risk Category: HIGH</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
CARMEN	<p>1. Flood Susceptibility: H 2. Likelihood of Occurrence Score: 5 3. TYPE: SPRING 4. REPLACEMENT COST: 41586.32 5. EXISTING CONDITION: FAIR 6 . HAZARD RESISTANT DESIGN: None 7. INSURANCE COVERAGE: None 8. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal. 9. SEVERITY OF CONSEQUENCE:4 10. Risk Score: 20 11. Risk Category: HIGH</p>	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-248. Risk Assessment Summary Matrix of Level II Water Supply System for Landslide, Davao City

DECISION AREAS	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Gumitan(2 Spring Source)	<ol style="list-style-type: none"> 1. Flood Susceptibility: H/M 2. Likelihood of Occurrence Score: 5 3. TYPE: SPRING 4. REPLACEMENT COST: 41586.32 5. EXISTING CONDITION: FAIR 6 . HAZARD RESISTANT DESIGN: None 7. INSURANCE COVERAGE: None 8. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal. 9. SEVERITY OF CONSEQUENCE:4 10. Risk Score: 20 11. Risk Category: HIGH 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials..
LUMIAD	<ol style="list-style-type: none"> 1. Flood Susceptibility: H/M 2. Likelihood of Occurrence Score: 5 3. TYPE: SPRING 4. REPLACEMENT COST: 41586.32 5. EXISTING CONDITION: FAIR 6 . HAZARD RESISTANT DESIGN: None 7. INSURANCE COVERAGE: None 8. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal. 9. SEVERITY OF CONSEQUENCE:4 10. Risk Score: 20 11. Risk Category: HIGH 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-248. Risk Assessment Summary Matrix of Level II Water Supply System for Landslide, Davao City

DECISION AREAS	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Magsaysay (4 spring)	<ol style="list-style-type: none"> 1. Flood Susceptibility: H/M 2. Likelihood of Occurrence Score: 5.5 3. TYPE: SPRING 4. REPLACEMENT COST: 41586.32 5. EXISTING CONDITION: FAIR 6 . HAZARD RESISTANT DESIGN: None 7. INSURANCE COVERAGE: None 8. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal. 9. SEVERITY OF CONSEQUENCE:4 10. Risk Score: 22 11. Risk Category: HIGH 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Megkawayan	<ol style="list-style-type: none"> 1. Flood Susceptibility: H 2. Likelihood of Occurrence Score: 5 3. TYPE: SPRING 4. REPLACEMENT COST: 41586.32 5. EXISTING CONDITION: FAIR 6 . HAZARD RESISTANT DESIGN: None 7. INSURANCE COVERAGE: None 8. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal. 9. SEVERITY OF CONSEQUENCE:4 10. Risk Score: 20 11. Risk Category: HIGH 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-248. Risk Assessment Summary Matrix of Level II Water Supply System for Landslide, Davao City

DECISION AREAS	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Salaysay (2 Spring)	<ol style="list-style-type: none"> 1. Flood Susceptibility: H 2. Likelihood of Occurrence Score: 5 3. TYPE: SPRING 4. REPLACEMENT COST: 41586.32 5. EXISTING CONDITION: FAIR 6 . HAZARD RESISTANT DESIGN: None 7. INSURANCE COVERAGE: None 8. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal. 9. SEVERITY OF CONSEQUENCE:4 10. Risk Score: 20 11. Risk Category: HIGH 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Suawan (4 spring)	<ol style="list-style-type: none"> 1. Flood Susceptibility: H 2. Likelihood of Occurrence Score: 5 3. TYPE: SPRING 4. REPLACEMENT COST: 41586.32 5. EXISTING CONDITION: FAIR 6 . HAZARD RESISTANT DESIGN: None 7. INSURANCE COVERAGE: None 8. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal. 9. SEVERITY OF CONSEQUENCE:4 10. Risk Score: 20 11. Risk Category: HIGH 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Table LU-248. Risk Assessment Summary Matrix of Level II Water Supply System for Landslide, Davao City

DECISION AREAS	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Tambobong	<ol style="list-style-type: none"> 1. Flood Susceptibility: H 2. Likelihood of Occurrence Score: 5 3. TYPE: SPRING 4. REPLACEMENT COST: 41586.32 5. EXISTING CONDITION: FAIR 6 . HAZARD RESISTANT DESIGN: None 7. INSURANCE COVERAGE: None 8. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal. 9. SEVERITY OF CONSEQUENCE:4 10. Risk Score: 20 11. Risk Category: HIGH 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
Tapak	<ol style="list-style-type: none"> 1. Flood Susceptibility: H 2. Likelihood of Occurrence Score: 6 3. TYPE: SPRING 4. REPLACEMENT COST: 41586.32 5. EXISTING CONDITION: FAIR 6 . HAZARD RESISTANT DESIGN: None 7. INSURANCE COVERAGE: None 8. AVAILABILITY OF GOVERNMENT RESOURCES: YES. For funding proposal. 9. SEVERITY OF CONSEQUENCE:4 10. Risk Score: 24 11. Risk Category: HIGH 	<ul style="list-style-type: none"> • There will be temporary water interruption depending on the severity of impact. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas. • Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Waterworks Association; Standard Specifications and American Society for Testing and Materials.

Disaster Risk Assessment for Level III Water System

Of 52 mainlines with a total length of 11, 137.98 meters moderately and highly susceptible to landslide, 8,112.84 meters are at high risk to landslide. These length has a total equivalent value of Php 259,807,317.09. These mainline pipes are in areas with occasional to frequent likelihood of landslide occurrence. These areas are Barangay 19-B, Catalunan Grande, Langub, Ma-a, Matina Crossing, Matina Pangi, Panacan, Talomo and Tigatto. These lines have been assessed to have

Table LU-249. Lifeline Utilities, Level III Water Supply System, Disaster Risk Assessment Table for Landslide, Davao City

HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
LOCATION	LANDSLIDE SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE AVERAGE	RISK SCORE	RISK CATEGORY
19-B	H	4	MLCSP	125.77	23.31	18.53%	40,100	934,586.10	Good	Yes	3	12	HIGH
MA-A	M	4	MLCSP	195.26	0.72	0.37%	52,800	38,197.31	Good	Yes	2	8	MODERATE
BUHANGIN	H	5	MLCSP	370.76	338.29	91.24%	40,100	13,565,406.52	Good	Yes	3	15	HIGH
19-B	H	4	MLCSP	36.42	15.04	41.30%	40,100	603,120.75	Good	Yes	3	12	HIGH
MA-A	M	4	MLCSP	158.36	158.36	100.00%	11,200	1,773,660.28	Good	Yes	2	8	MODERATE
MATINA PANGI	H	6	MLCSP	925.09	546.53	59.08%	11,200	6,121,133.67	Good	Yes	3	18	HIGH
MATINA PANGI	M	6	MLCSP	925.09	378.56	40.92%	11,200	4,239,843.29	Good	Yes	2	12	HIGH
BUHANGIN	H	5	MLCSP	41.27	41.27	100.00%	40,100	1,654,764.08	Good	Yes	3	15	HIGH
BUHANGIN	H	5	MLCSP	97.82	60.97	62.33%	40,100	2,445,063.47	Good	Yes	3	15	HIGH
MA-A	H	4	MLCSP	1,572.53	1,153.29	73.34%	52,800	60,893,836.31	Good	Yes	3	12	HIGH
MA-A	M	4	MLCSP	1,572.53	294.93	18.76%	52,800	15,572,258.33	Good	Yes	2	8	MODERATE
MATINA PANGI	H	6	MLCSP	1,741.74	62.67	3.60%	52,800	3,308,834.58	Good	Yes	3	18	HIGH
MATINA PANGI	M	6	MLCSP	1,741.74	804.92	46.21%	52,800	42,499,546.42	Good	Yes	2	12	HIGH
LANGUB	H	4	MLCSP	551.65	551.65	100.00%	52,800	29,126,895.54	Good	Yes	3	12	HIGH
MATINA PANGI	H	6	MLCSP	459.75	144.78	31.49%	52,800	7,644,328.46	Good	Yes	3	18	HIGH
MA-A	H	4	MLCSP	333.94	33.58	10.06%	52,800	1,772,995.35	Good	Yes	3	12	HIGH
MAGTUOD	H	1	MLCSP	402.95	97.35	24.16%	52,800	5,139,854.85	Good	Yes	3	3	LOW
MAGTUOD	M	1	MLCSP	402.95	22.24	5.52%	52,800	1,174,049.93	Good	Yes	2	2	LOW
TALOMO	H	5	MLCSP	123.15	20.23	16.43%	52,800	1,068,243.32	Good	Yes	3	15	HIGH
PANACAN	H	4	MLCSP	313.53	67.56	21.55%	20,800	1,405,303.91	Good	Yes	3	12	HIGH
TIBUNGCO	M	1	MLCSP	979.15	268.19	27.39%	20,800	5,578,333.36	Good	Yes	2	2	LOW
CABANTIAN	M	1	MLCSP	749.75	354.52	47.29%	24,300	8,614,792.54	Good	Yes	2	2	LOW
CABANTIAN	M	1	MLCSP	10.65	10.65	100.00%	24,300	258,857.13	Good	Yes	2	2	LOW
CABANTIAN	M	1	MLCSP	10.88	10.88	100.00%	24,300	264,444.73	Good	Yes	2	2	LOW

Table LU-249. Lifeline Utilities, Level III Water Supply System, Disaster Risk Assessment Table for Landslide, Davao City

HAZARD			EXPOSURE						VULNERABILITY		SEVERITY OF CONSEQUENCE	RISK	
LOCATION	LANDSLIDE SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	CLASSIFICATION	LENGTH	EXPOSED LENGTH	EXPOSURE PERCENTAGE	REPLACEMENT COST	VALUE OF EXPOSED LIFELINE	EXISTING CONDITION	HAZARD RESISTANT DESIGN	SEVERITY OF CONSEQUENCE AVERAGE	RISK SCORE	RISK CATEGORY
CABANTIAN	M	1	MLCSP	150.43	150.43	100.00%	24,300	3,655,470.92	Good	Yes	2	2	LOW
CABANTIAN	M	1	MLCSP	307.81	90.51	29.40%	24,300	2,199,289.51	Good	Yes	2	2	LOW
CABANTIAN	M	1	MLCSP	53.14	53.14	100.00%	24,300	1,291,375.82	Good	Yes	2	2	LOW
CABANTIAN	M	1	MLCSP	67.94	42.79	62.98%	24,300	1,039,840.77	Good	Yes	2	2	LOW
BUHANGIN	H	5	MLCSP	146.53	113.10	77.18%	62,400	7,057,346.30	Good	Yes	3	15	HIGH
BUHANGIN	H	5	MLCSP	19.25	19.25	100.00%	62,400	1,200,930.86	Good	Yes	3	15	HIGH
CATALUNAN GRANDE	H	4	MLCSP	3,233.03	474.80	14.69%	17,700	8,403,921.24	Good	Yes	3	12	HIGH
CATALUNAN GRANDE	M	4	MLCSP	3,233.03	479.85	14.84%	17,700	8,493,305.25	Good	Yes	2	8	MODERATE
MATINA CROSSING	H	6	MLCSP	1.97	1.97	100.00%	11,200	22,086.96	Good	Yes	3	18	HIGH
MATINA CROSSING	H	6	MLCSP	282.18	282.18	100.00%	11,200	3,160,378.98	Good	Yes	3	18	HIGH
CABANTIAN	M	1	MLCSP	22.45	0.89	3.96%	24,300	21,613.94	Good	Yes	2	2	LOW
TALOMO	H	5	MLCSP	1,112.19	649.36	58.39%	17,700	11,493,698.93	Good	Yes	3	15	HIGH
MATINA PANGI	H	6	MLCSP	94.92	94.92	100.00%	17,700	1,680,046.81	Good	Yes	3	18	HIGH
CATALUNAN GRANDE	H	4	MLCSP	884.15	29.34	3.32%	17,700	519,326.44	Good	Yes	3	12	HIGH
MATINA PANGI	H	6	MLCSP	576.54	174.12	30.20%	11,200	1,950,089.90	Good	Yes	3	18	HIGH
MATINA PANGI	M	6	MLCSP	576.54	402.42	69.80%	11,200	4,507,147.99	Good	Yes	2	12	HIGH
MATINA PANGI	H	6	MLCSP	8.16	8.16	100.00%	11,200	91,381.32	Good	Yes	3	18	HIGH
MA-A	H	4	MLCSP	978.39	644.74	65.90%	11,200	7,221,053.47	Good	Yes	3	12	HIGH
MA-A	M	4	MLCSP	978.39	333.65	34.10%	11,200	3,736,893.23	Good	Yes	2	8	MODERATE
MATINA CROSSING	H	6	MLCSP	346.67	346.67	100.00%	11,200	3,882,752.30	Good	Yes	3	18	HIGH
TIGATTO	H	5	MLCSP	2,289.22	18.87	0.82%	23,600	445,348.77	Good	Yes	3	15	HIGH
PANACAN	H	4	MLCSP	666.86	125.15	18.77%	19,100.00	2,390,363.37	Good	Yes	3	12	HIGH
PANACAN	M	4	MLCSP	666.86	398.24	59.72%	19,100.00	7,606,383.78	Good	Yes	2	8	MODERATE
MA-A	H	4	MLCSP	552.91	36.20	6.55%	52,800	1,911,143.74	Good	Yes	3	12	HIGH
MA-A	M	4	MLCSP	552.91	50.01	9.05%	52,800	2,640,716.00	Good	Yes	2	8	MODERATE
BUHANGIN	H	5	MLCSP	269.69	148.86	55.20%	52,800	7,859,597.43	Good	Yes	3	15	HIGH
CABANTIAN	M	1	MLCSP	587.28	207.79	35.38%	20,800	4,321,928.38	Good	Yes	2	2	LOW
BUHANGIN	H	5	MLCSP	395.71	300.11	75.84%	62,400	18,726,800.49	Good	Yes	3	15	HIGH

Disaster Risk Assessment for DCWD Wells

Wells located in Purok 27 and Purok 24 of Barangay Panacan are at moderate risk to landslide. Interventions such retrofitting is recommended.

Table LU-250. Lifeline Utilities, Disaster Risk Assessment for DCWD Wells , Davao City

	LANDSLIDE	LIKELIHOOD OF OCCURRENCE SCORE	REPLACEMENT COST	EXISTING CONDITION	HAZARD RESISTANT DESIGN	INSUR- ANCE COV- ERAGE	AVAILABILITY OF GOVERNMENT RESOURCES	SEVERITY OF CONSEQUENCE	RISK SCORE	RISK CATEGORY
Purok 27, Malagamot, Brgy. Panacan	M	4	6,500,000.00	GOOD	YES	NO		1	4	MODERATE
Purok 24, Malagamot, Brgy. Panacan	H	4	6,500,000.00	GOOD	YES	NO		1	4	MODERATE

Table LU-251. Risk Assessment Summary Matrix of Level III Water System for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
19-B	<ul style="list-style-type: none"> Two main pipelines are highly susceptible to landslide. The area has occasional likelihood of landslide occurrence. 34.35 m of pipes are at high risk of landslide. The total value of exposed line is P1,537,706.85. 	<ul style="list-style-type: none"> There will be disruption of regular operations. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for standby 24/7 services for water supply in case of emergency interruptions. Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. The concerned agency should provide allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
Matina Pang	<ul style="list-style-type: none"> There are three main lines which are moderately susceptible to landslide. The area has a frequent likelihood of landslide occurrence The exposed length is 1585.89 m The total impact value is P 51,246,537.71. The area is at high risk 	<ul style="list-style-type: none"> There will be disruption of regular operations. There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> Strengthen contingency plans for standby 24/7 services for water supply in case of emergency interruptions. Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. The concerned agency should provide allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

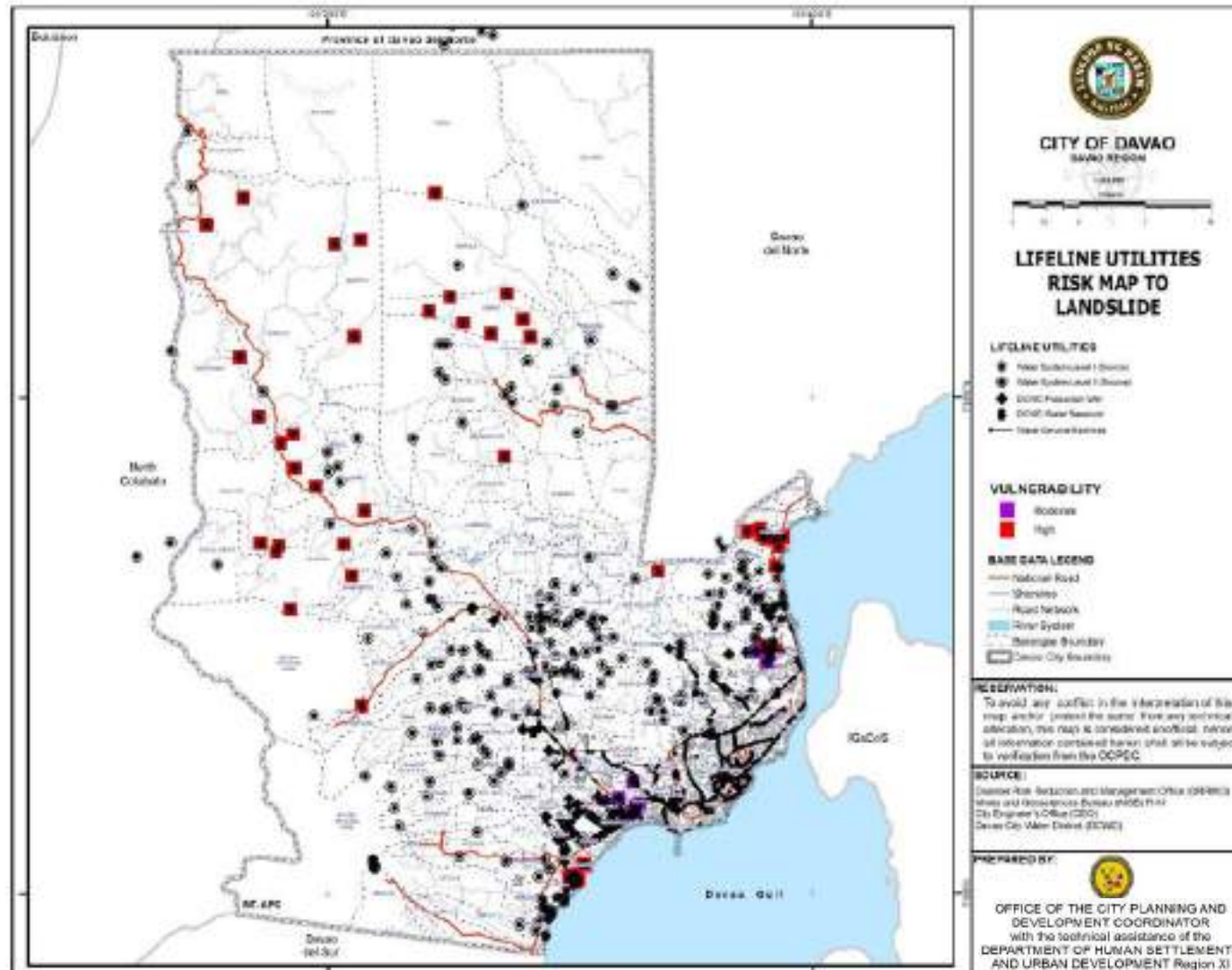
Table LU-251. Risk Assessment Summary Matrix of Level III Water System for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Catalunan Grande	<ul style="list-style-type: none"> ● There are two mainline pipes which are highly susceptible to landslide. ● A total of 333.35 m of a pipelines in the same barangay is moderately susceptible to landslide. ● There is occasional likelihood of landslide occurrence in the area. ● The exposed length for high landslide is 504.13 m. ● The exposed length moderately susceptible to landslide is ● P 8,493,305. ● The total impact value for pipe highly susceptible to landslide is P8,923,247.68 ● The areas susceptible to landslide is at high risk. ● The area moderately susceptible landslide is at moderate risk. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of emergency interruptions. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should provide allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
Langub	<ul style="list-style-type: none"> ● Some water lines which are highly susceptible to landslide. ● The area has occasional likelihood of landslide occurrence. ● The exposed length is 551 m. ● The total impact value is P29,126,895.54 ● The area is at high risk. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of emergency interruption. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should provide allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-251. Risk Assessment Summary Matrix of Level III Water System for Landslide, Davao City

AREA NAME	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
Ma-a	<ul style="list-style-type: none"> ● There are four water lines which highly susceptible to landslide. ● There are five water lines which are moderately susceptible to landslide. ● The area has occasional likelihood of landslide occurrence. ● The total exposed length highly susceptible to landslide is 1867.80 m. ● The total exposed length moderately susceptible to landslide is 837.67 m. ● The total impact value of portions highly susceptible to landslide is P71,799,028.87 ● The total impact value of portions moderately susceptible to landslide is P237,617.25 ● The areas highly susceptible to landslide is at high risk. ● The areas under moderate landslide is at moderate risk. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of emergency interruptions. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
PANACAN	<ul style="list-style-type: none"> ● Two mainline pipes are highly susceptible to landslide. ● There is a single waterline with total hazard length of 398.24 m moderately susceptible to landslide. ● The area has occasional likelihood of landslide occurrence. ● The total exposed length susceptible to landslide is 192.71 m. ● The total impact value is P3,795,667.28 ● The pipe length highly susceptible to landslide is at high risk. ● The pipe length moderately susceptible to landslide is at moderate risk. 	<ul style="list-style-type: none"> ● There will be disruption of regular operations. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of emergency interruptions. ● Strict implementation of material specification standards and construction (National Building Code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should provide allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Map 5.29 Lifeline Utilities, Risk Map to Landslide, Davao City



Disaster Risk Assessment for Cell sites

A total of 23 out of 26 cell sites are assessed to be moderately at risk to landslide. These cell sites are found in Matina Aplaya, Matina Crossing, Ma-, Talomo, Talomo Proper and Bucana. It is noted that Matina Aplaya, Talomo and Matina Crossing have frequent likelihood of occurrence of landslide. The cell sites in the area also have low severity of consequence.

Table LU-252. Lifeline Utilities, Cell Sites, Disaster Risk Assessment for Landslide, Davao City

NAME OF CELL SITE	HAZARD		EXPOSURE (FLOOD -VERY HIGH)			SENSITIVITY/VULNERABILITY			SEVERITY OF CONSEQUENCE SCORE	RISK SCORE	RISK CATEGORY
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN			
GLOBE TELECOM, INC.	Very High	6	Bonguyan Compound Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	Very High	6	Jesus Go, Matina Aplaya Road, Barangay Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
SMART COMMUNICATIONS, INC.	Very High	6	Matina Aplaya Road, Brgy. Pag-asa, Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	Very High	6	Alzati's Lot, Matina Aplaya,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
SMART COMMUNICATIONS, INC.	Very High	6	Matina Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
SMART COMMUNICATIONS, INC.	Very High	6	Centerpoint Mall, Brgy. Matina Crossing,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	Very High	3	Peralta Property, Seminary Rd., Brgy Catalunan Grande Talomo District,	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	4	Low
SMART COMMUNICATIONS, INC.	Very High	6	Purok 7, Sto. Niño Subd., Brgy. Maa	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	High	6	Mc Arthur Hiway, Brgy.	300 sq. m	₱12 -₱15 mil-	Steel & Concrete	good	Yes	1.33	8	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	High	3	Magno Prop., No. 64 V. Mapa St., Brgy. 11-B	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	4	Low
SMART COMMUNICATIONS,	High	3	No. 64 V. Mapa St., Brgy.	300 sq. m	₱12 -₱15 mil-	Steel & Concrete	good	Yes	1.33	4	Low
SMART COMMUNICATIONS,	High	4	#88 Maya St., Brgy. 76A,	300 sq. m	₱12 -₱15 mil-	Steel & Concrete	good	Yes	1.33	5.33	Moderate
SMART COMMUNICATIONS,	Moderate	6	National Highway, Times	300 sq. m	₱12 -₱15 mil-	Steel & Concrete	good	Yes	1.33	8	Moderate

Table LU-252. Lifeline Utilities, Cell Sites, Disaster Risk Assessment for Landslide, Davao City

NAME OF CELL SITE	HAZARD		EXPOSURE (FLOOD -VERY HIGH)			SENSITIVITY/VULNERABILITY			SEVERITY OF CONSEQUENCE SCORE	RISK SCORE	RISK CATEGORY
	FLOOD SUSCEPTIBILITY	LIKELIHOOD OF OCCURRENCE SCORE	LOCATION	AREA OCCUPIED (SQ. M)	REPLACEMENT COST	CONSTRUCTION MATERIALS USED	EXISTING CONDITION	HAZARD RESISTANT DESIGN			
SMART COMMUNICATIONS, INC.	Moderate	5	Crossing Puan, McArthur Highway, Brgy. Bago Aplaya	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	6.67	Moderate
DIGITEL MOBILE PHILIP-	Moderate	5	Brgy. Bago Aplaya, Talo-	300 sq. m	₱12 -₱15 mil-	Steel & Concrete	good	Yes	1.33	6.67	Moderate
SMART COMMUNICATIONS, INC.	Moderate	6	PLDT Village, Bo. Talomo, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
SMART COMMUNICATIONS, INC.	Moderate	6	PLDT Village, Bo. Talomo, Brgy. Talomo Proper	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	8	Moderate
SMART COMMUNICATIONS,	Moderate	6	Ortis Road, Ulas, Brgy.	300 sq. m	₱12 -₱15 mil-	Steel & Concrete	good	Yes	1.33	8	Moderate
DIGITEL MOBILE PHILIP-	Moderate	6	Ortis Road, Ulas, Brgy.	300 sq. m	₱12 -₱15 mil-	Steel & Concrete	good	Yes	1.33	8	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	4	Upper Rapnaga, Brgy. Bago Gallera Talumo Dist.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	5.33	Moderate
SMART COMMUNICATIONS, INC.	Moderate	4	Purok 16, Sitio Durian, Brgy. Bago Gallera	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	5.33	Moderate
SMART COMMUNICATIONS, INC.	Moderate	4	Upper Rapnaga, Brgy. Bago Gallera Talumo Dist.	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	5.33	Moderate
DIGITEL MOBILE PHILIP-	Moderate	4	Brgy. Bago Gallera, Talo-	300 sq. m	₱12 -₱15 mil-	Steel & Concrete	good	Yes	1.33	5.33	Moderate
DIGITEL MOBILE PHILIPPINES, INC.	Moderate	4	Sandawa, McArthur Hi-Way, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	5.33	Moderate
SMART COMMUNICATIONS, INC.	Moderate	4	Sandawa, McArthur Hi-Way, Matina, Brgy. Bucana	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	5.33	Moderate
GLOBE TELECOM, INC.	Moderate	3	Km 12.5, Talomo Dist, Brgy. Catalunan Pequeno, Davao City, Davao del Sur	300 sq. m	₱12 -₱15 million	Steel & Concrete	good	Yes	1.33	4	Low

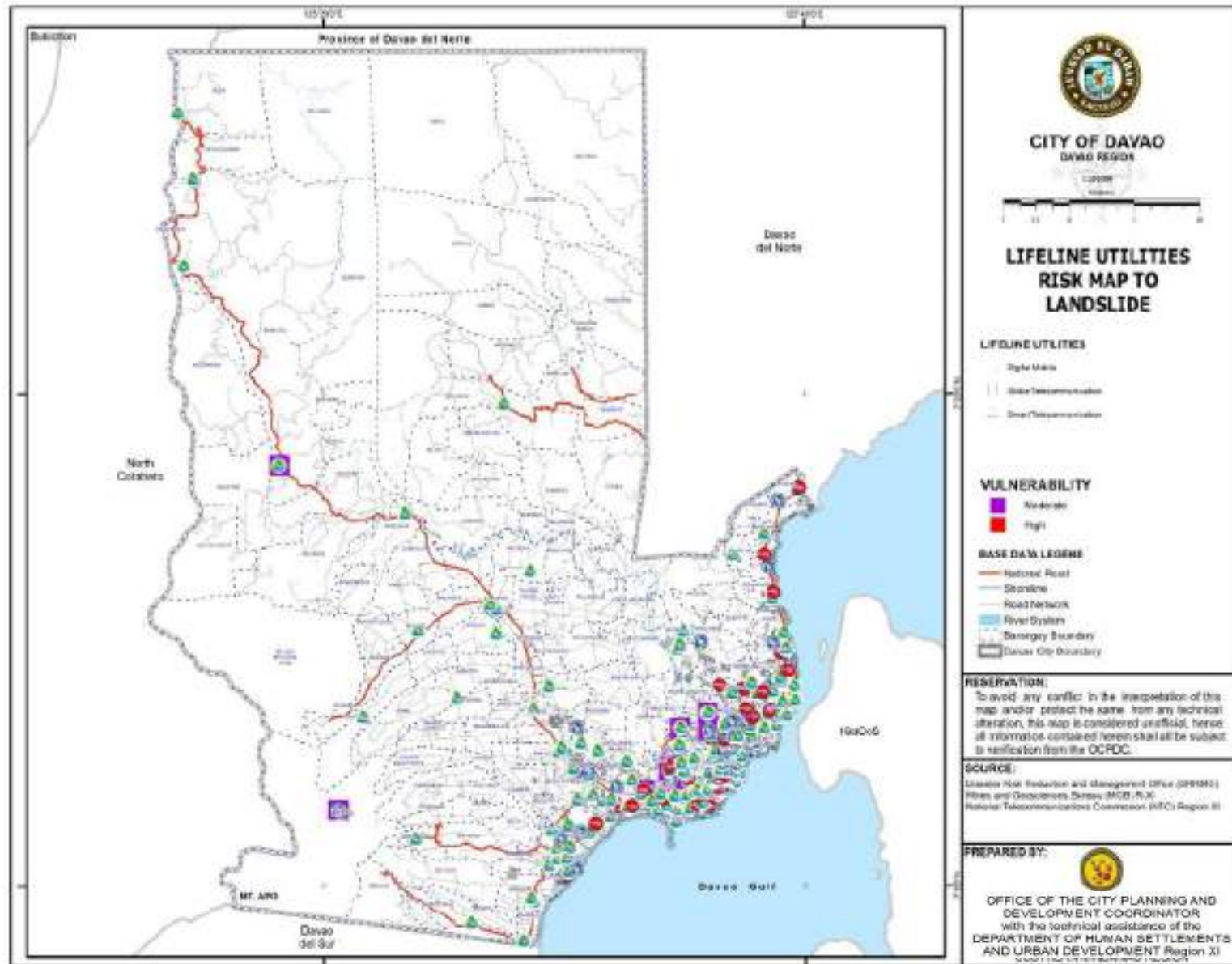
Table LU-253. Disaster Risk Assessment Summary Matrix of Cell sites for Landslide, Davao City

DECISION AREAS	TECHNICAL FINDINGS	PLANNING IMPLICATIONS	INTERVENTIONS
Brgy. Talomo Proper	<ul style="list-style-type: none"> The area has moderate likelihood of landslide occurrence. Two (2) cell sites moderately at risk of landslide. 	<ul style="list-style-type: none"> There will be possible drop down of communication signal. Mitigation measures are expensive. 	<ul style="list-style-type: none"> Immediate actions and alternative solutions like mobile towers in terms of telecommunication emergency interruptions. Government interventions by way of securing these facilities from man-made hazards. Ensure structural mitigation to prevent landslide. Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.
Brgy. Matina Crossing	<ul style="list-style-type: none"> One cell site is highly susceptible to landslide. <p>The area has frequent likelihood of landslide occurrence.</p> <p>One cell site is moderately at risk.</p>	<ul style="list-style-type: none"> There will be possible drop down of communication signal. Mitigation measures are expensive. 	<ul style="list-style-type: none"> Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. Government interventions by way of securing these facilities from man-made hazards. Ensure structural mitigation to prevent landslide. Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.
Brgy. Matina Pangi	<ul style="list-style-type: none"> Three (3) cell sites are highly susceptible to landslide and one is moderately susceptible to landslide <p>The area has frequent likelihood of landslide occurrence</p> <p>A total of 4 cell sites are moderately at risk of landslide.</p>	<ul style="list-style-type: none"> There will be possible drop down of communication signal. Mitigation measures are expensive. 	<ul style="list-style-type: none"> Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. Government interventions by way of securing these facilities from man-made hazards. Ensure structural mitigation to prevent landslide. Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.
Brgy. 19-B	<ul style="list-style-type: none"> One cell site is highly susceptible to landslide The area has occasional likelihood of landslide occurrence One cell site is moderately at risk of landslide 	<ul style="list-style-type: none"> There will be possible drop down of communication signal. Mitigation measures are expensive. 	<ul style="list-style-type: none"> Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. Government interventions by way of securing these facilities from man-made hazards. Ensure structural mitigation to prevent landslide. Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.

Table LU-253. Disaster Risk Assessment Summary Matrix of Cell sites for Landslide, Davao City

DECISION AREAS	TECHNICAL FINDINGS	PLANNING IMPLICATIONS	INTERVENTIONS
Brgy. Tigatto	<ul style="list-style-type: none"> • Two (2) cell sites are highly susceptible to landslide. • The areas has moderate likelihood of landslide occurrence • Two cell sites are moderately at risk of landslide 	<ul style="list-style-type: none"> • There will be possible drop down of communication signal. • Mitigation measures are expensive. 	<ul style="list-style-type: none"> • Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. • Government interventions by way of securing these facilities from man-made hazards. • Ensure structural mitigation to prevent landslide. • Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.
Brgy. Ma-a	<ul style="list-style-type: none"> • A total of three (3) cell sites are moderately susceptible to landslide • The areas has occasional likelihood of landslide occurrence • Three (3) cell sites are moderately at risk of landslide 	<ul style="list-style-type: none"> • There will be possible drop down of communication signal. • Mitigation measures are expensive. 	<ul style="list-style-type: none"> • Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. • Government interventions by way of securing these facilities from man-made hazards. • Ensure structural mitigation to prevent landslide. • Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.
Brgy. Marilog Proper	<ul style="list-style-type: none"> • One cell site is moderately susceptible to landslide • The area has moderate likelihood of landslide occurrence • One cell site is moderately at risk of landslide. 	<ul style="list-style-type: none"> • There will be possible drop down of communication signal. • Mitigation measures are expensive. 	<ul style="list-style-type: none"> • Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions. • Government interventions by way of securing these facilities from man-made hazards. • Ensure structural mitigation to prevent landslide. • Government should provide technical assistance relative to hazards and risks and possible interventions for mitigation control.

Map 5.30 Lifeline Utilities, Risk Map to Landslide, Davao City



Lifeline Utilities Major Decision Areas (MDA)

In the following pages are the decision areas identified according to the concentration of hazards per barangays and the lifeline utilities affected.

Major Decision Area 1

Major Decision Area-1 includes Suawan, Tamugan, Malabog, Talomo, Matina Crossing, Ma-a, Matina Pangi Tugbok, Mintal and Tacunan. The first cluster includes Suawan-Tamugan-Malabog. This cluster is identified to be MDA-1 because of two bridges at high risk of flood, road portions at high risk to landslide occurrence, and road portions moderately vulnerable to flood. Talomo-Matina Crossing-Matina Pangi-Ma-a -Matina Pangi is the second cluster identified as MDA-1. This cluster is considered because of the presence of bridges, road portions, a number of cell sites and main water lines that are at high risk to flood. Some road portions in this area is also at high risk to landslide occurrence, and vulnerable to active fault and liquefaction. The last cluster for MDA-1 is the Tugbok- Mintal- Tacunan because of the presence of three active fault lines, main line pipes which are at high or moderately at risk to flood.

LOCATION	HAZARDS
Suawan-Tamugan-Malabog	Landslide, Flood, Earthquake
Talomo-Matina Crossing-Matina Pangi-Ma-a	Flood, Liquefaction, Landslide, Earthquake
Tugbok-Mintal-Tacunan	Active Fault (Lacson Fault and Dacudao Fault), Flood

Major Decision Area 2 (MDA-2)

Portions of Buhangin, Magtuod are considered as MDA-2 because of portions C.P Garcia Highway are at risk of flood and landslide. Panacan is also considered as MDA-2 because of the Panacan Bridge which is moderately at risk to flood. The same barangay also have storm surge vulnerability. There are also wells which are at risk of landslide. Bunawan is also included because it has one bridge with high flood risk. Toril Daliao and Lizada, primarily the water sources in

LOCATION	HAZARDS
Buhangin-Magtuod	Flood, Landslide
Panacan	Flood, Storm Surge, Landslide
Toril-Daliao-Lizada	Flood, Storm Surge, Liquefaction
19-B	Storm Surge, Liquefaction

Major Decision Area 3 (MDA-3)

For MDA-3, Lumiad, Paquibato and Malabog are considered because of the Level III Water system sources which are at high risk of landslide.

Table LU-254. Summary of Utilities exposed to Flood and Landslide Risk, Davao City

TYPE OF LIFELINE UTILITY	FLOOD				LANDSLIDE			
	HIGH		MODERATE		HIGH		MODERATE	
	NUMBER	LENGTH	NUMBER	LENGTH	NUMBER	LENGTH	NUMBER	LENGTH
Roads	-	-	3	6.55 kms				
Bridges	4	310.79 m	8	493.33 m	-	-	-	-
Power Substations	-	-	3	-	-	-	-	-
Level I	21		12		1			
Level II	8		10		29	-	-	
Level III	116	16,830.42 meters	192	23,295.48 meters	33	8,112.84 meters	7	1,715.77 meters
DCWD Wells			10				2	
Cell sites			22				14	

The interventions and recommendations for these areas include:

- Crafting of contingency plans for emergency situation.
- Establishment of alternate roads parallel to existing bridge, to ensure uninterrupted linkage.
- Strengthen the slope protection projects by concerned agencies.
- Hazard retrofitting of existing structure.
- Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk.
- Road concreting and increase road elevation above the flood height. Establish road embankment protection.
- Improve drainage to allow flood waters to flow through culverts.
- Strengthen contingency plans for standby 24/7 services for water supply in case of interruption.
- Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials.
- Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions.

Table LU-255. Major Decision Areas- 1 Matrix

DECISION AREAS	BARANGAY DESCRIPTION	PROBLEMS/HAZARDS	IMPACTS/IMPLICATIONS	POLICY INTERVENTIONS
SUAWAN	Locational Characteristics: Riverbank Rural/Urban Classification: Rural Barangay Likelihood of Occurrence for Flood: Occasional (Every>10-30 years) Likelihood of Occurrence for Landslide: Moderate (Every >3-10years)	<ul style="list-style-type: none"> ● Portion of Davao Bukidnon Road in this area is at high risk of landslide. ● Four (4) Level II water system spring sources are at high risk of landslide ● Pagan Pequeño Bridge and Suawan Bridge are moderately at risk of flood. 	<ul style="list-style-type: none"> ● Interruption of main road access/linkage to Bukidnon from Davao City and interruption of road access from Barangay Suawan to Poblacion due to moderate landslide events. There will be interruption of the traffic flow once there Pagan Pequeño Suawan Bridge will overflow. ● Spring sources of water may be destroyed or covered by the debris of landslide that will cause water supply shortage for residents of Suawan 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Strengthen the slope protection projects by concerned agencies. ● Hazard retrofitting of existing structure ● Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk
TAMUGAN	Locational Characteristics: Riverbank Rural/Urban Classification: Rural Barangay Likelihood of Occurrence for Flood: Frequent (Every 1-3 years) Likelihood of Occurrence for Landslide: Frequent (Every 1-3 years)	<ul style="list-style-type: none"> ● Pagan Grande and Tamugan Bridge are at high risk of flood. ● Portion of Davao Bukidnon Road in this barangay is moderately vulnerable to active fault. 	<ul style="list-style-type: none"> ● Interruption of main road access/linkage to Bukidnon from Davao and Barangay Tamugan to Polacion due to possible overflow of the bridges due to frequent flood events. ● Short interruption of traffic flow due to damage caused by earthquake. 	<ul style="list-style-type: none"> ● Road concreting and increase road elevation above the flood height. Establish road embankment protection ● Improve drainage to allow flood waters to flow through culverts.
GUMALANG	Locational Characteristics: Riverbank Rural/Urban Classification: Urban Likelihood of Occurrence for Landslide: Occasional (Every>10-30 years)	<ul style="list-style-type: none"> ● Portion of Davao Bukidnon Road is at high risk of Landslide. ● Level 2 water supply source is at risk of flood. 	<ul style="list-style-type: none"> ● Interruption of main road access/linkage to Bukidnon from Davao. ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Crafting of contingency plans for emergency situation. ● Strengthen the slope protection projects by concerned agencies.

Table LU-255. Major Decision Areas- 1 Matrix

DECISION AREAS	BARANGAY DESCRIPTION	PROBLEMS/HAZARDS	IMPACTS/IMPLICATIONS	POLICY INTERVENTIONS
MALABOG	Locational Characteristics: Riverbank Rural/Urban Classification: Rural Barangay	<ul style="list-style-type: none"> • Portion of Fatima-Malabog road in this barangay is vulnerable to active fault. 	<ul style="list-style-type: none"> • Road from barangay Malabog to Poblacion may become unpassable due to moderate risk to landslide and vulnerability to earthquake 	<ul style="list-style-type: none"> • Establishment of alternate routes. • Crafting of contingency plans for emergency situation. • Road Concreting and increase adaptive capacity • Slope protection project
MATINA CROSS-ING	Locational Characteristics: Riverbank/Inland Rural/Urban Classification: Urban Likelihood of Occurrence for Flood: Frequent (Every 1-3 years) Likelihood of Occurrence for Landslide: Frequent (Every 1-3 years)	<ul style="list-style-type: none"> • Portion of Matina Bridge is at high risk to flood • Portion of C.P Garcia Highway and McArthur Highway is at moderate risk to flood. • Portion of C.P Garcia Highway is at moderately risk to landslide. • Portion of Carlos P. Garcia Highway is highly vulnerable to liquefaction. 	<ul style="list-style-type: none"> • Interruption of road access in Matina Crossing due to overflow of Matina Bridge in the event of flood. • Road access in C.P Garcia Highway that leads to Barangay Buhangin, Cabantian, Ma-a, Matina Crossing, Talomo and Tigatto will be interrupted due to the flooding. • There will be heavy flow of traffic within Matina Crossing due to the flood in McArthur Highway. • An interruption of flow of traffic in C.P Garcia will also be expected in case of landslide 	<ul style="list-style-type: none"> • Hazard retrofitting of existing structure • Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk
MATINA PANGI	Locational Characteristics: Riverbank Rural/Urban Classification: Urban Likelihood of Occurrence for Flood: Frequent (Every 1-3 years) Likelihood of Occurrence for Landslide: Frequent (Every 1-3 years)	<ul style="list-style-type: none"> • Matina Pangi Bridge is at high risk to flood. • Portion of C.P Garcia Highway is at moderate risk to landslide. 	<ul style="list-style-type: none"> • Overflow of Pangi Bridge can cause heavy traffic and inconvenience to the riding public. • Interruption of transportation along CP Garcia Highway-Matina Pangi portion that connects barangays Buhangin, Langub, Ma-a, Magtuod, and Matina Crossing once landslide would occur. 	<ul style="list-style-type: none"> • Hazard retrofitting of existing structure • Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk

Table LU-255. Major Decision Areas- 1 Matrix

DECISION AREAS	BARANGAY DESCRIPTION	PROBLEMS/HAZARDS	IMPACTS/IMPLICATIONS	POLICY INTERVENTIONS
MINTAL	Locational Characteristics: Riverbank Rural/Urban Classification: Urban Likelihood of Occurrence for Flood: Moderate (Every 3-10 years)	<ul style="list-style-type: none"> ● A total of 19 mainline pipes are at moderate risk to flood. ● A total of 11.9 meters of mainline pipes are moderately vulnerable to Active Fault (Dacudao Fault). 	<ul style="list-style-type: none"> ● Potential damage to waterlines due to flood and high magnitude earthquake. ● There will be temporary water interruption depending on the severity of impact. 	<ul style="list-style-type: none"> ● Hazard retrofitting of existing structure ● Crafting of contingency plans for emergency situation. ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials. ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.
TACUNAN	Locational Characteristics: Inland Rural/Urban Classification: Rural Likelihood of Occurrence for Flood: Improbable (Every 30-100 years)	<ul style="list-style-type: none"> ● A total of two water lines are at risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Strengthen contingency plans for standby 24/7 services for water supply in case of interruption. ● Strict implementation of material specification standards and construction (National building code of the Philippines; National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials ● The concerned agency should have an allocation for the repair and replacement of mainline pipes in case it will be hit by hazards.

Table LU-255. Major Decision Areas- 1 Matrix

DECISION AREAS	BARANGAY DESCRIPTION	PROBLEMS/HAZARDS	IMPACTS/IMPLICATIONS	POLICY INTERVENTIONS
TALOMO	<p>Locational Characteristics: Coastal/Riverbank Rural/Urban Classification: Urban</p> <p>Likelihood of Occurrence for Flood: Frequent (Every 1-3 years) Likelihood of Occurrence for Landslide: Moderate (Every >3-10 years)</p>	<ul style="list-style-type: none"> ● Portion of C.P Garcia Highway and Davao -Bukidnon road are at moderate risk to flood. ● Portion of C.P Garcia Highway is at high risk to landslide. ● Portion of Davao-Bukidnon Road is moderately vulnerable to active fault. ● Portion of Davao-Bukidnon Road is highly vulnerable to liquefaction. ● Four (4) DCWD wells are at moderate risk to flood 	<ul style="list-style-type: none"> ● Interruption of road access, within Talomo portion of the C.P Garcia Highway which could affect also the passage of vehicles to barangay Buhangin, Cabantian, Ma-a, Matina Crossing and Tigatto due to flood events. ● Occurrence of earthquake of heavy magnitude may cause short interruption of traffic. 	<ul style="list-style-type: none"> ● Hazard retrofitting of existing structure ● Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk
TUGBOK	<p>Locational Characteristics: Riverbank Rural/Urban Classification: Urban</p> <p>Likelihood of Occurrence for Flood: Frequent (Every 1-3 years)</p>	<ul style="list-style-type: none"> ● Tugbok Substation is at moderate risk to flood ● A total of 15 mainline pipes are at high risk to flood; six mainline pipes are at moderate risk to flood. ● A total of three (3) DCWD wells are at moderate to flood. ● A total of 10.04 meters of mainline pipes are moderately vulnerable to active fault. 	<ul style="list-style-type: none"> ● Minimal to negligible implications in terms of power supply once the flood hits due to high adaptive capacity. ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage. 	<ul style="list-style-type: none"> ● Hazard retrofitting of existing structure ● Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk
ULA	<p>Locational Characteristics: Riverbank Rural/Urban Classification: Rural</p> <p>Likelihood of Occurrence for Flood: Improbable (Every 30-100 years)</p>	<ul style="list-style-type: none"> ● A total of two (2) wells for Level I Water Supply are at moderate risk to flood. 	<ul style="list-style-type: none"> ● There will be temporary water interruption depending on the severity of impact. ● There will be replacement cost/repair cost based on the degree of damage 	<ul style="list-style-type: none"> ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas ● Strict implementation of material specification standards and construction (National building code of the Philippines; ● National Structural Code for Buildings; American National Standard Institute/American Water works Association; Standard Specifications and American Society for Testing and Materials.

Table LU-256. Major Decision Areas- 2 Matrix

DECISION AREAS	BARANGAY DESCRIPTION	PROBLEMS/HAZARDS	IMPACTS/IMPLICATIONS	POLICY INTERVENTIONS
19-B	<p>Locational Characteristics: Inland Rural/Urban Classification: Urban</p> <p>Likelihood of Occurrence for flood; Frequent (Every 1-3 years)</p>	<ul style="list-style-type: none"> • Portions of Florentino Torres St. and Jose P. Laurel in this barangay are moderately vulnerable to storm surge. • Portion of Florentino Torres St. is moderately vulnerable to liquefaction. • Portion of Jose P. Laurel is highly vulnerable to liquefaction. • A total of 602.47 meters of mainline pipes are at high risk to flood. 	<ul style="list-style-type: none"> • There will be road interruption ones J.P Laurel St. and Florentino Torres St. will be hit by storm surge and liquefaction. • There will be replacement cost/repair cost based on the degree of damage 	<ul style="list-style-type: none"> • Establishment of alternate routes. • Hazard retrofitting of existing structure • Strengthen contingency plans for alternative methods of water supply delivery to affected areas • Strict implementation of material specification standards and construction (National building code of the Philippines); • National Structural Code for Buildings; American National Standard Institute/ American Water works Association; Standard Specifications and American Society for Testing and Materials.
BUHANGIN	<p>Locational Characteristics: Riverbank Likelihood of Occurrence for Landslide: Moderate (Every >3-10 years) Rural/Urban Classification: Urban</p> <p>Likelihood of Occurrence for Flood: Moderate (Every >3-10 years)</p>	<ul style="list-style-type: none"> • Portion of C.P Garcia Highway is at high risk of flood. • Portion of C.P Garcia Highway is at high risk of landslide. 	<ul style="list-style-type: none"> • Road interruptions that will affect mobility of vehicles towards Bunawan Area and those from northern areas going to the central business district. • There will be replacement cost/repair cost based on the degree of damage 	<ul style="list-style-type: none"> • Establishment of alternate routes • Hazard retrofitting of existing structure
BUNAWAN	<p>Locational Characteristics: Coastal Rural/Urban Classification: Urban Likelihood of Occurrence Flood: Frequent (Every 1-3 years) Likelihood of Occurrence for Landslide: Occasional (Every >10-30 years)</p>	<ul style="list-style-type: none"> • Two (2) Level I Spring sources are at moderate risk to flood. 	<ul style="list-style-type: none"> • Water interruptions for number of hours to barangays serviced by spring and well sources. • There will be replacement cost/repair cost based on the degree of damage 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas • Strict implementation of material specification standards and construction (National building code of the Philippines); • National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials.
CROSSING BAYABAS	<p>Locational Characteristics: Riverbank(Lipadas River) Rural/Urban Classification: Urban Likelihood of Occurrence for Flood: Moderate (Every >3-10 years)</p>	<ul style="list-style-type: none"> • Portion of McArthur Highway is vulnerable to liquefaction. 	<ul style="list-style-type: none"> • Road interruptions that will affect mobility of vehicles towards Bunawan Area and those from northern areas. • There will be replacement cost/repair cost based on the degree of damage 	<ul style="list-style-type: none"> • Establishment of alternate routes • Hazard retrofitting of existing structure

Table LU-256. Major Decision Areas- 2 Matrix

DECISION AREAS	BARANGAY DESCRIPTION	PROBLEMS/HAZARDS	IMPACTS/IMPLICATIONS	POLICY INTERVENTIONS
DALIAO	<p>Locational Characteristics: Coastal Rural/Urban Classification: Urban Likelihood of Occurrence for Flood : Improbable (Every>30-100 years) Likelihood of Occurrence for Landslide: Occasional (Every>10-30 years)</p>	<ul style="list-style-type: none"> • A total of ten (10) spring sources are at moderate risk to flood. • A total of 24 spring sources are at high risk to landslide. 	<ul style="list-style-type: none"> • Water interruptions for number of hours to barangays serviced by spring and well sources • There will be replacement cost/repair cost based on the degree of damage 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas • Strict implementation of material specification standards and construction (National building code of the Philippines); • National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials
LIZADA	<p>Locational Characteristics: Coastal Rural/Urban Classification: Urban Likelihood of Occurrence Flood: Frequent (Every 1-3 years) Likelihood of Occurrence for Landslide: Occasional (Every >10-30 years)</p>	<ul style="list-style-type: none"> • A total of four (4) spring sources are at high risk to flood. • Lipadas Bridge I and II are vulnerable to active fault. • A portion of McArthur Highway is vulnerable to active fault. • A portion of McArthur Highway is highly vulnerable to liquefaction. 	<ul style="list-style-type: none"> • Water interruptions for number of hours to barangays serviced by spring and well sources • Traffic interruption in case of earthquake and liquefaction. • There will be replacement cost/repair cost based on the degree of damage 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas • Strict implementation of material specification standards and construction (National building code of the Philippines); • National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials
MAGTUOD	<p>Locational Characteristics: Rural Inland Rural/Urban Classification: Urban *no likelihood of occurrence for both landslide and flood</p>	<ul style="list-style-type: none"> • A portion of Carlos P. Garcia Highway is highly vulnerable to landslide. 	<ul style="list-style-type: none"> • Traffic interruptions in case of landslide. • There will be replacement cost/repair cost based on the degree of damage 	<ul style="list-style-type: none"> • Ensure structural mitigation to prevent landslide.
MAHAYAG	<p>Locational Characteristics: Inland Rural/Urban Classification: Urban Likelihood of Occurrence for Flood: Occasional (Every >10-30 years)</p>	<ul style="list-style-type: none"> • A portion of Davao-Agusan Highway is moderately vulnerable to storm surge. 	<ul style="list-style-type: none"> • Traffic interruption due to storm surge. 	<ul style="list-style-type: none"> • Establishment of alternate roads parallel to existing bridge, to ensure uninterrupted linkage • Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk • Retrofitting of existing bridge to accommodate 100 years of floods.

Table LU-256. Major Decision Areas- 2 Matrix

DECISION AREAS	BARANGAY DESCRIPTION	PROBLEMS/HAZARDS	IMPACTS/IMPLICATIONS	POLICY INTERVENTIONS
PANACAN	Locational Characteristics: Coastal Rural/Urban Classification: Urban Likelihood of Occurrence for Flood: Moderate (Every 3-10 years) Likelihood of Occurrence for Landslide: Occasional (Every >10-30 years)	<ul style="list-style-type: none"> ● Panacan Bridge is in moderate risk of flood. ● A total of two Level I spring sources are at high risk to flood ● A total of two wells are at high risk to landslide. ● A portion of Carlos P. Garcia Highway and Davao-Agusan Highway are moderately vulnerable to storm surge. 	<ul style="list-style-type: none"> ● Traffic interruption in case of flood. ● Replacement and repair cost based on the degree of damage. ● Traffic interruption because of storm surge. 	<ul style="list-style-type: none"> ● Establishment of alternate roads parallel to existing bridge, to ensure uninterrupted linkage ● Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk ● Retrofitting of existing bridge to accommodate 100 years of floods. ● Strengthen contingency plans for alternative methods of water supply delivery to affected areas
SAN ISIDRO	Locational Characteristics: Riverbank Rural/Urban Classification: Rural Likelihood of Occurrence for Landslide: Occasional (>10-30 years)	<ul style="list-style-type: none"> ● A total of two wells are at high risk to landslide 	<ul style="list-style-type: none"> ● Water Interruptions, repair cost 	<ul style="list-style-type: none"> ● Establishment of alternate roads parallel to existing bridge, to ensure uninterrupted linkage ● Construct flood resistant river dike system especially before and after bridges that have been classified into moderate/high risk <ul style="list-style-type: none"> ● Retrofitting of existing bridge to accommodate 100 years of floods.
TIGATTO	Locational Characteristics: Riverbank Rural/Urban Classification: Urban Likelihood of Occurrence for Flood: Frequent (Every 1-3 years) Likelihood of Occurrence for Landslide: Moderate (Every>3-10 years)	<ul style="list-style-type: none"> ● A portion of C. P Garcia Highway are at moderate risk to flood. A portion of Carlos P. Garcia Highway is highly vulnerable to liquefaction. 	<ul style="list-style-type: none"> ● Traffic interruption. ● Replacement and repair cost depending on the damage. 	<ul style="list-style-type: none"> ● Establishment of alternate roads parallel to existing bridge, to ensure uninterrupted linkage
TORIL	Locational Characteristics: Inland Rural/Urban Classification: Urban Likelihood Occurrence for Flood: Occasional (Every >10-30 years)	<ul style="list-style-type: none"> ● One cell site is moderately vulnerable to storm surge. 	<ul style="list-style-type: none"> ● Telecommunications interruption. Lack of signal in affected areas. 	<ul style="list-style-type: none"> ● Immediate actions and alternative solutions like mobile towers in terms of telecommunication interruptions.

LU-257. Major Decision Areas-3 Matrix , Davao City

DECISION AREAS	BARANGAY DESCRIPTION	PROBLEMS/HAZARDS	IMPACTS/IMPLICATIONS	POLICY INTERVENTIONS
LUMIAD	Locational Characteristics: Inland Rural/Urban Classification: Rural Likelihood of Occurrence: Moderate (Every>3-10 years)	<ul style="list-style-type: none"> • Level 2 water sources are at high risk of rain induced landslide. 	<ul style="list-style-type: none"> • Water Interruptions • Repair cost depending on the degree of impact. 	<ul style="list-style-type: none"> • Strengthen contingency plans for alternative methods of water supply delivery to affected areas • Strict implementation of material specification standards and construction (National building code of the Philippines; • National Structural Code for Buildings; American National Standard Institute/ American Waterworks Association; Standard Specifications and American Society for Testing and Materials
MALABOG	Locational Characteristics: Riverbank Rural/Urban Classification: Rural	<ul style="list-style-type: none"> • Crossing Malabog Bridge is moderately vulnerable to landslide. • Fatima-Malabog Road is moderately vulnerable to active fault. 	<ul style="list-style-type: none"> • Water and traffic interruptions in case of earthquake from active fault. • Repair cost depending on the degree of impact 	<ul style="list-style-type: none"> • Establishment of alternate roads parallel to existing bridge, to ensure uninterrupted linkage • Ensure structural mitigation to prevent landslide.
PAQUIBATO	Locational Characteristics: Riverbank Rural/Urban Classification: Rural Likelihood of Occurrence: Improbable (Every >30-100 years)	<ul style="list-style-type: none"> • Fatima-Malabog Road is highly vulnerable to landslide. 	<ul style="list-style-type: none"> • Traffic interruption due to landslide 	<ul style="list-style-type: none"> • Establishment of alternate roads parallel to existing bridge, to ensure uninterrupted linkage • Ensure structural mitigation to prevent landslide.

Map 5.31 Lifeline Utilities, Risk Map to Landslide, Davao City

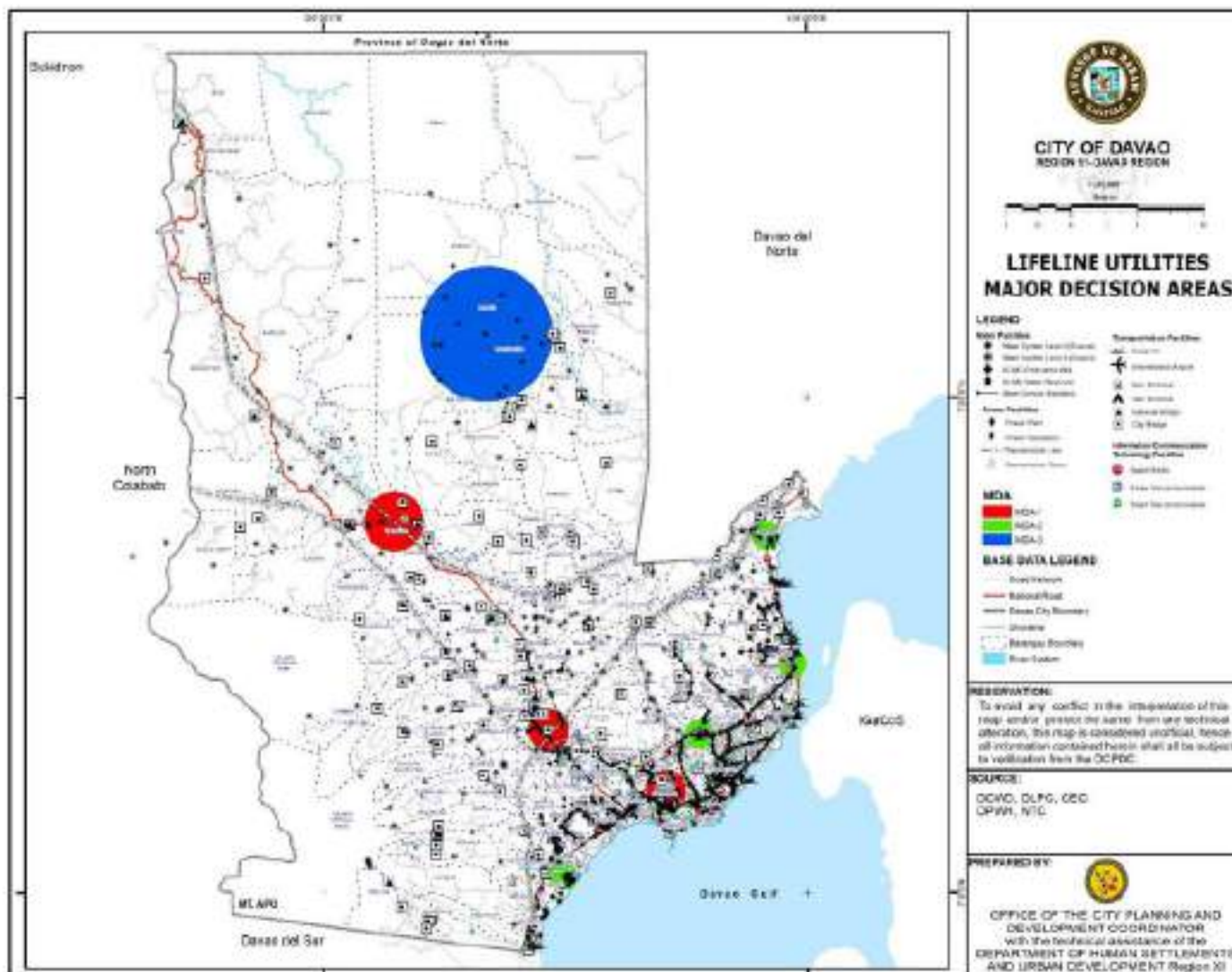


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CLIMATE CHANGE VULNERABILITY ASSESSMENT

Natural Resource-Based Production Areas (NRBPAs) cover agriculture, forestry, and fishery production areas. Changes in climate and incidences of different calamities may potentially hamper these areas and result to the reduction on agricultural production, low food supply, and coastal and forest ecosystem degradation. Indeed, there is a need to consider the potential threats of natural hazards and climate change. Without considering the threats, interventions may lead to creation of new risks and maladaptation. Unsustainable utilization and management of natural resources may as well be among the factors that generate new risks by exposing vulnerable elements in hazard prone areas. As way to reduce the impacts on NRBPAs, a climate change vulnerability assessment is conducted, where the vulnerable areas are identified recommended policy interventions are provided.

Natural Resource-Based Production Area Exposure Attributes

The succeeding tables include information on the area allocated for NRBPAs, dominant crop or variety in the area, annual production output per hectare, number of farmers who employ sustainable production techniques, proportion of population engaged in production aware of natural hazards associated with climate change, proportion of production areas covered by hazard control measures, and other pertinent details related to agriculture, forestry, and fishery production areas. Below are the summary of the tables per hazard:

Flood – A total of 129 barangays, which have NRBPAs, are susceptible to floods. Of the total, 82 barangays are mostly planted with coconuts, which occupy a combined land size of 77,489 hectares and reaped an annual average output per hectare at ₱2,983,870 (Table NR – 1). There are also 4,583 farming families who attended climate field school, 4,659 farming families who use sustainable production techniques, and 5,463 farmers who have access to hazard information. The remaining barangays, on the other hand, have different dominant varieties. Vegetables are dominant in Buda and Salumay (2,104.36 hectares) while rice is largely planted in Calinan, Gumitan, and Los Amigos (1,790.22 hectares). Corn is widely planted in Lumiad, Baganihan, and Magsaysay in farms that total to 2,635 hectares. Bananas, whether for local or international markets, are propagated in areas that span 7,798.81 hectares in Tigatto, San Isidro, Sirib, Tamayong, Salaysay, Bago Aplaya, Pañalum, and Dalian Plantation. Pelagic fishes also dominate in Matina Aplaya and Lasang (460.68 hectares) while catfish (hito) is propagated in Los Amigos (27.50 hectares). Barangays Cawayan, Sirawan, and Sibulan have pineapples (777.62 hectares), mango (730.75 hectares), and abaca (501.15 hectares), respectively.

Table NR – 1. Natural Resource Production Area Exposure Attributes, Flood, Davao City

Barangay	Exposure					Sensitivity					Adaptive Capacity				
	Number of farm- ing dependent house- holds	Total Area Allo- cation (Has.)	Dominant Crop/ Variety of Produce	Average output per hec- tare (PHP)	Number of farm- ing fami- lies who attended climate field school	Propor- tion of farming families using sus- tainable produc- tion tech- niques	Number of farm- ers with access to hazard infor- mation	Number of pro- duction areas with in- frastruc- ture cover- age	% Areas with irri- gation coverage	% Areas with wa- ter im- poundme nt	Access to insurance	Agricul- tural ex- tension services of the local gov- ernment	Early warning systems	Alterna- tive Liveli- hood	Govern- ment Resources
Talomo District															
Bago Aplaya	550	14.19	banana	29,700	-	-	Yes	-	-	-	Yes	Yes	Yes	-	Yes
Bago Gal- lera	-	335.90	coconut	61,972	-	-	-	-	-	-	Yes	Yes	Yes	-	Yes
Baliok	-	120.58	coconut	61,062	-	-	Yes	-	-	-	Yes	Yes	Yes	-	Yes
Bucana	23,624	3.16	-	-	-	-	-	-	-	-	-	-	Yes	-	Yes
Catalunan Grande	-	862.74	coconut	74,117	-	-	Yes	-	-	-	Yes	Yes	Yes	-	Yes
Catalunan Pequeño	-	250.64	coconut	60,731	-	-	Yes	-	-	-	Yes	Yes	Yes	-	Yes
Dumoy	538	195.07	coconut	62,718	-	-	No	-	-	-	-	Yes	Yes	-	Yes
Langub	-	502.37	coconut	73,248	-	-	Yes	-	1.11	-	Yes	Yes	Yes	-	Yes
Ma-a	-	76.80	coconut	68,941	-	-	Yes	-	-	-	Yes	Yes	Yes	-	Yes
Magtuod	-	355.59	coconut	71,590	-	-	Yes	-	-	-	Yes	Yes	Yes	-	Yes
Matina Aplaya	266	5.16	Pelagic Fishes	168,000,000	-	-	-	-	-	-	-	-	Yes	-	Yes
Matina Crossing	-	7.94	-	-	-	-	-	-	-	-	-	-	Yes	-	Yes
Matina Pangi	-	213.60	coconut	54,793	-	-	Yes	-	-	-	Yes	Yes	Yes	-	Yes
Talomo	72,538	89.14	-	-	-	-	Yes	-	-	-	-	Yes	Yes	-	Yes
Buhangin District															

Table NR – 1. Natural Resource Production Area Exposure Attributes, Flood, Davao City

Barangay	Exposure				Sensitivity						Adaptive Capacity			
	Number of farm- dependent house- holds	Total Area Allo- cation (Has.)	Dominant Crop/ Variety of Produce	Average output per hec- tare (PHP)	Number of farm- ing fami- lies who attended climate field school	Propor- tion of farming families using sus- tainable produc- tion tech- niques	Number of farm- ers with access to hazard infor- mation	Number of pro- duction areas with in- frastructu- re cover- age	% Areas with irri- gation coverage	% Areas with wa- ter im- poundme- nt	Access to insurance	Agricul- tural ex- tension services of the local gov- ernment	Early warning systems	Alterna- tive Liveli- hood
Acacia	167	738.89	coconut	21,000	-	-	-	No	-	-	Yes	Yes	-	Yes
Buhangin	-	123.37	-	-	-	-	No	-	-	-	Yes	Yes	-	Yes
Cabantian	30	231.75	-	-	-	-	No	-	-	-	Yes	Yes	-	Yes
Callawa	131	835.33	coconut	28,540	-	-	Yes	6.71	1.71	-	Yes	Yes	-	Yes
Communal	-	277.18	-	-	-	-	No	-	-	-	-	Yes	-	Yes
Indangan	55	1,112.40	coconut	30,000	-	-	Yes	-	-	-	Yes	Yes	-	Yes
Mandug	180	603.45	coconut	30,000	-	-	Yes	-	-	-	Yes	Yes	-	Yes
Sasa	1500	22.71	-	-	-	-	No	-	-	-	-	Yes	-	Yes
Tigatto	80	354.51	banana local	101,000	-	-	Yes	8.82	-	-	Yes	Yes	-	Yes
Waan	275	352.74	coconut	10,109	-	-	Yes	-	-	-	Yes	Yes	-	Yes
Bunawan District														
Bunawan	200	380.57	-	-	-	-	No	-	-	-	-	Yes	-	Yes
Gatungan	273	1,125.29	coconut	31,132	-	-	Yes	-	-	-	Yes	Yes	-	Yes
Ilang	4305	228.31	-	-	-	-	No	-	-	-	-	Yes	-	Yes
Lasang	300	455.52	Pelagic Fishes	-	-	-	Yes	-	-	-	-	Yes	-	Yes
Mahayag	465	407.79	coconut	30,000	-	-	No	-	-	-	Yes	Yes	-	Yes
Mudiang	307	561.40	coconut	31,789	-	-	No	-	-	-	Yes	Yes	-	Yes
Panacan	2000	201.64	-	-	-	-	Yes	-	-	-	-	Yes	-	Yes

Table NR – 1. Natural Resource Production Area Exposure Attributes, Flood, Davao City

Barangay	Exposure					Sensitivity					Adaptive Capacity				
	Number of farm- dependent house- holds	Total Area Allo- cation (Has.)	Dominant Crop/ Variety of Produce	Average output per hec- tare (PHP)	Number of farm- ing fami- lies who attended climate field school	Propor- tion of farming families using sus- tainable produc- tion tech- niques	Number of farm- ers with access to hazard infor- mation	Number of pro- duction areas with in- frastruc- ture cover- age	% Areas with irri- gation coverage	% Areas with wa- ter im- poundme nt	Access to insurance	Agricul- tural ex- tension services of the local gov- ernment	Early warning systems	Alterna- tive Liveli- hood	Govern- ment Resources
San Isidro	286	518.52	banana local	73,575	-	-	-	Yes	-	-	Yes	Yes	Yes	-	Yes
Tibungco	9255	450.59	-	-	-	-	No	-	-	-	-	Yes	Yes	-	Yes
Paquiba- to District															
Colosas	1396	3,608.87	coconut	5,794	105	50	105	Yes	-	-	Yes	Yes	Yes	45	Yes
Fatima	992	2,473.51	coconut	5,717	180	47	180	Yes	-	-	Yes	Yes	Yes	70	Yes
Lumiad	488	885.86	corn	71,941	110	60	110	Yes	-	-	Yes	Yes	Yes	90	Yes
Mabuhay	385	997.56	coconut	4,396	50	25	50	Yes	0.52	-	Yes	Yes	Yes	12	Yes
Malabog	3030	3,527.92	coconut	11,833	300	100	300	Yes	-	-	Yes	Yes	Yes	500	Yes
Mapula	992	1,932.29	coconut	22,669	190	70	190	Yes	-	0.15	Yes	Yes	Yes	100	Yes
Pandaitan	1045	2,036.11	coconut	13,139	240	80	240	Yes	-	-	Yes	Yes	Yes	40	Yes
Pañalum	560	609.23	banana	52,178	120	40	120	Yes	-	-	Yes	Yes	Yes	20	Yes
Paquibato	788	1,375.53	coconut	16,716	160	70	160	Yes	-	-	Yes	Yes	Yes	200	Yes
Paradise Embac	980	1,731.39	coconut	17,182	140	75	140	Yes	-	-	Yes	Yes	Yes	36	Yes
Sala- pawan	678	176.45	coconut	6,158	100	68	100	Yes	-	-	Yes	Yes	Yes	10	Yes
Sumimao	407	1,434.92	coconut	1,910	170	43	170	Yes	0.05	-	Yes	Yes	Yes	25	Yes
Tapak	1428	1,269.49	coconut	16,131	140	40	140	Yes	-	-	Yes	Yes	Yes	100	Yes
Baguio District															
Baguio	858	638.57	coconut	38,187	47	215	47	Yes	-	-	Yes	Yes	Yes	48	Yes

Table NR – 1. Natural Resource Production Area Exposure Attributes, Flood, Davao City

Barangay	Exposure				Sensitivity						Adaptive Capacity				
	Number of farm- ing dependent house- holds	Total Area Allo- cation (Has.)	Dominant Crop/ Variety of Produce	Average output per hec- tare (PHP)	Number of farm- ing fami- lies who attended climate field school	Propor- tion of farming families using sus- tainable produc- tion tech- niques	Number of farm- ers with access to hazard infor- mation	Number of pro- duction areas with in- frastructu- re cover- age	% Areas with irri- gation coverage	% Areas with wa- ter im- poundme nt	Access to insurance	Agricul- tural ex- tension services of the local gov- ernment	Early warning systems	Alterna- tive Liveli- hood	Govern- ment Resources
Cadalian	454	616.55	coconut	39,195	115	383	115	Yes	-	-	357	Yes	Yes	20	Yes
Carmen	441	340.03	cacao	78,600	55	348	55	Yes	-	-	24	Yes	Yes	68	Yes
Gumalang	819	1,394.99	coconut	39,250	110	680	110	Yes	3.78	-	45	Yes	Yes	59	Yes
Malagos	976	826.54	coconut	38,359	160	571	160	Yes	2.26	-	25	Yes	Yes	15	Yes
Tam- bobong	1082	349.39	coconut	32,089	75	150	75	Yes	-	-	1,151	Yes	Yes	45	Yes
Tawan- Tawan	765	874.21	cacao	84,555	156	544	156	Yes	1.49	-	394	Yes	Yes	140	Yes
Wines	476	855.76	coconut	39,098	80	355	80	Yes	8.25	-	61	Yes	Yes	20	Yes
Calinan District															
Biao Joaquin	665	513.94	coconut	35,291	60	16	60	Yes	-	0.52	148	Yes	Yes	-	Yes
Calinan	2661	611.68	rice	81,940	70	10	70	Yes	6533.33	-	112	Yes	Yes	-	Yes
Cawayan	641	777.62	pineapple	574,200	35	5	35	Yes	1.53	-	25	Yes	Yes	-	Yes
Dacudao	1197	1,123.77	coconut	38,065	40	-	40	Yes	-	-	60	Yes	Yes	-	Yes
Dalagdag	280	317.69	coconut	32,540	30	4	30	Yes	4.38	-	15	Yes	Yes	-	Yes
Dominga	378	498.35	coconut	34,043	45	10	45	No	-	-	43	Yes	Yes	-	Yes
Inayangan	1401	1,138.27	coconut	34,045	45	10	45	Yes	-	-	60	Yes	Yes	-	Yes
Lacson	466	764.19	coconut	38,039	60	10	60	Yes	8.77	-	20	Yes	Yes	-	Yes
Lamanan	1459	1,427.04	coconut	35,047	56	10	56	Yes	-	-	45	Yes	Yes	-	Yes
Lam- pianao	184	794.41	coconut	32,541	50	10	50	Yes	-	0.97	35	Yes	Yes	-	Yes

Table NR – 1. Natural Resource Production Area Exposure Attributes, Flood, Davao City

Barangay	Exposure				Sensitivity						Adaptive Capacity				
	Number of farm- dependent house- holds	Total Area Allo- cation (Has.)	Dominant Crop/ Variety of Produce	Average output per hec- tare (PHP)	Number of farm- ing fami- lies who attended climate field school	Propor- tion of farming families using sus- tainable produc- tion tech- niques	Number of farm- ers with access to hazard infor- mation	Number of pro- duction areas with in- frastructu- re cover- age	% Areas with irri- gation coverage	% Areas with wa- ter im- poundme nt	Access to insurance	Agricul- tural ex- tension services of the local gov- ernment	Early warning systems	Alterna- tive Liveli- hood	Govern- ment Resources
Megka- wayan	706	1,551.55	cacao	69,371	36	20	36	Yes	-	-	-	Yes	Yes	-	Yes
Pangyan	203	660.52	coconut	26,517	31	10	31	Yes	-	-	35	Yes	Yes	-	Yes
Riverside	1883	421.37	coconut	38,100	36	10	36	Yes	41.85	-	11	Yes	Yes	-	Yes
Saloy	459	990.07	coconut	39,071	70	10	70	Yes	-	-	45	Yes	Yes	-	Yes
Sirib	1343	2,120.12	banana cav.	407,720	60	15	60	Yes	-	-	14	Yes	Yes	-	Yes
Subasta	911	1,172.23	coconut	38,059	65	5	65	Yes	1.02	-	75	Yes	Yes	-	Yes
Talomo River	1551	707.69	coconut	37,113	65	20	65	Yes	-	1.48	30	Yes	Yes	-	Yes
Tamayong	1685	1,356.14	banana cav.	554,376	75	15	75	Yes	-	-	80	Yes	Yes	-	Yes
Wangan	1746	1,147.83	coconut	39,098	65	12	65	Yes	4.28	0.05		Yes	Yes	-	Yes
Marilog District															
Baganihan	375	168.75	corn	48,000	30	15	113	Yes	-	-	80	Yes	Yes	262	Yes
Bantol	570	408.76	coconut	36,174	150	200	150	Yes	-	-	75	Yes	Yes	399	Yes
Buda	554	1,422.90	vegeta- bles	75,600	20	10	20	Yes	1.05	-	-	Yes	Yes	388	Yes
Dalag Lumot	569	140.76	cacao	-	100	200	100	Yes	-	-	1	Yes	Yes	306	Yes
Datu Salumay	578	681.46	vegeta- bles	-	150	150	150	Yes	-	-	-	Yes	Yes	404	Yes
Gumitan	550	814.50	rice	31,556	25	25	25	Yes	-	-	-	Yes	Yes	398	Yes

Table NR – 1. Natural Resource Production Area Exposure Attributes, Flood, Davao City

Barangay	Exposure				Sensitivity						Adaptive Capacity				
	Number of farm- dependent house- holds	Total Area Allo- cation (Has.)	Dominant Crop/ Variety of Produce	Average output per hec- tare (PHP)	Number of farm- ing fami- lies who attended climate field school	Propor- tion of farming families using sus- tainable produc- tion tech- niques	Number of farm- ers with access to hazard infor- mation	Number of pro- duction areas with in- frastructu- re cover- age	% Areas with irri- gation coverage	% Areas with wa- ter im- poundme nt	Access to insurance	Agricul- tural ex- tension services of the local gov- ernment	Early warning systems	Alterna- tive Liveli- hood	Govern- ment Resources
Mag-saysay	705	1,580.09	corn	60,000	100	75	212	Yes	-	-	15	Yes	Yes	493	Yes
Malamba	1318	1,729.27	coconut	35,087	60	200	60	Yes	-	-	27	Yes	Yes	132	Yes
Marilog	4300	3,936.82	coconut	34,207	500	375	860	Yes	0.30	-	88	Yes	Yes	2,802	Yes
Salaysay	904	1,854.46	banana cav.	36	150	300	150	Yes	0.42	-		Yes	Yes	632	Yes
Suawan	1240	1,684.68	coconut	34,192	100	100	620	Yes	1.11	-	95	Yes	Yes	868	Yes
Tamugan	2123	946.09	coconut	39,214	200	100	200	Yes	-	-	80	Yes	Yes	1,910	Yes
Toril Dis- trict															
Alambre	669	280.59	coconut	44,000	25	20	25	Yes	3.79	-	10	Yes	Yes	15	Yes
Atan-Awe	323	319.38	coconut	42,500	25	30	25	No	-	-	20	Yes	Yes	105	Yes
Bankas Heights	113	205.75	coconut	44,000	5	30	5	Yes	-	-	2	Yes	Yes	20	Yes
Baracatan	567	1,085.56	coconut	41,000	30	30	30	No	-	-	-	Yes	Yes	18	Yes
Bato	235	745.05	coconut	35,000	25	25	25	No	2.55	-	10	Yes	Yes	53	Yes
Bayabas	780	1,183.42	coconut	37,500	5	20	5	No	-	-	5	Yes	Yes	50	Yes
Crossing Bayabas	-	78.79	-	-	-	-	-	No	-	-	-	-	Yes	-	Yes
Binugao	1996	290.68	coconut	38,000	25	25	25	Yes	-	-	-	Yes	Yes	35	Yes
Camansi	372	349.76	coconut	37,500	35	30	35	Yes	-	-	2	Yes	Yes	20	Yes
Catigan	813	2,329.75	coconut	40,000	50	60	50	Yes	-	-	-	Yes	Yes	170	Yes
Daliao	4471	4.68	-	-	-	-	-	Yes	-	-	-	-	Yes	-	Yes

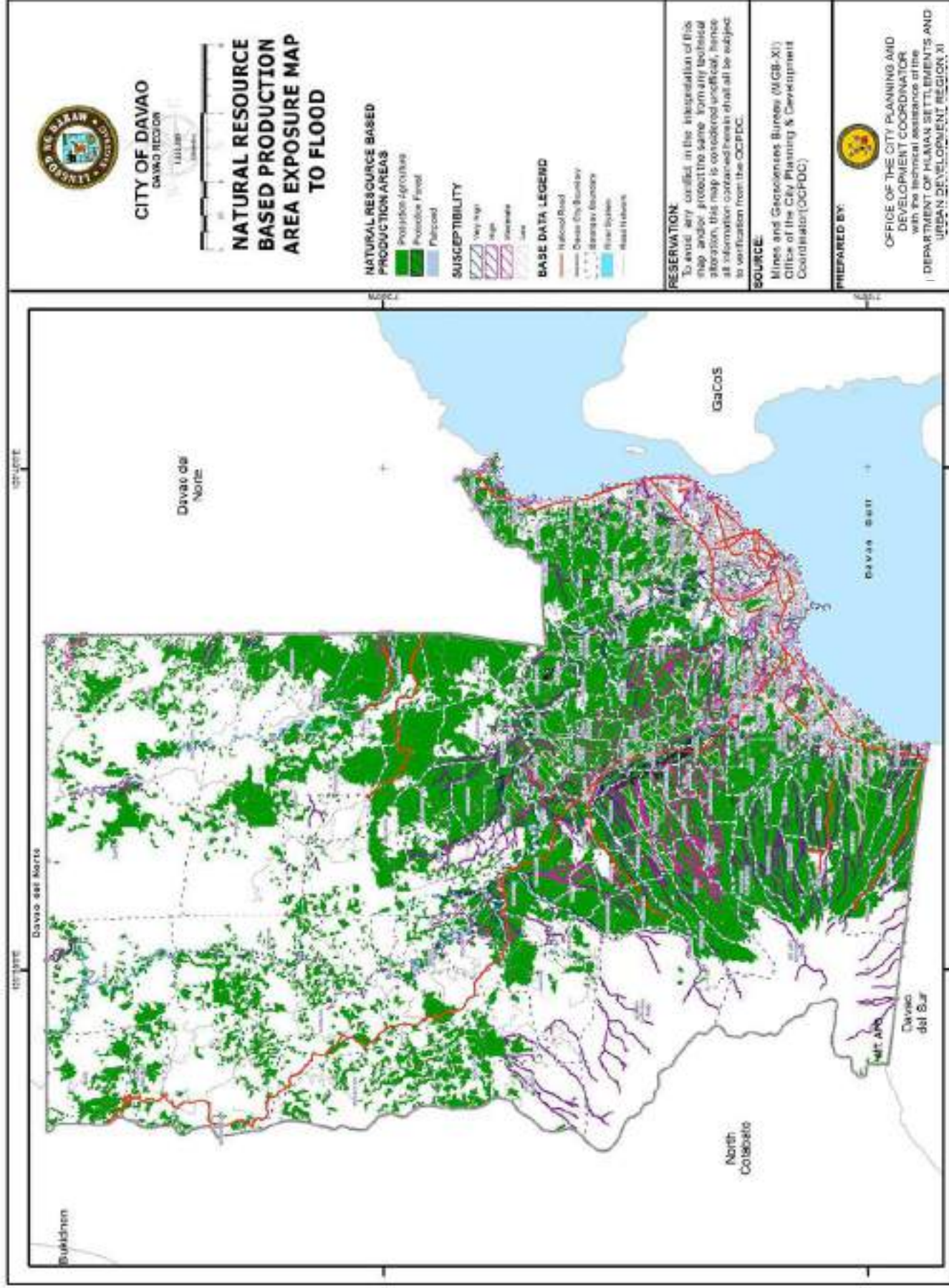
Table NR – 1. Natural Resource Production Area Exposure Attributes, Flood, Davao City

Barangay	Exposure					Sensitivity					Adaptive Capacity				
	Number of farm- dependent house- holds	Total Area Allo- cation (Has.)	Dominant Crop/ Variety of Produce	Average output per hec- tare (PHP)	Number of farm- ing fami- lies who attended climate field school	Propor- tion of farming families using sus- tainable produc- tion tech- niques	Number of farm- ers with access to hazard infor- mation	Number of pro- duction areas with in- frastruc- ture cover- age	% Areas with irri- gation coverage	% Areas with wa- ter im- poundme nt	Access to insurance	Agricul- tural ex- tension services of the local gov- ernment	Early warning systems	Alterna- tive Liveli- hood	Govern- ment Resources
Daliao Plantation	1352	971.65	banana	640,000	30	25	30	Yes	-	-	Yes	Yes	Yes	200	Yes
Eden	612	464.93	durian	150,000	25	30	25	No	-	-	No	Yes	Yes	70	Yes
Kilate	305	633.71	-	-	-	15	-	No	-	-	No	Yes	Yes	45	Yes
Lizada	4147	251.72	-	-	-	10	-	No	-	-	No	-	Yes	-	Yes
Lubogan		72.90	-	-	-	-	-	Yes	-	-	Yes	-	Yes	-	Yes
Marapang i	142	526.81	-	-	20	30	20	Yes	-	-	Yes	Yes	Yes	60	Yes
Mulig	502	980.43	coconut	44,500	55	30	55	No	-	-	No	Yes	Yes	215	Yes
Sibulan	606	501.15	abaca	90,000	120	80	120	Yes	-	-	Yes	Yes	Yes	150	Yes
Sirawan	1430	730.75	mango	200,000	25	20	25	Yes	-	-	Yes	Yes	Yes	50	Yes
Tagluno	396	551.66	coconut	40,000	75	25	75	Yes	-	-	Yes	Yes	Yes	35	Yes
Tagurano	319	498.36	coconut	39,500	-	20	-	No	-	-	No	Yes	Yes	30	Yes
Tibuloy	324	804.03	coconut	40,000	-	10	-	Yes	-	-	Yes	Yes	Yes	-	Yes
Toril	-	2.05	-	-	-	-	-	-	-	-	-	Yes	Yes	-	Yes
Tungkalan Tugbok District	790	1,755.69	coconut	40,500	50	75	50	Yes	0.85	-	Yes	Yes	Yes	115	Yes
Angalan Bago Oshiro	220	447.77	coconut	36,019	-	-	-	Yes	-	-	Yes	Yes	Yes	123	Yes
Balangaen	160	348.39	-	-	-	-	-	Yes	-	-	Yes	Yes	Yes	30	Yes
	186	441.08	coconut	36,000	-	15	-	Yes	11.48	-	Yes	Yes	Yes	82	Yes

Table NR – 1. Natural Resource Production Area Exposure Attributes, Flood, Davao City

Barangay	Exposure				Sensitivity						Adaptive Capacity				
	Number of farm- dependent house- holds	Total Area Allo- cation (Has.)	Dominant Crop/ Variety of Produce	Average output per hec- tare (PHP)	Number of farm- ing fami- lies who attended climate field school	Propor- tion of farming families using sus- tainable produc- tion tech- niques	Number of farm- ers with access to hazard infor- mation	Number of pro- duction areas with in- frastructu- re cover- age	% Areas with irri- gation coverage	% Areas with wa- ter im- poundme nt	Access to insurance	Agricul- tural ex- tension services of the local gov- ernment	Early warning systems	Alterna- tive Liveli- hood	Govern- ment Resources
Biao Es- cuela	250	1,284.53	coconut	34,250	-	8	-	Yes	-	0.50	82	Yes	Yes	40	Yes
Biao Gui- anga	200	466.00	coconut	34,628	-	6	-	Yes	-	2.86	55	Yes	Yes	181	Yes
Matina Biao	155	1,000.81	coconut	34,098	-	5	-	Yes	-	-	54	Yes	Yes	71	Yes
Los Ami- gos	220	364.04	rice	46,240	-	5	-	Yes	1987.58	15.53	42	Yes	Yes	75	Yes
Los Ami- gos	272	27.50	hito	1,707,687	-	5	-	Yes	1987.58	15.53	42	Yes	Yes	75	Yes
Manambu lan	236	751.58	coconut	36,100	-	-	-	Yes	-	-	30	Yes	Yes	31	Yes
Manuel Guianga	500	874.55	coconut	36,503	-	10	-	Yes	-	-	55	Yes	Yes	140	Yes
Mintal	-	435.08	coconut	48,958	-	-	-	No	-	-	8	Yes	Yes		Yes
New Car- men	234	956.39	coconut	72,543	-	-	-	No	-	-	76	Yes	Yes	102	Yes
New Va- lencia	400	880.77	coconut	36,524	52	10	52	Yes	-	0.19	154	Yes	Yes	131	Yes
Sto. Niño	-	1.47	-	-	-	-	-	No	-	-	-	Yes	Yes	-	Yes
Tacunan	250	790.18	coconut	33,999	36	15	36	Yes	-	1.84	85	Yes	Yes	109	Yes
Tagakpan	360	707.45	coconut	45,725	-	10	-	Yes	-	-	75	Yes	Yes	110	Yes
Talandang	400	1,220.69	coconut	34,014	-	10	-	Yes	1.36	-	138	Yes	Yes	219	Yes
Tugbok	356	716.56	coconut	39,469	-	-	-	Yes	-	-	-	Yes	Yes	64	Yes
Ula	160	856.08	coconut	35,032	-	6	-	Yes	-	0.30	110	Yes	Yes	60	Yes

Map 6.1. Natural Resource-Based Production Area Exposure Map to Flood, Davao City



Landslide – At least 128 barangays, which have NRBPAs, are susceptible to landslides (Table NR – 2). The dominant crop in these areas are coconuts, which span to 77,489.04 hectares in 82 barangays. These coconut farms are source of income to 53,617 farming dependent households. Farmers in these areas are also educated on the impacts of climate change and are able to utilize sustainable production techniques. If ever the farms would be affected by landslides, a total of 4,200 farmers in these areas have access to insurance. At least 9,800 of them have alternative livelihood. Other areas have different dominant varieties. All of these areas have early warning systems in case of emergencies.

Table NR – 2. Natural Resource Production Area Exposure Attributes, Landslide , Davao City

Barangay	Exposure				Sensitivity						Adaptive Capacity				
	Number of farming dependent households	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources
Talomo District															
Bago Aplaya	550	14.19	banana	29,700	-	-	Yes	-	-	-	Yes	Yes	Yes	-	Yes
Bago Gallera	-	335.90	coconut	61,972	-	-	-	-	-	-	Yes	Yes	-	-	Yes
Baliok	-	120.58	coconut	61,062	-	-	Yes	-	-	-	Yes	Yes	-	-	Yes
Bucana	23,624	3.16	-	-	-	-	-	-	-	-	-	Yes	-	-	Yes
Catalunan Grande	-	862.74	coconut	74,117	-	-	Yes	-	-	-	Yes	Yes	-	-	Yes
Catalunan Pequeño	-	250.64	coconut	60,731	-	-	Yes	-	-	-	-	Yes	-	-	Yes
Dumoy	538	195.07	coconut	62,718	-	-	No	-	-	-	Yes	Yes	-	-	Yes
Langub	-	502.37	coconut	73,248	-	-	Yes	-	1.11	-	Yes	Yes	-	-	Yes
Ma-a	-	76.80	coconut	68,941	-	-	Yes	-	-	-	Yes	Yes	-	-	Yes
Magtuod	-	355.59	coconut	71,590	-	-	Yes	-	-	-	Yes	Yes	-	-	Yes

Table NR – 2. Natural Resource Production Area Exposure Attributes, Landslide , Davao City

Barangay	Exposure					Sensitivity					Adaptive Capacity			
	Number of farming dependent households	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood
Matina Aplaya	-	3.16	-	-	-	-	-	-	-	-	-	Yes	-	Yes
Matina Crossing	-	7.94	-	-	-	-	-	-	-	-	-	Yes	-	Yes
Matina Pangi	-	213.60	coconut	54,793	-	-	Yes	-	-	-	Yes	Yes	-	Yes
Talomo	72,538	89.14	-	-	-	-	Yes	-	-	-	-	Yes	-	Yes
Buhangin District														
Acacia	167	738.89	coconut	21,000	-	-	No	-	-	-	Yes	Yes	-	Yes
Buhangin	-	123.37	-	-	-	-	No	-	-	-	-	Yes	-	Yes
Cabantian	30	231.75	-	-	-	-	No	-	-	-	Yes	Yes	-	Yes
Callawa	131	835.33	coconut	28,540	-	-	Yes	6.71	1.71	-	Yes	Yes	-	Yes
Communal	-	277.18	-	-	-	-	No	-	-	-	-	Yes	-	Yes
Indangan	55	1,112.40	coconut	30,000	-	-	Yes	-	-	-	Yes	Yes	-	Yes
Mandug	180	603.45	coconut	30,000	-	-	Yes	-	-	-	Yes	Yes	-	Yes
Sasa	1500	22.71	-	-	-	-	No	-	-	-	-	Yes	-	Yes
Tigatto	80	354.51	banana local	101,000	-	-	Yes	8.82	-	-	Yes	Yes	-	Yes
Waan	275	352.74	coconut	10,109	-	-	Yes	-	-	-	Yes	Yes	-	Yes
Bunawan District														
Bunawan	200	380.57	-	-	-	-	No	-	-	-	-	Yes	-	Yes

Table NR – 2. Natural Resource Production Area Exposure Attributes, Landslide , Davao City

Barangay	Exposure					Sensitivity					Adaptive Capacity			
	Number of farming dependent households	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood
Gatungan	273	1,125.29	coconut	31,132	-	-	-	Yes	-	-	Yes	Yes	-	Yes
Ilang	4305	228.31	-	-	-	-	No	-	-	-	-	Yes	-	Yes
Lasang	300	455.52	-	-	-	-	Yes	-	-	-	-	Yes	-	Yes
Mahavag	465	407.79	coconut	30,000	-	-	No	-	-	-	Yes	Yes	-	Yes
Mudiang	307	561.40	coconut	31,789	-	-	No	-	-	-	Yes	Yes	-	Yes
Panacan	2000	201.64	-	-	-	-	Yes	-	-	-	-	Yes	-	Yes
San Isidro	286	518.52	banana local	73,575	-	-	Yes	-	-	-	Yes	Yes	-	Yes
Tibungco	9255	450.59	-	-	-	-	No	-	-	-	-	Yes	-	Yes
Paquibato District														
Colosas	1396	3,608.87	coconut	5,794	105	50	105	Yes	-	30	Yes	Yes	45	Yes
Fatima	992	2,473.51	coconut	5,717	180	47	180	Yes	-	50	Yes	Yes	70	Yes
Lumiad	488	885.86	corn	71,941	110	60	110	Yes	-	-	Yes	Yes	90	Yes
Mabuhay	385	997.56	coconut	4,396	50	25	50	Yes	0.52	9	Yes	Yes	12	Yes
Malabog	3030	3,527.92	coconut	11,833	300	100	300	Yes	-	50	Yes	Yes	500	Yes
Mapula	992	1,932.29	coconut	22,669	190	70	190	Yes	0.15	54	Yes	Yes	100	Yes
Pan-daitan	1045	2,036.11	coconut	13,139	240	80	240	Yes	-	1	Yes	Yes	40	Yes
Pañalum	560	609.23	banana	52,178	120	40	120	Yes	-	35	Yes	Yes	20	Yes
Paquibato	788	1,375.53	coconut	16,716	160	70	160	Yes	-	2	Yes	Yes	200	Yes

Table NR – 2. Natural Resource Production Area Exposure Attributes, Landslide , Davao City

Barangay	Exposure					Sensitivity					Adaptive Capacity				
	Number of farming dependent households	Total Area Allocation (Has.)	Dominant Crop/ Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources
Paradise Embac	980	1,731.39	coconut	17,182	140	75	140	Yes	-	-	Yes	Yes	Yes	36	Yes
Salapawan	678	176.45	coconut	6,158	100	68	100	Yes	-	-	Yes	Yes	Yes	10	Yes
Sumimao	407	1,434.92	coconut	1,910	170	43	170	Yes	0.05	15	Yes	Yes	Yes	25	Yes
Tapak	1428	1,269.49	coconut	16,131	140	40	140	Yes	-	-	Yes	Yes	Yes	100	Yes
Baguio District															
Baguio	858	638.57	coconut	38,187	47	215	47	Yes	-	65	Yes	Yes	Yes	48	Yes
Cadalian	454	616.55	coconut	39,195	115	383	115	Yes	-	357	Yes	Yes	Yes	20	Yes
Carmen	441	340.03	cacao	78,600	55	348	55	Yes	-	24	Yes	Yes	Yes	68	Yes
Gumalang	819	1,394.99	coconut	39,250	110	680	110	Yes	3.78	45	Yes	Yes	Yes	59	Yes
Malagos	976	826.54	coconut	38,359	160	571	160	Yes	2.26	25	Yes	Yes	Yes	15	Yes
Tambobong	1082	349.39	coconut	32,089	75	150	75	Yes	-	1,151	Yes	Yes	Yes	45	Yes
Tawan-Tawan	765	874.21	cacao	84,555	156	544	156	Yes	1.49	394	Yes	Yes	Yes	140	Yes
Wines	476	855.76	coconut	39,098	80	355	80	Yes	8.25	61	Yes	Yes	Yes	20	Yes
Calinan District															
Biao Joaquin	665	513.94	coconut	35,291	60	16	60	Yes	-	148	Yes	Yes	Yes	-	Yes
Calinan	2661	611.68	rice	81,940	70	10	70	Yes	6533.33	112	Yes	Yes	Yes	-	Yes
Cawayan	641	777.62	pineapple	574,200	35	5	35	Yes	1.53	25	Yes	Yes	Yes	-	Yes

Table NR – 2. Natural Resource Production Area Exposure Attributes, Landslide , Davao City

Barangay	Exposure				Sensitivity						Adaptive Capacity				
	Number of farming dependent households	Total Area Allocation (Has.)	Dominant Crop/ Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources
Dacudao	1197	1,123.77	coconut	38,065	40	-	40	Yes	-	-	Yes	Yes	Yes	-	Yes
Dalagdag	280	317.69	coconut	32,540	30	4	30	Yes	4.38	-	Yes	Yes	Yes	-	Yes
Dominga	378	498.35	coconut	34,043	45	10	45	No	-	-	Yes	Yes	Yes	-	Yes
Inayangan	1401	1,138.27	coconut	34,045	45	10	45	Yes	-	-	Yes	Yes	Yes	-	Yes
Lacson	466	764.19	coconut	38,039	60	10	60	Yes	8.77	-	Yes	Yes	Yes	-	Yes
Lamanan	1459	1,427.04	coconut	35,047	56	10	56	Yes	-	-	Yes	Yes	Yes	-	Yes
Lampianao	184	794.41	coconut	32,541	50	10	50	Yes	-	0.97	Yes	Yes	Yes	-	Yes
Megkawayan	706	1,551.55	cacao	69,371	36	20	36	Yes	-	-	Yes	Yes	Yes	-	Yes
Pangyan	203	660.52	coconut	26,517	31	10	31	Yes	-	-	Yes	Yes	Yes	-	Yes
Riverside	1883	421.37	coconut	38,100	36	10	36	Yes	41.85	-	Yes	Yes	Yes	-	Yes
Saloy	459	990.07	coconut	39,071	70	10	70	Yes	-	-	Yes	Yes	Yes	-	Yes
Sirib	1343	2,120.12	banana cav.	407,720	60	15	60	Yes	-	-	Yes	Yes	Yes	-	Yes
Subasta	911	1,172.23	coconut	38,059	65	5	65	Yes	1.02	-	Yes	Yes	Yes	-	Yes
Talomo River	1551	707.69	coconut	37,113	65	20	65	Yes	-	1.48	Yes	Yes	Yes	-	Yes
Tamayong	1685	1,356.14	banana cav.	554,376	75	15	75	Yes	-	-	Yes	Yes	Yes	-	Yes
Wangan	1746	1,147.83	coconut	39,098	65	12	65	Yes	4.28	0.05	Yes	Yes	Yes	-	Yes
Marilog District															

Table NR – 2. Natural Resource Production Area Exposure Attributes, Landslide , Davao City

Barangay	Exposure					Sensitivity					Adaptive Capacity			
	Number of farming dependent households	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood
Baganihan	375	168.75	corn	48,000	30	15	113	Yes	-	80	Yes	Yes	262	Yes
Bantol	570	408.76	coconut	36,174	150	200	150	Yes	-	75	Yes	Yes	399	Yes
Buda	554	1,422.90	vegetables	75,600	20	10	20	Yes	1.05	-	Yes	Yes	388	Yes
Dalag Lumot	569	140.76	cacao	-	100	200	100	Yes	-	1	Yes	Yes	306	Yes
Datu Salumay	578	681.46	vegetables	-	150	150	150	Yes	-	-	Yes	Yes	404	Yes
Gumitan	550	814.50	rice	31,556	25	25	25	Yes	-	-	Yes	Yes	398	Yes
Mag-saysay	705	1,580.09	corn	60,000	100	75	212	Yes	-	15	Yes	Yes	493	Yes
Malamba	1318	1,729.27	coconut	35,087	60	200	60	Yes	-	27	Yes	Yes	132	Yes
Marilog	4300	3,936.82	coconut	34,207	500	375	860	Yes	0.30	88	Yes	Yes	2,802	Yes
Salaysay	904	1,854.46	banana cav.	36	150	300	150	Yes	0.42	-	Yes	Yes	632	Yes
Suawan	1240	1,684.68	coconut	34,192	100	100	620	Yes	1.11	95	Yes	Yes	868	Yes
Tamugan	2123	946.09	coconut	39,214	200	100	200	Yes	-	80	Yes	Yes	1,910	Yes
Toril District														
Alambre	669	280.59	coconut	44,000	25	20	25	Yes	3.79	10	Yes	Yes	15	Yes
Atan-Awe	323	319.38	coconut	42,500	25	30	25	No	-	20	Yes	Yes	105	Yes
Bankas Heights	113	205.75	coconut	44,000	5	30	5	Yes	-	2	Yes	Yes	20	Yes
Baracatan	567	1,085.56	coconut	41,000	30	30	30	No	-	-	Yes	Yes	18	Yes

Table NR – 2. Natural Resource Production Area Exposure Attributes, Landslide , Davao City

Barangay	Exposure				Sensitivity						Adaptive Capacity				
	Number of farming dependent households	Total Area Allocation (Has.)	Dominant Crop/ Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources
Bato	235	745.05	coconut	35,000	25	25	25	No	2.55	-	10	Yes	Yes	53	Yes
Bayabas	780	1,183.42	coconut	37,500	5	20	5	No	-	-	5	Yes	Yes	50	Yes
Crossing Bayabas	-	78.79	-	-	-	-	-	No	-	-	-	Yes	-	-	Yes
Binugao	1996	290.68	coconut	38,000	25	25	25	Yes	-	-	-	Yes	Yes	35	Yes
Camansi	372	349.76	coconut	37,500	35	30	35	Yes	-	-	2	Yes	Yes	20	Yes
Catigan	813	2,329.75	coconut	40,000	50	60	50	Yes	-	-	-	Yes	Yes	170	Yes
Daliao	4471	4.68	-	-	-	-	-	Yes	-	-	-	Yes	-	-	Yes
Daliao Plantation	1352	971.65	banana	640,000	30	25	30	Yes	-	-	-	Yes	Yes	200	Yes
Eden	612	464.93	durian	150,000	25	30	25	No	-	-	5	Yes	Yes	70	Yes
Kilate	305	633.71	-	-	-	15	-	No	-	-	20	Yes	Yes	45	Yes
Lizada	4147	251.72	-	-	-	10	-	No	-	-	-	Yes	-	-	Yes
Lubogan	-	72.90	-	-	-	-	-	Yes	-	-	-	Yes	-	-	Yes
Marapanigi	142	526.81	-	-	20	30	20	Yes	-	-	5	Yes	Yes	60	Yes
Mulig	502	980.43	coconut	44,500	55	30	55	No	-	-	150	Yes	Yes	215	Yes
Sibulan	606	501.15	abaca	90,000	120	80	120	Yes	-	-	-	Yes	Yes	150	Yes
Sirawan	1430	730.75	mango	200,000	25	20	25	Yes	-	-	-	Yes	Yes	50	Yes
Tagluno	396	551.66	coconut	40,000	75	25	75	Yes	-	-	-	Yes	Yes	35	Yes
Tagurano	319	498.36	coconut	39,500	-	20	-	No	-	-	10	Yes	Yes	30	Yes

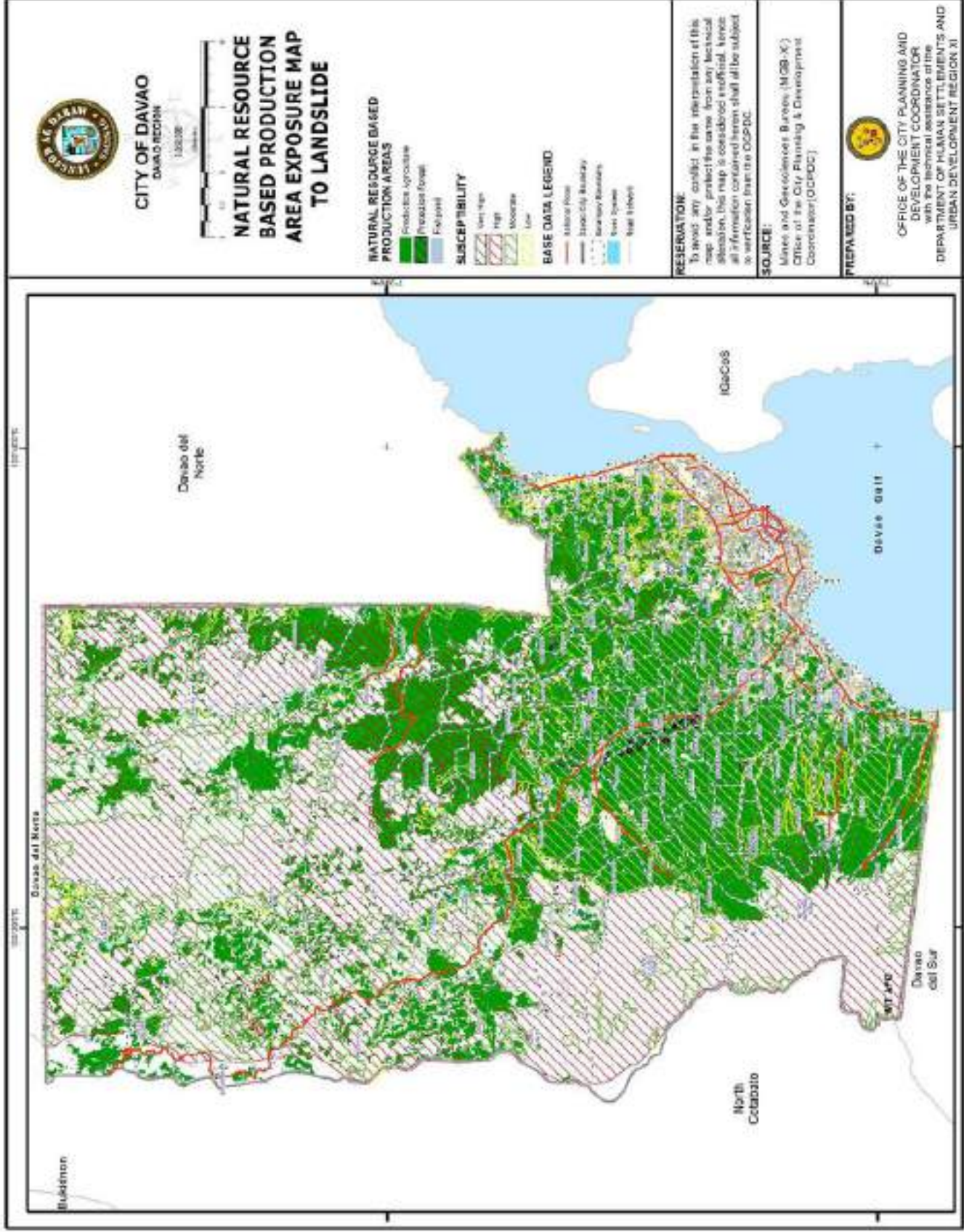
Table NR – 2. Natural Resource Production Area Exposure Attributes, Landslide , Davao City

Barangay	Exposure					Sensitivity					Adaptive Capacity				
	Number of farming dependent households	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources
Tibuloy	324	804.03	coconut	40,000	-	10	-	Yes	-	15	Yes	Yes	Yes	-	Yes
Toril	-	2.05	-	-	-	-	-	-	-	-	Yes	Yes	Yes	-	Yes
Tungkalan	790	1,755.69	coconut	40,500	50	75	-	Yes	0.85	40	Yes	Yes	Yes	115	Yes
Tugbok District															
Angalan	220	447.77	coconut	36,019	-	-	-	Yes	-	45	Yes	Yes	Yes	123	Yes
Bago Oshiro	160	348.39	-	-	-	-	-	Yes	-	-	Yes	Yes	Yes	30	Yes
Balengae ng	186	441.08	coconut	36,000	-	15	-	Yes	11.48	67	Yes	Yes	Yes	82	Yes
Biao Escuela	250	1,284.53	coconut	34,250	-	8	-	Yes	-	82	Yes	Yes	Yes	40	Yes
Biao Guianga	200	466.00	coconut	34,628	-	6	-	Yes	2.86	55	Yes	Yes	Yes	181	Yes
Matina Biao	155	1,000.81	coconut	34,098	-	5	-	Yes	-	54	Yes	Yes	Yes	71	Yes
Los Amigos	220	364.04	rice	46,240	-	5	-	Yes	1987.58	42	Yes	Yes	Yes	75	Yes
Manambulan	236	751.58	coconut	36,100	-	-	-	Yes	-	30	Yes	Yes	Yes	31	Yes
Manuel Guianga	500	874.55	coconut	36,503	-	10	-	Yes	-	55	Yes	Yes	Yes	140	Yes
Mintal		435.08	coconut	48,958	-	-	-	No	-	8	Yes	Yes	Yes	-	Yes
New Carmen	234	956.39	coconut	72,543	-	-	-	No	-	76	Yes	Yes	Yes	102	Yes

Table NR – 2. Natural Resource Production Area Exposure Attributes, Landslide , Davao City

Barangay	Exposure					Sensitivity					Adaptive Capacity				
	Number of farming dependent households	Total Area Allocation (Has.)	Dominant Crop/ Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources
New Valencia	400	880.77	coconut	36,524	52	10	52	Yes	-	0.19	154	Yes	Yes	131	Yes
Sto. Niño	-	1.47	-	-	-	-	-	No	-	-	-	Yes	Yes	-	Yes
Tacunan	250	790.18	coconut	33,999	-	15	36	Yes	-	1.84	85	Yes	Yes	109	Yes
Tagakpan	360	707.45	coconut	45,725	-	10	-	Yes	-	-	75	Yes	Yes	110	Yes
Talandang	400	1,220.69	coconut	34,014	-	10	-	Yes	1.36	-	138	Yes	Yes	219	Yes
Tugbok	356	716.56	coconut	39,469	-	-	-	Yes	-	-	-	Yes	Yes	64	Yes
Ula	160	856.08	coconut	35,032	-	6	-	Yes	-	0.30	110	Yes	Yes	60	Yes

Map 6.2. Natural Resource-Based Production Area Exposure to Landslide Map, Davao City



Storm Surge – A total of 20 barangays, which have NRBPA, are susceptible to storm surges (Table NR – 3). The dominant crop or variety of produce in these sites include pelagic fishes, mango, coconut, and banana. All of these areas span 4,671 hectares, which have 127,871 farming dependent households. Only the NRBPA in Sirawan and Binugao have 50 farming families who are able to attend climate field school and 50 farmers with access to hazard infrastructure. Sirawan, Binugao, and Lizada have also 55 farming families who use sustainable production techniques. Agricultural workers in Sirawan and Binugao, which total to 85, have an alternative livelihood whenever their produce would be affected by storm surge. The City Government also has resources to support the farming communities whenever a disaster would arise.

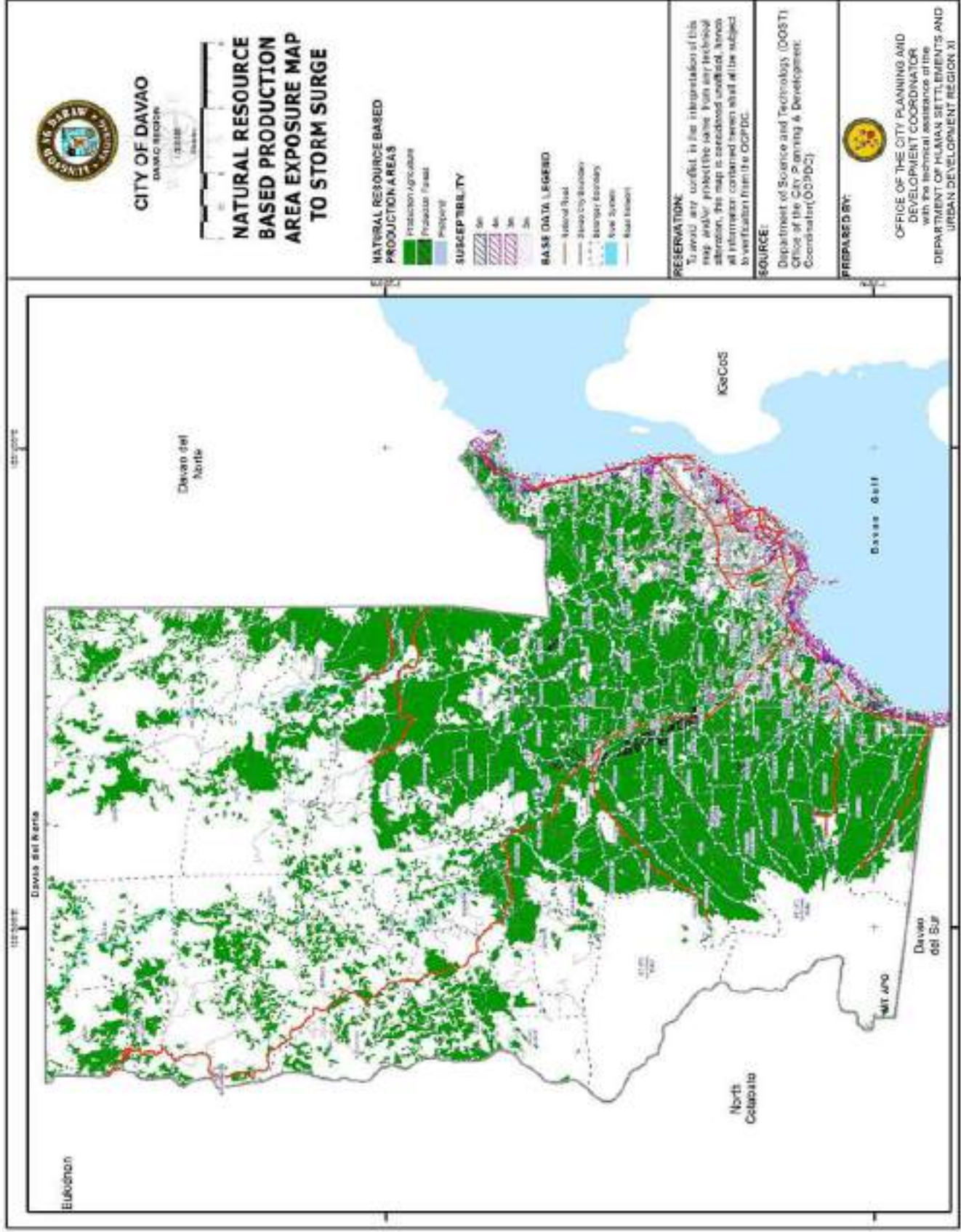
Table NR – 3. Natural Resource Production Area Exposure Attributes, Storm Surge, Davao City

Barangay	Exposure					Sensitivity					Adaptive Capacity				
	Number of farming dependent households	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alter-native Livelihood	Government Resources
Talomo District															
Bago Aplaya	550	14.19	banana	29,700	-	-	-	-	-	-	Yes	Yes	-	Yes	
Bago Gallera	-	335.90	coconut	61,972	-	-	-	-	-	-	Yes	Yes	-	Yes	
Bucana	23,624	3.16	-	-	-	-	-	-	-	-	-	Yes	-	Yes	
Dumoy	538	195.07	coconut	62,718	-	-	-	-	-	-	Yes	Yes	-	Yes	
Ma-a	-	76.80	coconut	68,941	-	-	-	-	-	-	Yes	Yes	-	Yes	
Matina Aplaya	266	5.16	Pelagic Fishes	168,000,000	-	-	-	-	-	-	-	Yes	-	Yes	
Matina Crossing	-	7.94	-	-	-	-	-	-	-	-	-	Yes	-	Yes	
Talomo	72,538	89.14	-	-	-	-	Yes	-	-	-	-	Yes	-	Yes	
Buhangin District															
Sasa	1500	22.71	-	-	-	-	No	-	-	-	-	Yes	-	Yes	
Bunawan District															
Bunawan Ilang	200	380.57	-	-	-	-	No	-	-	-	-	Yes	-	Yes	
	4305	228.31	-	-	-	-	No	-	-	-	-	Yes	-	Yes	

Table NR – 3. Natural Resource Production Area Exposure Attributes, Storm Surge, Davao City

Barangay	Exposure				Sensitivity						Adaptive Capacity				
	Number of farming dependent households	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources
Lasang	300	455.52	-	-	-	-	-	Yes	-	-	-	-	Yes	-	Yes
Mahayag	465	407.79	coconut	30,000	-	-	-	No	-	-	Yes	-	Yes	-	Yes
Panacan	2000	201.64	-	-	-	-	-	Yes	-	-	-	-	Yes	-	Yes
San Isidro	286	518.52	banana local	73,575	-	-	-	Yes	-	-	Yes	-	Yes	-	Yes
Tibungco	9255	450.59	-	-	-	-	-	No	-	-	-	-	Yes	-	Yes
Toril District															
Binugao	1996	290.68	coconut	38,000	25	25	25	Yes	-	-	Yes	Yes	Yes	35	Yes
Daliao	4471	4.68	-	-	-	-	-	Yes	-	-	-	Yes	Yes	-	Yes
Lizada	4147	251.72	-	-	-	10	-	No	-	-	-	Yes	Yes	-	Yes
Sirawan	1430	730.75	mango	200,000	25	20	25	Yes	-	-	Yes	Yes	Yes	50	Yes

Map 6.3. Natural Resource-Based Production Area Exposure Map to Storm Surge, Davao City



Liquefaction – A total of 49 barangays with NRBPA are susceptible to liquefaction (Table NR – 4). Half of these have coconuts as dominant crop. All of these sites have 141,980 farming dependent households, though only 0.48% of them have attended climate field school. Only 0.54% of the farming dependent households are also able to use sustainable production techniques. At least 683 farmers have access to hazard information while 1,016 individuals have alternative livelihood.

Table NR – 4. Natural Resource Production Area Exposure Attributes, Liquefaction, Davao City

Barangay	Exposure				Sensitivity						Adaptive Capacity				
	Number of farming dependent households	Total Allocation Area (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources
Talomo District															
Bago Aplaya	550	14.19	banana	29,700	-	-	-	Yes	-	-	Yes	Yes	-	-	Yes
Bago Gallera	-	335.90	coconut	61,972	-	-	-	-	-	-	Yes	Yes	-	-	Yes
Baliok	-	120.58	coconut	61,062	-	-	-	Yes	-	-	Yes	Yes	-	-	Yes
Bucana	23,624	3.16	-	-	-	-	-	-	-	-	-	Yes	-	-	Yes
Catalunan Grande	-	862.74	coconut	74,117	-	-	-	Yes	-	-	Yes	Yes	-	-	Yes
Catalunan Pequeño	-	250.64	coconut	60,731	-	-	-	Yes	-	-	-	Yes	-	-	Yes
Dumoy	538	195.07	coconut	62,718	-	-	-	No	-	-	Yes	Yes	-	-	Yes
Ma-a	-	76.80	coconut	68,941	-	-	-	Yes	-	-	Yes	Yes	-	-	Yes
Matina Aplaya	-	3.16	-	-	-	-	-	-	-	-	-	Yes	-	-	Yes
Matina Crossing	-	7.94	-	-	-	-	-	-	-	-	-	Yes	-	-	Yes
Matina Pangj	-	213.60	coconut	54,793	-	-	-	Yes	-	-	Yes	Yes	-	-	Yes
Talomo	72,538	89.14	-	-	-	-	-	Yes	-	-	-	Yes	-	-	Yes

Table NR – 4. Natural Resource Production Area Exposure Attributes, Liquefaction, Davao City

Barangay	Exposure					Sensitivity					Adaptive Capacity				
	Number of farming dependent households	Total Allocation Area (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources
Buhangin District															
Buhangin	-	123.37	-	-	-	-	-	-	-	-	-	Yes	-	-	Yes
Callawa	131	835.33	coconut	28,540	-	-	-	6.71	1.71	-	Yes	Yes	-	-	Yes
Mandug	180	603.45	coconut	30,000	-	-	-	-	-	-	Yes	Yes	-	-	Yes
Sasa	1500	22.71	-	-	-	-	-	-	-	-	-	Yes	-	-	Yes
Tigatto	80	354.51	banana local	101,000	-	-	-	8.82	-	-	Yes	Yes	-	-	Yes
Waan	275	352.74	coconut	10,109	-	-	-	-	-	-	Yes	Yes	-	-	Yes
Bunawan District															
Bunawan	200	380.57	-	-	-	-	-	-	-	-	-	Yes	-	-	Yes
Ilang	4305	228.31	-	-	-	-	-	-	-	-	-	Yes	-	-	Yes
Lasang	300	455.52	-	-	-	-	-	-	-	-	-	Yes	-	-	Yes
Mahayag	465	407.79	coconut	30,000	-	-	-	-	-	-	Yes	Yes	-	-	Yes
Panacan	2000	201.64	-	-	-	-	-	-	-	-	-	Yes	-	-	Yes
San Isidro	286	518.52	banana local	73,575	-	-	-	-	-	-	Yes	Yes	-	-	Yes
Tibungco	9255	450.59	-	-	-	-	-	-	-	-	-	Yes	-	-	Yes
Baguio District															
Malagos	976	826.54	coconut	38,359	160	571	160	2.26	-	25	Yes	Yes	15	-	Yes
Calinan District															
Calinan	2661	611.68	rice	81,940	70	10	70	6533.33	-	112	Yes	Yes	-	-	Yes
Dacudao	1197	1,123.77	coconut	38,065	40	-	40	-	-	60	Yes	Yes	-	-	Yes

Table NR – 4. Natural Resource Production Area Exposure Attributes, Liquefaction, Davao City

Barangay	Exposure					Sensitivity					Adaptive Capacity				
	Number of farming dependent household	Total Allocation Area (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alter-native Livelihood	Government Resources
Lacson	466	764.19	coconut	38,039	60	10	60	Yes	8.77	20	Yes	Yes	-	Yes	
Riverside	1883	421.37	coconut	38,100	36	10	36	Yes	41.85	11	Yes	Yes	-	Yes	
Subasta	911	1,172.23	coconut	38,059	65	5	65	Yes	1.02	75	Yes	Yes	-	Yes	
Talomo River	1551	707.69	coconut	37,113	65	20	65	Yes	-	30	Yes	Yes	-	Yes	
Wangan	1746	1,147.83	coconut	39,098	65	12	65	Yes	4.28	-	Yes	Yes	-	Yes	
Toril District															
Crossing Bayabas	-	78.79	-	-	-	-	-	No	-	-	-	Yes	-	Yes	
Binugao	1996	290.68	coconut	38,000	25	25	25	Yes	-	-	Yes	Yes	35	Yes	
Daliao	4471	4.68	-	-	-	-	-	Yes	-	-	-	Yes	-	Yes	
Lizada	4147	251.72	-	-	-	10	-	No	-	-	-	Yes	-	Yes	
Lubogan	-	72.90	-	-	-	-	-	Yes	-	-	-	Yes	-	Yes	
Marapan gi	142	526.81	-	-	20	30	20	Yes	-	5	Yes	Yes	60	Yes	
Sirawan	1430	730.75	mango	200,000	25	20	25	Yes	-	-	Yes	Yes	50	Yes	
Toril	-	2.05	-	-	-	-	-	-	-	-	Yes	Yes	-	Yes	
Tugbok District															
Angalan	220	447.77	coconut	36,019	-	-	-	Yes	-	45	Yes	Yes	123	Yes	
Balengae ng	186	441.08	coconut	36,000	-	15	-	Yes	11.48	67	Yes	Yes	82	Yes	
Los Amigos	220	364.04	rice	46,240	-	5	-	Yes	1987.58	42	Yes	Yes	75	Yes	

Table NR – 4. Natural Resource Production Area Exposure Attributes, Liquefaction, Davao City

Barangay	Exposure					Sensitivity					Adaptive Capacity				
	Number of farming dependent households	Total Allocation Area (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources
New Carmen	234	956.39	coconut	72,543	-	-	-	No	-	76	Yes	Yes	102	Yes	
New Valencia	400	880.77	coconut	36,524	52	10	52	Yes	0.19	154	Yes	Yes	131	Yes	
Talandang	400	1,220.69	coconut	34,014	-	10	-	Yes	1.36	138	Yes	Yes	219	Yes	
Tugbok	356	716.56	coconut	39,469	-	-	-	Yes	-	-	Yes	Yes	64	Yes	
Ula	160	856.08	coconut	35,032	-	6	-	Yes	0.30	110	Yes	Yes	60	Yes	

Fault Line – Fault line systems are present in 54 barangays, which have NRBPA's (Table NR – 5). Most of the barangays with NRBPA's but have presence of fault line systems are planted with coconuts, which have a combined annual output per hectare of ₱1,674,568. All of these sites have 110,936 farming dependent households. Of the total number, only 2.32% are able to attend climate field school. Only 2.12% of the farming dependent households are able to use sustainable production techniques. At least 1.98% of them have access to insurance while 4.31% have alternative livelihood. Should there be movements in the fault line systems, the City Government have resources to respond and provide aid to the farming households. There are also early warning systems that are installed in the affected barangays.

Table NR – 5. Natural Resource Production Area Exposure Attributes, Fault Line, Davao City

Barangay	Exposure				Sensitivity						Adaptive Capacity				
	Number of farming dependent households	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources
Talomo District															
Baliok	-	120.58	coconut	61,062	-	-	-	Yes	-	-	Yes	Yes	-	-	Yes
Catalunan Grande	-	862.74	coconut	74,117	-	-	-	Yes	-	-	Yes	Yes	-	-	Yes
Catalunan Pequeño	-	250.64	coconut	60,731	-	-	-	Yes	-	-	-	Yes	-	-	Yes
Langub	-	502.37	coconut	73,248	-	-	-	Yes	-	-	Yes	Yes	-	-	Yes
Talomo	72,538	89.14	-	-	-	-	-	Yes	-	-	-	Yes	-	-	Yes
Paquibato District															
Lumiad	488	885.86	corn	71,941	110	60	110	Yes	-	-	Yes	Yes	90	-	Yes
Malabog	3030	3,527.92	coconut	11,833	300	100	300	Yes	-	50	Yes	Yes	500	-	Yes
Mapula	992	1,932.29	coconut	22,669	190	70	190	Yes	-	54	Yes	Yes	100	-	Yes
Pañalum	560	609.23	banana	52,178	120	40	120	Yes	-	35	Yes	Yes	20	-	Yes

Table NR – 5. Natural Resource Production Area Exposure Attributes, Fault Line, Davao City

Barangay	Exposure				Sensitivity						Adaptive Capacity			
	Number of farming dependent households	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood
Paquibato	788	1,375.53	coconut	16,716	160	70	160	Yes	-	2	Yes	Yes	200	Yes
Sumimao	407	1,434.92	coconut	1,910	170	43	170	Yes	0.05	15	Yes	Yes	25	Yes
Baguio District														
Baguio	858	638.57	coconut	38,187	47	215	47	Yes	-	65	Yes	Yes	48	Yes
Gumalang	819	1,394.99	coconut	39,250	110	680	110	Yes	3.78	45	Yes	Yes	59	Yes
Malagos	976	826.54	coconut	38,359	160	571	160	Yes	2.26	25	Yes	Yes	15	Yes
Calinan District														
Biao Joaquin	665	513.94	coconut	35,291	60	16	60	Yes	-	148	Yes	Yes	-	Yes
Calinan	2661	611.68	rice	81,940	70	10	70	Yes	6533.33	112	Yes	Yes	-	Yes
Cawayan	641	777.62	pineapple	574,200	35	5	35	Yes	1.53	25	Yes	Yes	-	Yes
Dacudao	1197	1,123.77	coconut	38,065	40	-	40	Yes	-	60	Yes	Yes	-	Yes
Dominga	378	498.35	coconut	34,043	45	10	45	No	-	43	Yes	Yes	-	Yes
Lacson	466	764.19	coconut	38,039	60	10	60	Yes	8.77	20	Yes	Yes	-	Yes
Lamanan	1459	1,427.04	coconut	35,047	56	10	56	Yes	-	45	Yes	Yes	-	Yes
Lampianao	184	794.41	coconut	32,541	50	10	50	Yes	0.97	35	Yes	Yes	-	Yes
Pangyan	203	660.52	coconut	26,517	31	10	31	Yes	-	35	Yes	Yes	-	Yes
Riverside	1883	421.37	coconut	38,100	36	10	36	Yes	41.85	11	Yes	Yes	-	Yes
Subasta	911	1,172.23	coconut	38,059	65	5	65	Yes	1.02	75	Yes	Yes	-	Yes

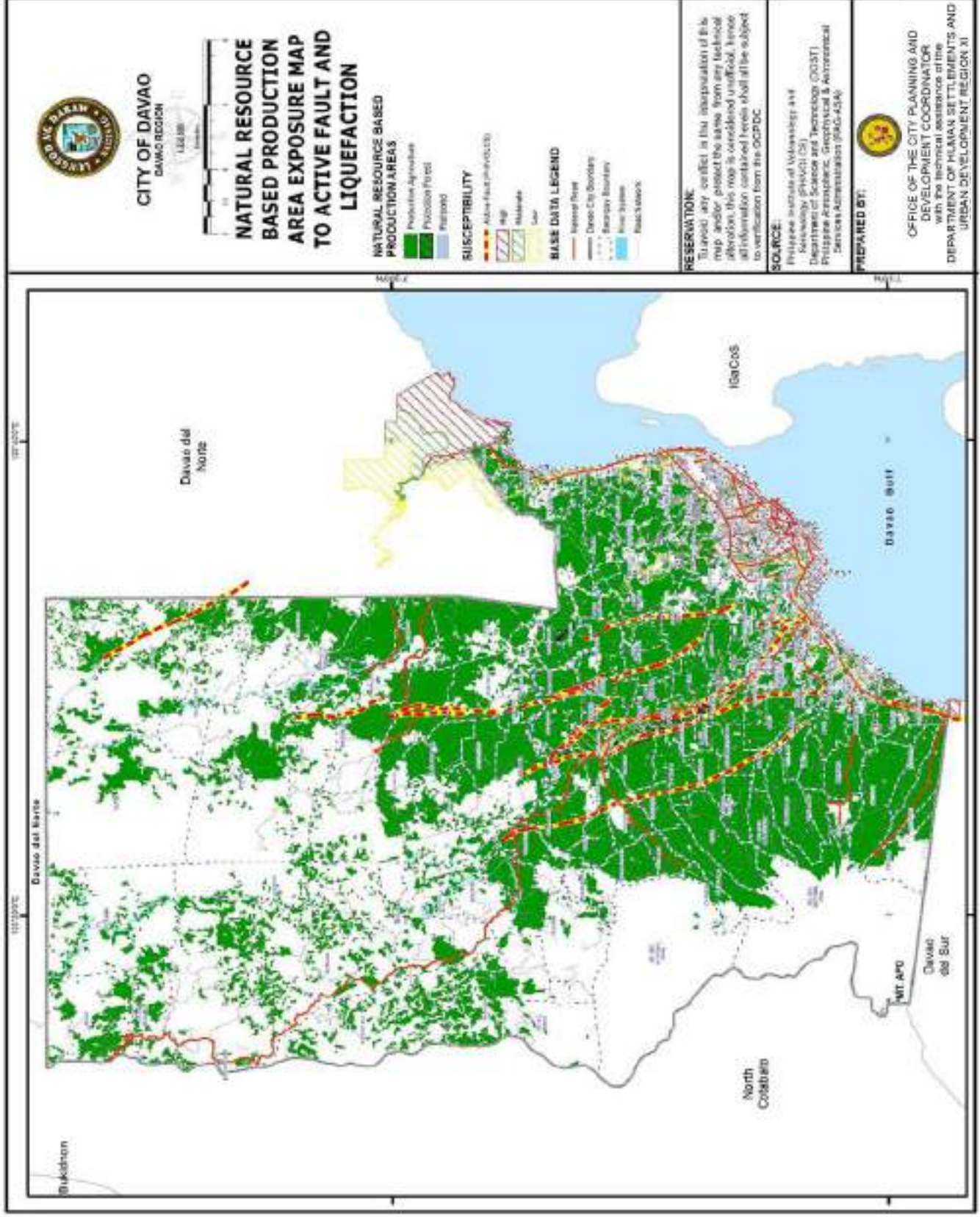
Table NR – 5. Natural Resource Production Area Exposure Attributes, Fault Line, Davao City

Barangay	Exposure				Sensitivity						Adaptive Capacity				
	Number of farming dependent households	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources
Talomo River	1551	707.69	coconut	37,113	65	20	65	Yes	-	1.48	30	Yes	Yes	-	Yes
Wangan	1746	1,147.83	coconut	39,098	65	12	65	Yes	4.28	0.05	-	Yes	Yes	-	Yes
Marilog District															
Tamagan	2123	946.09	coconut	39,214	200	100	200	Yes	-	-	80	Yes	Yes	1,910	Yes
Toril District															
Alambre	669	280.59	coconut	44,000	25	20	25	Yes	3.79	-	10	Yes	Yes	15	Yes
Bankas Heights	113	205.75	coconut	44,000	5	30	5	Yes	-	-	2	Yes	Yes	20	Yes
Binugao	1996	290.68	coconut	38,000	25	25	25	Yes	-	-	-	Yes	Yes	35	Yes
Camansi	372	349.76	coconut	37,500	35	30	35	Yes	-	-	2	Yes	Yes	20	Yes
Lizada	4147	251.72	-	-	-	10	-	No	-	-	-	Yes	Yes	-	Yes
Lubogan	-	72.90	-	-	-	-	-	Yes	-	-	-	Yes	Yes	-	Yes
Mulig	502	980.43	coconut	44,500	55	30	55	No	-	-	150	Yes	Yes	215	Yes
Sirawan	1430	730.75	mango	200,000	25	20	25	Yes	-	-	-	Yes	Yes	50	Yes
Tagluno	396	551.66	coconut	40,000	75	25	75	Yes	-	-	-	Yes	Yes	35	Yes
Tugbok District															
Angalan	220	447.77	coconut	36,019	-	-	-	Yes	-	-	45	Yes	Yes	123	Yes
Bago Oshiro	160	348.39	-	-	-	-	-	Yes	-	-	-	Yes	Yes	30	Yes
Balengae ng	186	441.08	coconut	36,000	-	15	-	Yes	11.48	-	67	Yes	Yes	82	Yes

Table NR – 5. Natural Resource Production Area Exposure Attributes, Fault Line, Davao City

Barangay	Exposure				Sensitivity						Adaptive Capacity				
	Number of farming dependent households	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources
Biao Escuela	250	1,284.53	coconut	34,250	-	8	-	Yes	-	0.50	82	Yes	Yes	40	Yes
Biao Guianga	200	466.00	coconut	34,628	-	6	-	Yes	-	2.86	55	Yes	Yes	181	Yes
Matina Biao	155	1,000.81	coconut	34,098	-	5	-	Yes	-	-	54	Yes	Yes	71	Yes
Los Amigos	220	364.04	rice	46,240	-	5	-	Yes	1987.58	15.53	42	Yes	Yes	75	Yes
Manambulan	236	751.58	coconut	36,100	-	-	-	Yes	-	-	30	Yes	Yes	31	Yes
Mintal		435.08	coconut	48,958	-	-	-	No	-	-	8	Yes	Yes		Yes
New Carmen	234	956.39	coconut	72,543	-	-	-	No	-	-	76	Yes	Yes	102	Yes
New Valencia	400	880.77	coconut	36,524	52	10	52	Yes	-	0.19	154	Yes	Yes	131	Yes
Sto. Niño	-	1.47	-	-	-	-	-	No	-	-	-	Yes	Yes	-	Yes
Tacunan	250	790.18	coconut	33,999	36	15	36	Yes	-	1.84	85	Yes	Yes	109	Yes
Tagakpan	360	707.45	coconut	45,725	-	10	-	Yes	-	-	75	Yes	Yes	110	Yes
Talandang	400	1,220.69	coconut	34,014	-	10	-	Yes	1.36	-	138	Yes	Yes	219	Yes
Tugbok	356	716.56	coconut	39,469	-	-	-	Yes	-	-	-	Yes	Yes	64	Yes
Ula	160	856.08	coconut	35,032	-	6	-	Yes	-	0.30	110	Yes	Yes	60	Yes

Map 6.4. Natural Resource-Based Production Area Exposure Map to Active Fault Line and Liquefaction, Davao City



Natural Resource Production Area Exposure Estimation

The following tables contains exposed NRRP areas, exposure percentage, and exposed value. The exposed areas are those that are either moderate or high susceptible to such hazard. The exposure percentage is obtained by dividing the exposed area to the total barangay allocation by dominant crop. The exposed value is computed by multiplying the affected area to the estimated annual output per hectare. Below are the summary of the tables per hazard:

Flood – Matina Biao, which is mostly filled with coconuts, has the largest exposed area to floods with 858.79 hectares or 85.81% of the total area allocated to the dominant crop with exposed value of ₱29,282,946. Only barangays Buhangin Proper, Sasa, Lumiad, Baganihan, Buda, Dalag Lumot, Datu Salumay, Magsaysay, and Toril Proper have no areas exposed to floods.

Table NR – 6. Natural Resource Production Area Exposure Estimation, Fault Line, Davao City

Barangay	Exposure						Sensitivity					
	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Talomo District												
Bago Aplaya	14.19	banana	2.13	15.02%	29,700	63,308	-	-	Yes	-	-	-
Bago Gallera	335.90	coconut	69.56	20.71%	61,972	4,311,015	-	-	-	-	-	-
Baliok	120.58	coconut	35.27	29.25%	61,062	2,153,449	-	-	Yes	-	-	-
Bucana	3.16	-	1.85	58.75%	-	-	-	-	-	-	-	-
Catalunan Grande	862.74	coconut	172.78	20.03%	74,117	12,806,285	-	-	Yes	-	-	-
Catalunan Pequeño	250.64	coconut	87.86	35.05%	60,731	5,335,778	-	-	Yes	-	-	-
Dumoy	195.07	coconut	19.59	10.04%	62,718	1,228,600	-	-	No	-	-	-
Langub	502.37	coconut	136.89	27.25%	73,248	10,027,132	-	-	Yes	-	-	1.11

Table NR – 6. Natural Resource Production Area Exposure Estimation, Fault Line, Davao City

Barangay	Exposure						Sensitivity					
	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Ma-a	76.80	coconut	30.57	39.80%	68,941	2,107,343	-	-	-	Yes	-	-
Magtuod	355.59	coconut	2.11	0.59%	71,590	151,224	-	-	-	Yes	-	-
Matina Aplaya	5.16	Pelagic Fishes	4.30	83.22%	168,000,000	721,762,044	-	-	-	-	-	-
Matina Crossing	7.94	-	1.11	13.98%	-	-	-	-	-	-	-	-
Matina Pangli	213.60	coconut	45.63	21.36%	54,793	2,500,194	-	-	-	Yes	-	-
Talomo	89.14	-	45.71	51.27%	-	-	-	-	-	Yes	-	-
Buhangin District												
Acacia	738.89	coconut	4.99	0.68%	21,000	104,855	-	-	-	No	-	-
Buhangin	123.37	-	-	0.00%	-	-	-	-	-	No	-	-
Cabantian	231.75	-	0.05	0.02%	-	-	-	-	-	No	-	-
Callawa	835.33	coconut	68.56	8.21%	28,540	1,956,814	-	-	-	Yes	6.71	1.71
Communal	277.18	-	15.77	5.69%	-	-	-	-	-	No	-	-
Indangan	1,112.40	coconut	5.71	0.51%	30,000	171,253	-	-	-	Yes	-	-
Mandug	603.45	coconut	83.26	13.80%	30,000	2,497,785	-	-	-	Yes	-	-
Sasa	22.71	-	-	0.00%	-	-	-	-	-	No	-	-
Tigatto	354.51	banana local	127.62	36.00%	101,000	12,889,877	-	-	-	Yes	8.82	-
Waan	352.74	coconut	127.58	36.17%	10,109	1,289,702	-	-	-	Yes	-	-
Bunawan District												
Bunawan	380.57	-	86.20	22.65%	-	-	-	-	-	No	-	-
Gatangan	1,125.29	coconut	17.17	1.53%	31,132	534,413	-	-	-	Yes	-	-
Ilang	228.31	-	5.80	2.54%	-	-	-	-	-	No	-	-

Table NR – 6. Natural Resource Production Area Exposure Estimation, Fault Line, Davao City

Barangay	Exposure							Sensitivity					
	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	
Lasang	455.52	Pelagic Fishes	119.86	26.31%	-	-	-	-	-	Yes	-	-	
Mahayag	407.79	coconut	1.00	0.25%	30,000	29,982	-	-	-	No	-	-	
Mudiang	561.40	coconut	7.98	1.42%	31,789	253,629	-	-	-	No	-	-	
Panacan	201.64		9.49	4.71%	-	-	-	-	-	Yes	-	-	
San Isidro	518.52	banana local	23.69	4.57%	73,575	1,742,956	-	-	-	Yes	-	-	
Tibungco	450.59		4.74	1.05%	-	-	-	-	-	No	-	-	
Paquibato District													
Colosas	3,608.87	coconut	188.06	5.21%	5,794	1,089,632	105	50	105	Yes	-	-	
Fatima	2,473.51	coconut	0.05	0.00%	5,717	267	180	47	180	Yes	-	-	
Lumiad	885.86	corn	-	0.00%	71,941	-	110	60	110	Yes	-	-	
Mabuhay	997.56	coconut	31.24	3.13%	4,396	137,341	50	25	50	Yes	0.52	-	
Malabog	3,527.92	coconut	27.88	0.79%	11,833	329,856	300	100	300	Yes	-	-	
Mapula	1,932.29	coconut	0.22	0.01%	22,669	4,973	190	70	190	Yes	-	0.15	
Pandaitan	2,036.11	coconut	4.19	0.21%	13,139	55,050	240	80	240	Yes	-	-	
Pañalum	609.23	banana	5.03	0.83%	52,178	262,517	120	40	120	Yes	-	-	
Paquibato	1,375.53	coconut	1.32	0.10%	16,716	22,065	160	70	160	Yes	-	-	
Paradise Embac	1,731.39	coconut	134.06	7.74%	17,182	2,303,349	140	75	140	Yes	-	-	
Salapawan	176.45	coconut	12.73	7.21%	6,158	78,376	100	68	100	Yes	-	-	
Sumimao	1,434.92	coconut	70.30	4.90%	1,910	134,273	170	43	170	Yes	0.05	-	
Tapak	1,269.49	coconut	56.30	4.43%	16,131	908,155	140	40	140	Yes	-	-	
Baguio District													

Table NR – 6. Natural Resource Production Area Exposure Estimation, Fault Line, Davao City

Barangay	Exposure						Sensitivity					
	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Baguio	638.57	coconut	147.87	23.16%	38,187	5,646,771	47	215	47	Yes	-	-
Cadalian	616.55	coconut	46.05	7.47%	39,195	1,804,988	115	383	115	Yes	-	-
Carmen	340.03	cacao	19.64	5.78%	78,600	1,543,845	55	348	55	Yes	-	-
Gumalang	1,394.99	coconut	302.40	21.68%	39,250	11,869,228	110	680	110	Yes	3.78	-
Malagos	826.54	coconut	290.25	35.12%	38,359	11,133,819	160	571	160	Yes	2.26	-
Tambobong	349.39	coconut	19.84	5.68%	32,089	636,650	75	150	75	Yes	-	-
Tawan-Tawan	874.21	cacao	112.33	12.85%	84,555	9,498,189	156	544	156	Yes	1.49	-
Wines	855.76	coconut	184.14	21.52%	39,098	7,199,602	80	355	80	Yes	8.25	-
Calinan District												
Biao Joaquin	513.94	coconut	371.61	72.31%	35,291	13,114,701	60	16	60	Yes	-	0.52
Calinan	611.68	rice	571.41	93.42%	81,940	46,821,452	70	10	70	Yes	6533.33	-
Cawayan	777.62	pineapple	262.98	33.82%	574,200	151,005,737	35	5	35	Yes	1.53	-
Dacudao	1,123.77	coconut	344.21	30.63%	38,065	13,102,325	40	-	40	Yes	-	-
Dalagdag	317.69	coconut	62.35	19.63%	32,540	2,029,016	30	4	30	Yes	4.38	-
Dominga	498.35	coconut	172.90	34.69%	34,043	5,885,865	45	10	45	No	-	-
Inayangan	1,138.27	coconut	45.62	4.01%	34,045	1,553,211	45	10	45	Yes	-	-
Lacson	764.19	coconut	186.95	24.46%	38,039	7,111,429	60	10	60	Yes	8.77	-
Lamanan	1,427.04	coconut	359.99	25.23%	35,047	12,616,614	56	10	56	Yes	-	-
Lampianao	794.41	coconut	136.12	17.14%	32,541	4,429,583	50	10	50	Yes	-	0.97
Megkawayan	1,551.55	cacao	60.23	3.88%	69,371	4,178,160	36	20	36	Yes	-	-
Pangyan	660.52	coconut	96.28	14.58%	26,517	2,552,956	31	10	31	Yes	-	-
Riverside	421.37	coconut	267.60	63.51%	38,100	10,195,435	36	10	36	Yes	41.85	-

Table NR – 6. Natural Resource Production Area Exposure Estimation, Fault Line, Davao City

Barangay	Exposure						Sensitivity					
	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Saloy	990.07	coconut	95.48	9.64%	39,071	3,730,482	70	10	70	Yes	-	-
Sirib	2,120.12	banana cav.	761.51	35.92%	407,720	310,481,541	60	15	60	Yes	-	-
Subasta	1,172.23	coconut	787.31	67.16%	38,059	29,964,258	65	5	65	Yes	1.02	-
Talomo River	707.69	coconut	536.67	75.83%	37,113	19,917,471	65	20	65	Yes	-	1.48
Tamayong	1,356.14	banana cav.	94.49	6.97%	554,376	52,381,458	75	15	75	Yes	-	-
Wangan	1,147.83	coconut	555.44	48.39%	39,098	21,716,563	65	12	65	Yes	4.28	0.05
Marilog District												
Baganihan	168.75	corn	-	0.00%	48,000	-	30	15	113	Yes	-	-
Bantol	408.76	coconut	34.95	8.55%	36,174	1,264,108	150	200	150	Yes	-	-
Buda	1,422.90	vegetables	-	0.00%	75,600	-	20	10	20	Yes	1.05	-
Dalag Lumot	140.76	cacao	-	0.00%	-	-	100	200	100	Yes	-	-
Datu Salumay	681.46	vegetables	-	0.00%	-	-	150	150	150	Yes	-	-
Gumitan	814.50	rice	8.76	1.08%	31,556	276,302	25	25	25	Yes	-	-
Magsaysay	1,580.09	corn	-	0.00%	60,000	-	100	75	212	Yes	-	-
Malamba	1,729.27	coconut	95.50	5.52%	35,087	3,350,807	60	200	60	Yes	-	-
Marilog	3,936.82	coconut	17.82	0.45%	34,207	609,484	500	375	860	Yes	0.30	-
Salaysay	1,854.46	banana cav.	3.94	0.21%	36	143	150	300	150	Yes	0.42	-
Suawan	1,684.68	coconut	342.68	20.34%	34,192	11,716,755	100	100	620	Yes	1.11	-
Tamugan	946.09	coconut	215.60	22.79%	39,214	8,454,434	200	100	200	Yes	-	-
Toril District												
Alambre	280.59	coconut	29.59	10.55%	44,000	1,302,151	25	20	25	Yes	3.79	-
Atan-Awe	319.38	coconut	31.12	9.74%	42,500	1,322,661	25	30	25	No	-	-

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Barangay	Exposure						Sensitivity					
	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Bankas Heights	205.75	coconut	92.97	45.18%	44,000	4,090,507	5	30	5	Yes	-	-
Baracatan	1,085.56	coconut	78.27	7.21%	41,000	3,208,946	30	30	30	No	-	-
Bato	745.05	coconut	50.75	6.81%	35,000	1,776,393	25	25	25	No	2.55	-
Bayabas	1,183.42	coconut	104.37	8.82%	37,500	3,913,911	5	20	5	No	-	-
Crossing Bayabas	78.79	-	14.44	18.33%	-	-	-	-	-	No	-	-
Binugao	290.68	coconut	129.37	44.50%	38,000	4,915,947	25	25	25	Yes	-	-
Camansi	349.76	coconut	27.74	7.93%	37,500	1,040,386	35	30	35	Yes	-	-
Catigan	2,329.75	coconut	134.50	5.77%	40,000	5,379,877	50	60	50	Yes	-	-
Daliao	4.68	-	0.00	0.00%	-	-	-	-	-	Yes	-	-
Daliaoan Plantation	971.65	banana	83.44	8.59%	640,000	53,402,330	30	25	30	Yes	-	-
Eden	464.93	durian	38.95	8.38%	150,000	5,842,519	25	30	25	No	-	-
Kilate	633.71	-	63.26	9.98%	-	-	-	15	-	No	-	-
Lizada	251.72	-	77.83	30.92%	-	-	-	10	-	No	-	-
Lubogan	72.90	-	20.39	27.97%	-	-	-	-	-	Yes	-	-
Marapangi	526.81	-	122.52	23.26%	-	-	20	30	20	Yes	-	-
Mulig	980.43	coconut	28.34	2.89%	44,500	1,261,318	55	30	55	No	-	-
Sibulan	501.15	abaca	38.22	7.63%	90,000	3,439,384	120	80	120	Yes	-	-
Sirawan	730.75	mango	121.18	16.58%	200,000	24,236,400	25	20	25	Yes	-	-
Tagluno	551.66	coconut	36.28	6.58%	40,000	1,451,371	75	25	75	Yes	-	-
Tagurano	498.36	coconut	28.67	5.75%	39,500	1,132,497	-	20	-	No	-	-
Tibuloy	804.03	coconut	98.59	12.26%	40,000	3,943,628	-	10	-	Yes	-	-
Toril	2.05	-	-	0.00%	-	-	-	-	-	-	-	-

Table NR – 6. Natural Resource Production Area Exposure Estimation, Fault Line, Davao City

Barangay	Exposure						Sensitivity					
	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Tungkalan	1,755.69	coconut	210.71	12.00%	40,500	8,533,671	50	75	50	Yes	0.85	-
Tugbok District												
Angalan	447.77	coconut	420.70	93.95%	36,019	15,153,037	-	-	-	Yes	-	-
Bago Oshiro	348.39	-	18.37	5.27%	-	-	-	-	-	Yes	-	-
Balengaeng	441.08	coconut	453.59	102.84%	36,000	16,329,314	-	15	-	Yes	11.48	-
Biao Escuela	1,284.53	coconut	670.27	52.18%	34,250	22,956,907	-	8	-	Yes	-	0.50
Biao Guianga	466.00	coconut	347.81	74.64%	34,628	12,044,035	-	6	-	Yes	-	2.86
Matina Biao	1,000.81	coconut	858.79	85.81%	34,098	29,282,946	-	5	-	Yes	-	-
Los Amigos	364.04	rice	323.96	88.99%	46,240	14,979,954	-	5	-	Yes	1987.58	15.53
Los Amigos	27.50	hito	27.50	100.00%	1,707,687	46,961,384	-	5	-	Yes	1987.58	15.53
Manambulan	751.58	coconut	175.84	23.40%	36,100	6,347,923	-	-	-	Yes	-	-
Manuel Guianga	874.55	coconut	250.80	28.68%	36,503	9,155,048	-	-	-	Yes	-	-
Mintal	435.08	coconut	65.66	15.09%	48,958	3,214,614	-	-	-	No	-	-
New Carmen	956.39	coconut	184.37	19.28%	72,543	13,374,601	-	-	-	No	-	-
New Valencia	880.77	coconut	224.22	25.46%	36,524	8,189,514	52	10	52	Yes	-	0.19
Sto. Niño	1.47	-	0.58	39.02%	-	-	-	-	-	No	-	-
Tacunan	790.18	coconut	320.36	40.54%	33,999	10,891,994	-	15	36	Yes	-	1.84
Tagakpan	707.45	coconut	487.69	68.94%	45,725	22,299,409	-	10	-	Yes	-	-
Talandang	1,220.69	coconut	233.86	19.16%	34,014	7,954,398	-	10	-	Yes	1.36	-
Tugbok	716.56	coconut	610.77	85.24%	39,469	24,106,520	-	-	-	Yes	-	-
Ula	856.08	coconut	527.44	61.61%	35,032	18,477,370	-	6	-	Yes	-	0.30

Landslide – Marilog Proper, which is largely planted with coconuts, has the widest exposed area to landslides with 3,803.93 hectares or 96.2% of the area allocated to the dominant crop. On the other hand, there are no recorded exposure in NRBPA within 28 barangays including Angalan, Bago Oshiro, Balengaeng, Biao Guianga, and Los Amigos.

Table NR – 7. Natural Resource Production Area Exposure Table, Landslide, Davao City

Barangay	Exposure						Sensitivity					
	Area By Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Talomo District												
Bago Aplaya	14.19	banana	-	0.00%	29,700	-	-	-	Yes	-	-	-
Bago Gallera	335.90	coconut	-	0.00%	61,972	-	-	-	-	-	-	-
Baliok	120.58	coconut	-	0.00%	61,062	-	-	-	Yes	-	-	-
Bucana	3.16	-	-	0.00%	-	-	-	-	-	-	-	-
Catalunan Grande	862.74	coconut	47.40	5.49%	74,117	3,513,303	-	-	Yes	-	-	-
Catalunan Pequeño	250.64	coconut	-	0.00%	60,731	-	-	-	Yes	-	-	-
Dumoy	195.07	coconut	-	0.00%	62,718	-	-	-	No	-	-	-
Langub	502.37	coconut	357.51	71.16%	73,248	26,186,533	-	-	Yes	-	-	1.11
Ma-a	76.80	coconut	32.05	41.74%	68,941	2,209,823	-	-	Yes	-	-	-
Magtuod	355.59	coconut	324.94	91.38%	71,590	23,262,637	-	-	Yes	-	-	-
Matina Aplaya	3.16	-	-	0.00%	-	-	-	-	-	-	-	-
Matina Crossing	7.94	-	6.81	85.81%	-	-	-	-	-	-	-	-
Matina Pangí	213.60	coconut	150.44	70.43%	54,793	8,243,208	-	-	Yes	-	-	-
Talomo	89.14	-	14.42	16.18%	-	-	-	-	Yes	-	-	-
Buhangin District												
Acacia	738.89	coconut	667.72	90.37%	21,000	14,022,028	-	-	No	-	-	-
Buhangin	123.37	-	116.26	94.23%	-	-	-	-	No	-	-	-

Table NR – 7. Natural Resource Production Area Exposure Table, Landslide, Davao City

Barangay	Exposure						Sensitivity					
	Area By Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Cabantian	231.75	-	120.13	51.84%	-	-	-	-	No	-	-	
Callawa	835.33	coconut	463.36	55.47%	28,540	13,224,296	-	-	Yes	6.71	1.71	
Communal	277.18	-	183.55	66.22%	-	-	-	-	No	-	-	
Indangan	1,112.40	coconut	791.80	71.18%	30,000	23,754,134	-	-	Yes	-	-	
Mandug	603.45	coconut	343.04	56.85%	30,000	10,291,273	-	-	Yes	-	-	
Sasa	22.71	-	6.61	29.13%	-	-	-	-	No	-	-	
Tigatto	354.51	banana local	123.66	34.88%	101,000	12,489,429	-	-	Yes	8.82	-	
Waan	352.74	coconut	199.13	56.45%	10,109	2,013,038	-	-	Yes	-	-	
Bunawan District												
Bunawan	380.57	-	31.58	8.30%	-	-	-	-	No	-	-	
Gatangan	1,125.29	coconut	1,069.85	95.07%	31,132	33,306,418	-	-	Yes	-	-	
Ilang	228.31	-	127.96	56.04%	-	-	-	-	No	-	-	
Lasang	455.52	-	-	0.00%	-	-	-	-	Yes	-	-	
Mahayag	407.79	coconut	143.87	35.28%	30,000	4,316,053	-	-	No	-	-	
Mudiang	561.40	coconut	528.69	94.17%	31,789	16,806,480	-	-	No	-	-	
Panacan	201.64	-	66.39	32.92%	-	-	-	-	Yes	-	-	
San Isidro	518.52	banana local	76.68	14.79%	73,575	5,641,897	-	-	Yes	-	-	
Tibungco	450.59	-	223.65	49.63%	-	-	-	-	No	-	-	
Paquibato District												
Colosas	3,608.87	coconut	3,311.11	91.75%	5,794	19,184,573	105	50	Yes	-	-	
Fatima	2,473.51	coconut	2,186.58	88.40%	5,717	12,500,673	180	47	Yes	-	-	
Lumiad	885.86	corn	869.46	98.15%	71,941	62,549,543	110	60	Yes	-	-	
Mabuhay	997.56	coconut	717.09	71.88%	4,396	3,152,329	50	25	Yes	0.52	-	

Table NR – 7. Natural Resource Production Area Exposure Table, Landslide, Davao City

Barangay	Exposure						Sensitivity					
	Area By Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Malabog	3,527.92	coconut	3,498.42	99.16%	11,833	41,396,821	300	100	300	Yes	-	-
Mapula	1,932.29	coconut	1,923.59	99.55%	22,669	43,605,945	190	70	190	Yes	-	0.15
Pandaitan	2,036.11	coconut	1,951.07	95.82%	13,139	25,635,055	240	80	240	Yes	-	-
Pañalum	609.23	banana	507.03	83.23%	52,178	26,455,677	120	40	120	Yes	-	-
Paquibato	1,375.53	coconut	1,196.30	86.97%	16,716	19,997,383	160	70	160	Yes	-	-
Paradise Embac	1,731.39	coconut	1,484.55	85.74%	17,182	25,507,522	140	75	140	Yes	-	-
Salapawan	176.45	coconut	137.90	78.15%	6,158	849,217	100	68	100	Yes	-	-
Sumimao	1,434.92	coconut	1,425.87	99.37%	1,910	2,723,407	170	43	170	Yes	0.05	-
Tapak	1,269.49	coconut	1,258.96	99.17%	16,131	20,308,351	140	40	140	Yes	-	-
Baguio District												
Baguio	638.57	coconut	48.53	7.60%	38,187	1,853,329	47	215	47	Yes	-	-
Cadalian	616.55	coconut	96.35	15.63%	39,195	3,776,288	115	383	115	Yes	-	-
Carmen	340.03	cacao	108.82	32.00%	78,600	8,553,252	55	348	55	Yes	-	-
Gumalang	1,394.99	coconut	211.77	15.18%	39,250	8,312,132	110	680	110	Yes	3.78	-
Malagos	826.54	coconut	51.22	6.20%	38,359	1,964,829	160	571	160	Yes	2.26	-
Tambobong	349.39	coconut	326.52	93.45%	32,089	10,477,788	75	150	75	Yes	-	-
Tawan-Tawan	874.21	cacao	109.00	12.47%	84,555	9,216,742	156	544	156	Yes	1.49	-
Wines	855.76	coconut	73.90	8.64%	39,098	2,889,221	80	355	80	Yes	8.25	-
Calinan District												
Biao Joaquin	513.94	coconut	133.13	25.90%	35,291	4,698,446	60	16	60	Yes	-	0.52
Calinan	611.68	rice	29.51	4.83%	81,940	2,418,371	70	10	70	Yes	6533.33	-
Cawayan	777.62	pineapple	27.24	3.50%	574,200	15,641,951	35	5	35	Yes	1.53	-
Dacudao	1,123.77	coconut	209.49	18.64%	38,065	7,974,275	40	-	40	Yes	-	-

Table NR – 7. Natural Resource Production Area Exposure Table, Landslide, Davao City

Barangay	Exposure						Sensitivity					
	Area By Dominant Crop (Has.)	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Dalagdag	317.69	coconut	236.65	74.49%	32,540	7,700,661	30	4	30	Yes	4.38	-
Dominga	498.35	coconut	365.55	73.35%	34,043	12,444,522	45	10	45	No	-	-
Inayangan	1,138.27	coconut	1,062.21	93.32%	34,045	36,163,086	45	10	45	Yes	-	-
Lacson	764.19	coconut	218.29	28.57%	38,039	8,303,717	60	10	60	Yes	8.77	-
Lamanan	1,427.04	coconut	888.63	62.27%	35,047	31,143,916	56	10	56	Yes	-	-
Lampianao	794.41	coconut	452.97	57.02%	32,541	14,740,253	50	10	50	Yes	-	0.97
Megkawayan	1,551.55	cacao	1,470.45	94.77%	69,371	102,006,789	36	20	36	Yes	-	-
Pangyan	660.52	coconut	342.70	51.88%	26,517	9,087,289	31	10	31	Yes	-	-
Riverside	421.37	coconut	-	0.00%	38,100	-	36	10	36	Yes	41.85	-
Saloy	990.07	coconut	955.01	96.46%	39,071	37,313,302	70	10	70	Yes	-	-
Sirib	2,120.12	banana cav.	633.36	29.87%	407,720	258,234,375	60	15	60	Yes	-	-
Subasta	1,172.23	coconut	-	0.00%	38,059	-	65	5	65	Yes	1.02	-
Talomo River	707.69	coconut	73.17	10.34%	37,113	2,715,562	65	20	65	Yes	-	1.48
Tamayong	1,356.14	banana cav.	901.06	66.44%	554,376	499,524,728	75	15	75	Yes	-	-
Wangan	1,147.83	coconut	-	0.00%	39,098	-	65	12	65	Yes	4.28	0.05
Marilog District												
Baganihan	168.75	corn	1.55	0.92%	48,000	74,450	30	15	113	Yes	-	-
Bantol	408.76	coconut	349.17	85.42%	36,174	12,630,595	150	200	150	Yes	-	-
Buda	1,422.90	vegetables	673.94	47.36%	75,600	50,949,549	20	10	20	Yes	1.05	-
Dalag Lumot	140.76	cacao	137.85	97.93%	-	-	100	200	100	Yes	-	-
Datu Salumay	681.46	vegetables	447.75	65.70%	-	-	150	150	150	Yes	-	-
Gumitan	814.50	rice	785.82	96.48%	31,556	24,796,986	25	25	25	Yes	-	-

Table NR – 7. Natural Resource Production Area Exposure Table, Landslide, Davao City

Barangay	Exposure						Sensitivity					
	Area By Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Magsaysay	1,580.09	corn	1,416.06	89.62%	60,000	84,963,457	100	75	212	Yes	-	-
Malamba	1,729.27	coconut	1,535.40	88.79%	35,087	53,872,656	60	200	60	Yes	-	-
Marilog	3,936.82	coconut	3,803.93	96.62%	34,207	130,120,980	500	375	860	Yes	0.30	-
Salaysay	1,854.46	banana cav.	1,845.25	99.50%	36	67,108	150	300	150	Yes	0.42	-
Suawan	1,684.68	coconut	1,127.29	66.91%	34,192	38,544,405	100	100	620	Yes	1.11	-
Tamugan	946.09	coconut	157.57	16.66%	39,214	6,179,096	200	100	200	Yes	-	-
Toril District												
Alambre	280.59	coconut	26.82	9.56%	44,000	1,180,082	25	20	25	Yes	3.79	-
Atan-Awe	319.38	coconut	308.12	96.47%	42,500	13,095,091	25	30	25	No	-	-
Bankas Heights	205.75	coconut	-	0.00%	44,000	-	5	30	5	Yes	-	-
Baracatan	1,085.56	coconut	637.55	58.73%	41,000	26,139,546	30	30	30	No	-	-
Bato	745.05	coconut	273.05	36.65%	35,000	9,556,586	25	25	25	No	2.55	-
Bayabas	1,183.42	coconut	423.56	35.79%	37,500	15,883,424	5	20	5	No	-	-
Crossing Bayabas	78.79	-	-	0.00%	-	-	-	-	-	No	-	-
Binugao	290.68	coconut	159.30	54.80%	38,000	6,053,483	25	25	25	Yes	-	-
Camansi	349.76	coconut	216.16	61.80%	37,500	8,106,078	35	30	35	Yes	-	-
Catigan	2,329.75	coconut	1,196.79	51.37%	40,000	47,871,756	50	60	50	Yes	-	-
Dallao	4.68	-	-	0.00%	-	-	-	-	-	Yes	-	-
Dallao Plantation	971.65	banana	644.98	66.38%	640,000	412,790,380	30	25	30	Yes	-	-
Eden	464.93	durian	420.64	90.47%	150,000	63,095,335	25	30	25	No	-	-
Kilate	633.71	-	174.02	27.46%	-	-	-	15	-	No	-	-
Lizada	251.72	-	-	0.00%	-	-	-	10	-	No	-	-

Table NR – 7. Natural Resource Production Area Exposure Table, Landslide, Davao City

Barangay	Exposure						Sensitivity					
	Area By Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Lubogan	72.90	-	-	0.00%	-	-	-	-	-	Yes	-	-
Marapangi	526.81	-	155.29	29.48%	-	-	20	20	Yes	-	-	-
Mulig	980.43	coconut	16.79	1.71%	44,500	747,042	55	30	No	-	-	-
Sibulan	501.15	abaca	498.92	99.56%	90,000	44,902,920	120	80	Yes	-	-	-
Sirawan	730.75	mango	191.32	26.18%	200,000	38,263,745	25	20	Yes	-	-	-
Tagluno	551.66	coconut	65.11	11.80%	40,000	2,604,366	75	25	Yes	-	-	-
Tagurano	498.36	coconut	308.57	61.92%	39,500	12,188,707	-	20	No	-	-	-
Tibuloy	804.03	coconut	643.98	80.09%	40,000	25,759,216	-	10	Yes	-	-	-
Toril	2.05	-	-	0.00%	-	-	-	-	-	-	-	-
Tungkalan	1,755.69	coconut	868.30	49.46%	40,500	35,166,168	50	75	Yes	0.85	-	-
Tugbok District												
Angalan	447.77	coconut	-	0.00%	36,019	-	-	-	Yes	-	-	-
Bago Oshiro	348.39	-	-	0.00%	-	-	-	-	Yes	-	-	-
Balangaeng	441.08	coconut	-	0.00%	36,000	-	-	15	Yes	11.48	-	-
Biao Escuela	1,284.53	coconut	9.62	0.75%	34,250	329,363	-	8	Yes	-	0.50	-
Biao Guianga	466.00	coconut	-	0.00%	34,628	-	-	6	Yes	-	2.86	-
Matina Biao	1,000.81	coconut	92.57	9.25%	34,098	3,156,503	-	5	Yes	-	-	-
Los Amigos	364.04	rice	-	0.00%	46,240	-	-	5	Yes	1987.58	15.53	-
Manambulan	751.58	coconut	21.21	2.82%	36,100	765,858	-	-	Yes	-	-	-
Manuel Guianga	874.55	coconut	65.98	7.54%	36,503	2,408,559	-	10	Yes	-	-	-
Mintal	435.08	coconut	-	0.00%	48,958	-	-	-	No	-	-	-
New Carmen	956.39	coconut	688.77	72.02%	72,543	49,965,436	-	-	No	-	-	-
New Valencia	880.77	coconut	386.02	43.83%	36,524	14,099,012	52	10	Yes	-	0.19	-

Table NR – 7. Natural Resource Production Area Exposure Table, Landslide, Davao City

Barangay	Exposure						Sensitivity					
	Area By Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Sto. Niño	1.47		-	0.00%		-	-	-	-	No	-	-
Tacunan	790.18	coconut	-	0.00%	33,999	-	36	15	36	Yes	-	1.84
Tagakpan	707.45	coconut	-	0.00%	45,725	-	-	10	-	Yes	-	-
Talandang	1,220.69	coconut	683.09	55.96%	34,014	23,234,568	-	10	-	Yes	1.36	-
Tugbok	716.56	coconut	-	0.00%	39,469	-	-	-	-	Yes	-	-
Ula	856.08	coconut	-	0.00%	35,032	-	-	6	-	Yes	-	0.30

Storm Surge – Bunawan Proper has the largest exposed area to storm surge at 222.71 hectares or 58.52% of the total area allocated for agricultural purposes. At least seven (7) barangays such as Daliao, Bago Gallera, Ma-a, Matina Crossing, Sasa, Mahayag, and Tibungco have no exposed areas.

Table NR – 8. Natural Resource Production Area Exposure Table, Storm Surge, Davao City

Barangay	Exposure						Sensitivity					
	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Talomo District												
Bago Aplaya	14.19	banana	7.83	55.15%	29,700	232,426	-	-	Yes	-	-	
Bago Gallera	335.90	coconut	-	0.00%	61,972	-	-	-	-	-	-	
Bucana	3.16	-	3.16	99.99%	-	-	-	-	-	-	-	
Dumoy	195.07	coconut	39.92	20.47%	62,718	2,503,975	-	-	No	-	-	
Ma-a	76.80	coconut	-	0.00%	68,941	-	-	-	Yes	-	-	
Matina Aplaya	5.16	Pelagic Fishes	4.30	83.22%	168,000,000	721,762,044	-	-	-	-	-	
Matina Crossing	7.94	-	-	0.00%	-	-	-	-	-	-	-	
Talomo	89.14	-	5.11	5.73%	-	-	-	-	Yes	-	-	
Buhangin District												
Sasa	22.71	-	-	0.00%	-	-	-	-	No	-	-	
Bunawan District												
Bunawan	380.57	-	222.71	58.52%	-	-	-	-	No	-	-	
Ilang	228.31	-	1.17	0.51%	-	-	-	-	No	-	-	
Lasang	455.52	-	151.60	33.28%	-	-	-	-	Yes	-	-	
Mahayag	407.79	coconut	-	0.00%	30,000	-	-	-	No	-	-	
Panacan	201.64	-	11.52	5.71%	-	-	-	-	Yes	-	-	

Table NR – 8. Natural Resource Production Area Exposure Table, Storm Surge, Davao City

Barangay	Exposure						Sensitivity					
	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
San Isidro	518.52	banana local	7.36	1.42%	73,575	541,164	-	-	-	Yes	-	-
Tibungco	450.59		-	0.00%	-	-	-	-	-	No	-	-
Toril District												
Binugao	290.68	coconut	62.86	21.62%	38,000	2,388,578	25	25	25	Yes	-	-
Daliao	4.68	-	0.00	0.00%	-	-	-	-	-	Yes	-	-
Lizada	251.72	-	184.69	73.37%	-	-	-	10	-	No	-	-
Sirawan	730.75	mango	36.57	5.00%	200,000	7,313,778	25	20	25	Yes	-	-

Liquefaction – Lasang has the widest exposed area to liquefaction at 450.61 hectares or 98.92% of the total area allocated for agricultural purposes. On the other hand, a total of 24 barangays have no recorded exposed areas.

Table NR – 9. Natural Resource Production Area Exposure Table, Liquefaction, Davao City

Barangay	Exposure						Sensitivity					
	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Talomo District												
Bago Aplaya	14.19	banana	9.69	68.27%	29,700	287,724	-	-	Yes	-	-	
Bago Gallera	335.90	coconut	15.90	4.73%	61,972	985,307	-	-	-	-	-	
Bucana	3.16	-	2.91	92.14%	-	-	-	-	-	-	-	
Catalunan Grande	862.74	coconut	2.84	0.33%	74,117	210,739	-	-	Yes	-	-	
Catalunan Pequeño	250.64	coconut	-	0.00%	60,731	-	-	-	Yes	-	-	
Dumoy	195.07	coconut	111.24	57.03%	62,718	6,976,694	-	-	No	-	-	
Ma-a	76.80	coconut	42.25	55.01%	68,941	2,912,427	-	-	Yes	-	-	
Matina Aplaya	3.16	-	2.18	68.92%	-	-	-	-	-	-	-	
Matina Crossing	7.94	-	1.11	13.98%	-	-	-	-	-	-	-	
Matina Pangí	213.60	coconut	30.88	14.46%	54,793	1,692,009	-	-	Yes	-	-	
Talomo	89.14	-	2.49	2.79%	-	-	-	-	Yes	-	-	
Buhangin District												
Buhangin	123.37	-	-	0.00%	-	-	-	-	No	-	-	
Callawa	835.33	coconut	-	0.00%	28,540	-	-	-	Yes	6.71	1.71	
Mandug	603.45	coconut	10.13	1.68%	30,000	304,033	-	-	Yes	-	-	
Sasa	22.71	-	-	0.00%	-	-	-	-	No	-	-	
Tigatto	354.51	banana local	155.36	43.82%	101,000	15,690,959	-	-	Yes	8.82	-	

Table NR – 9. Natural Resource Production Area Exposure Table, Liquefaction, Davao City

Barangay	Exposure						Sensitivity					
	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Waan	352.74	coconut	125.74	35.65%	10,109	1,271,108	-	-	-	Yes	-	-
Bunawan District												
Bunawan	380.57	-	297.24	78.10%	-	-	-	-	-	No	-	-
Ilang	228.31	-	0.73	0.32%	-	-	-	-	-	No	-	-
Lasang	455.52	-	450.61	98.92%	-	-	-	-	-	Yes	-	-
Mahayag	407.79	coconut	-	0.00%	30,000	-	-	-	-	No	-	-
Panacan	201.64	-	28.14	13.96%	-	-	-	-	-	Yes	-	-
San Isidro	518.52	banana local	289.70	55.87%	73,575	21,314,890	-	-	-	Yes	-	-
Tibungco	450.59	-	-	0.00%	-	-	-	-	-	No	-	-
Baguio District												
Malagos	826.54	coconut	-	0.00%	38,359	-	160	160	Yes	2.26	-	-
Calinan District												
Calinan	611.68	rice	-	0.00%	81,940	-	70	70	Yes	6533.33	-	-
Dacudao	1,123.77	coconut	-	0.00%	38,065	-	40	40	Yes	-	-	-
Lacson	764.19	coconut	-	0.00%	38,039	-	60	60	Yes	8.77	-	-
Riverside	421.37	coconut	-	0.00%	38,100	-	36	36	Yes	41.85	-	-
Subasta	1,172.23	coconut	-	0.00%	38,059	-	65	65	Yes	1.02	-	-
Wangan	1,147.83	coconut	-	0.00%	39,098	-	65	65	Yes	4.28	0.05	-
Toril District												
Crossing Bayabas	78.79	-	-	0.00%	-	-	-	-	No	-	-	-
Binugao	290.68	coconut	92.34	31.77%	38,000	3,508,903	25	25	Yes	-	-	-
Daliao	4.68	-	4.61	98.53%	-	-	-	-	Yes	-	-	-

Table NR – 9. Natural Resource Production Area Exposure Table, Liquefaction, Davao City

Barangay	Exposure						Sensitivity					
	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Lizada	251.72	-	248.81	98.85%	-	-	-	10	-	No	-	-
Lubogan	72.90	-	-	0.00%	-	-	-	-	-	Yes	-	-
Marapangi	526.81	-	0.01	0.00%	-	-	20	30	20	Yes	-	-
Sibulan	501.15	abaca	-	0.00%	90,000	-	120	80	120	Yes	-	-
Sirawan	730.75	mango	83.52	11.43%	200,000	16,704,611	25	20	25	Yes	-	-
Toril	2.05		2.03	99.00%		-	-	-	-	-	-	-
Tugbok												
Angalan	447.77	coconut	-	0.00%	36,019	-	-	-	-	Yes	-	-
Balangaeng	441.08	coconut	-	0.00%	36,000	-	-	15	-	Yes	11.48	-
Los Amigos	364.04	rice	-	0.00%	46,240	-	-	5	-	Yes	1987.58	15.53
New Carmen	956.39	coconut	42.00	4.39%	72,543	3,046,628	-	-	-	No	-	-
New Valencia	880.77	coconut	-	0.00%	36,524	-	52	10	52	Yes	-	0.19
Tagakpan	707.45	coconut	-	0.00%	45,725	-	-	10	-	Yes	-	-
Talandang	1,220.69	coconut	-	0.00%	34,014	-	-	10	-	Yes	1.36	-
Tugbok	716.56	coconut	-	0.00%	39,469	-	-	-	-	Yes	-	-
Ula	856.08	coconut	-	0.00%	35,032	-	-	6	-	Yes	-	0.30

Fault Line – Malabog has the largest area exposed to fault line systems with 7.42 hectares or 0.21% of the total area allocated for agricultural purposes. The site is largely planted with coconuts. Only Tapak and Sto.Niño have no areas that are exposed to fault line systems.

Table NR – 10. Natural Resource Production Area Exposure Table, Fault Line, Davao City

Barangay	Exposure						Sensitivity					
	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposed Percentage	Average Potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Talomo District												
Baliok	120.58	coconut	0.28	0.24%	61,062	17,353	-	-	Yes	-	-	-
Catalunan Grande	862.74	coconut	1.38	0.16%	74,117	102,450	-	-	Yes	-	-	-
Catalunan Pequeño	250.64	coconut	1.49	0.60%	60,731	90,747	-	-	Yes	-	-	-
Langub	502.37	coconut	2.00	0.40%	73,248	146,463	-	-	Yes	-	-	1.11
Talomo	89.14	-	1.33	1.49%	-	-	-	-	Yes	-	-	-
Paquibato District												
Lumiad	885.86	corn	1.71	0.19%	71,941	123,038	110	60	110	Yes	-	-
Malabog	3,527.92	coconut	7.42	0.21%	11,833	87,820	300	100	300	Yes	-	-
Mapula	1,932.29	coconut	0.06	0.00%	22,669	1,438	190	70	190	Yes	-	0.15
Pañalum	609.23	banana	0.34	0.06%	52,178	17,853	120	40	120	Yes	-	-
Paquibato	1,375.53	coconut	1.28	0.09%	16,716	21,378	160	70	160	Yes	-	-
Tapak	1,269.49	coconut	-	0.00%	16,131	-	140	40	140	Yes	-	-
Baguio District												
Baguio	638.57	coconut	0.26	0.04%	38,187	9,998	47	215	47	Yes	-	-
Gumalang	1,394.99	coconut	3.85	0.28%	39,250	151,279	110	680	110	Yes	3.78	-
Malagos	826.54	coconut	3.42	0.41%	38,359	131,141	160	571	160	Yes	2.26	-

Table NR – 10. Natural Resource Production Area Exposure Table, Fault Line, Davao City

Barangay	Exposure							Sensitivity				
	Area by Dominant Crop (Has.)	Dominant Crop/ Variety of Produce	Exposed Area	Exposed Percentage	Average Potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Calinan District												
Biao Joaquin	513.94	coconut	1.21	0.24%	35,291	42,638	60	16	60	Yes	-	0.52
Calinan	611.68	rice	2.82	0.46%	81,940	230,748	70	10	70	Yes	6533.33	-
Cawayan	777.62	pineapple	2.05	0.26%	574,200	1,179,802	35	5	35	Yes	1.53	-
Dacudao	1,123.77	coconut	3.70	0.33%	38,065	141,027	40	-	40	Yes	-	-
Dominga	498.35	coconut	1.94	0.39%	34,043	66,036	45	10	45	No	-	-
Lacson	764.19	coconut	3.14	0.41%	38,039	119,539	60	10	60	Yes	8.77	-
Lamanan	1,427.04	coconut	2.13	0.15%	35,047	74,654	56	10	56	Yes	-	-
Lampianao	794.41	coconut	0.44	0.06%	32,541	14,417	50	10	50	Yes	-	0.97
Pangyan	660.52	coconut	4.14	0.63%	26,517	109,747	31	10	31	Yes	-	-
Riverside	421.37	coconut	1.61	0.38%	38,100	61,276	36	10	36	Yes	41.85	-
Subasta	1,172.23	coconut	3.17	0.27%	38,059	120,682	65	5	65	Yes	1.02	-
Talomo River	707.69	coconut	5.40	0.76%	37,113	200,313	65	20	65	Yes	-	1.48
Wangan	1,147.83	coconut	3.69	0.32%	39,098	144,272	65	12	65	Yes	4.28	0.05
Marilog District												
Tamugan	946.09	coconut	2.42	0.26%	39,214	94,890	200	100	200	Yes	-	-
Toril District												
Alambre	280.59	coconut	2.23	0.79%	44,000	98,090	25	20	25	Yes	3.79	-
Bankas Heights	205.75	coconut	1.63	0.79%	44,000	71,813	5	30	5	Yes	-	-
Binugao	290.68	coconut	0.22	0.07%	38,000	8,239	25	25	25	Yes	-	-

Table NR – 10. Natural Resource Production Area Exposure Table, Fault Line, Davao City

Barangay	Exposure						Sensitivity					
	Area by Dominant Crop (Has.)	Dominant Crop/ Variety of Produce	Exposed Area	Exposed Percentage	Average Potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Camansi	349.76	coconut	1.49	0.43%	37,500	55,776	35	30	35	Yes	-	-
Lizada	251.72	-	0.12	0.05%	-	-	-	10	-	No	-	-
Lubogan	72.90	-	0.32	0.44%	-	-	-	-	-	Yes	-	-
Mulig	980.43	coconut	0.01	0.00%	44,500	578	55	30	55	No	-	-
Sirawan	730.75	mango	0.65	0.09%	200,000	130,259	25	20	25	Yes	-	-
Tagluno	551.66	coconut	0.47	0.08%	40,000	18,708	75	25	75	Yes	-	-
Tugbok District												
Angalan	447.77	coconut	1.01	0.23%	36,019	36,438	-	-	-	Yes	-	-
Bago Oshiro	348.39	-	2.01	0.58%	-	-	-	-	-	Yes	-	-
Balangaeng	441.08	coconut	2.10	0.48%	36,000	75,588	-	15	-	Yes	11.48	-
Biao Escuela	1,284.53	coconut	4.17	0.32%	34,250	142,933	-	8	-	Yes	-	0.50
Biao Guiranga	466.00	coconut	0.74	0.16%	34,628	25,527	-	6	-	Yes	-	2.86
Matina Biao	1,000.81	coconut	5.64	0.56%	34,098	192,460	-	5	-	Yes	-	-
Los Amigos	364.04	rice	2.27	0.62%	46,240	104,862	-	5	-	Yes	1987.58	15.53
Manambulan	751.58	coconut	3.03	0.40%	36,100	109,402	-	-	-	Yes	-	-
Mintal	435.08	coconut	0.88	0.20%	48,958	42,911	-	-	-	No	-	-
New Carmen	956.39	coconut	0.19	0.02%	72,543	13,954	-	-	-	No	-	-
New Valencia	880.77	coconut	2.53	0.29%	36,524	92,488	52	10	52	Yes	-	0.19

Table NR – 10. Natural Resource Production Area Exposure Table, Fault Line, Davao City

Barangay	Exposure						Sensitivity					
	Area by Dominant Crop (Has.)	Dominant Crop/ Variety of Produce	Exposed Area	Exposed Percentage	Average Potential income per hectare per year (PHP)	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment
Sto. Niño	1.47	-	-	0.00%	-	-	-	-	-	No	-	-
Tacunan	790.18	coconut	0.05	0.01%	33,999	1,851	36	36	Yes	-	-	1.84
Tagakpan	707.45	coconut	1.44	0.20%	45,725	65,889	-	10	Yes	-	-	-
Talandang	1,220.69	coconut	4.24	0.35%	34,014	144,363	-	10	Yes	Yes	1.36	-
Tugbok	716.56	coconut	4.97	0.69%	39,469	196,298	-	-	Yes	Yes	-	-
Ula	856.08	coconut	0.80	0.09%	35,032	27,978	-	6	-	Yes	-	0.30

Degree of Impact to Natural Resource-Based Production Area

Hazards and climate changes may critically affect the flora and fauna including the agricultural production areas in NRBPA's. In this section, a degree of impact rating is given per area. The highest is three (3), where the value of property damage to natural resources is expected to be disastrous given the extent of exposure and current sensitivity of the system. The moderate score is two (2), where moderate direct impacts are expected in terms of value of property damage to natural resources. The lowest is one (1), where the direct and indirect impacts to natural resources are seen to be low to negligible and can be felt within a short-term period.

Workshop results show that only the NRBPA's within fault line systems have no degree of impact. Those areas within fault line systems have no structures, but have only farms that may be transferred to other areas.

Flood – The NRBPA's in Callawa, Waan, Calinan Proper, Cawayan, Dominga, Riverside, Wangan, Balengaeng, and Los Amigos have the highest degree of impact rating (Table NR – 11). These are expected to have the highest extent of damage to natural resources whenever there are floods. Of the barangays, Cawayan is estimated to have the highest exposed value at ₱15,005,737, where the pineapple farms would be highly affected.

Table NR – 11. Natural Resource-Based Production Areas, Degree of Impact Rating, Flood, Davao City

Barangay	Exposure					Sensitivity					Impact	
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to Hazard information	Number of Production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with Water impoundment		
Talomo District												
Bago Aplaya	banana	2.13	15.02%	63,308	-	-	-	Yes	-	-	-	1
Bago Gallera	coconut	69.56	20.71%	4,311,015	-	-	-	-	-	-	-	1
Baliok	coconut	35.27	29.25%	2,153,449	-	-	-	Yes	-	-	-	1
Bucana	-	1.85	58.75%	-	-	-	-	-	-	-	-	1
Catalunan Grande	coconut	172.78	20.03%	12,806,285	-	-	-	Yes	-	-	-	2

Table NR – 11. Natural Resource-Based Production Areas, Degree of Impact Rating, Flood, Davao City

Barangay	Exposure					Sensitivity						Impact
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to Hazard information	Number of Production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with Water impoundment	Degree of impact	
Catalunan Pequeño	coconut	87.86	35.05%	5,335,778	-	-	-	Yes	-	-	1	
Dumoy	coconut	19.59	10.04%	1,228,600	-	-	-	No	-	-	1	
Langub	coconut	136.89	27.25%	10,027,132	-	-	-	Yes	-	1.11	2	
Ma-a	coconut	30.57	39.80%	2,107,343	-	-	-	Yes	-	-	1	
Magtuod	coconut	2.11	0.59%	151,224	-	-	-	Yes	-	-	2	
Matina Aplaya	Pelagic Fishes	4.30	83.22%	721,762,044	-	-	-	-	-	-	1	
Matina Crossing	-	1.11	13.98%	-	-	-	-	-	-	-	1	
Matina Pangi	coconut	45.63	21.36%	2,500,194	-	-	-	Yes	-	-	1	
Talomo	-	45.71	51.27%	-	-	-	-	Yes	-	-	1	
Buhangin District												
Acacia	coconut	4.99	0.68%	104,855	-	-	-	No	-	-	1	
Buhangin	-	-	0.00%	-	-	-	-	No	-	-	1	
Cabantian	-	0.05	0.02%	-	-	-	-	No	-	-	1	
Callawa	coconut	68.56	8.21%	1,956,814	-	-	-	Yes	6.71	1.71	3	
Communal	-	15.77	5.69%	-	-	-	-	No	-	-	1	
Indangan	coconut	5.71	0.51%	171,253	-	-	-	Yes	-	-	1	
Mandug	coconut	83.26	13.80%	2,497,785	-	-	-	Yes	-	-	2	
Sasa	-	-	0.00%	-	-	-	-	No	-	-	1	
Tigatto	banana local	127.62	36.00%	12,889,877	-	-	-	Yes	8.82	-	2	
Waan	coconut	127.58	36.17%	1,289,702	-	-	-	Yes	-	-	3	
Bunawan District												
Bunawan	-	86.20	22.65%	-	-	-	-	No	-	-	1	

Table NR – 11. Natural Resource-Based Production Areas, Degree of Impact Rating, Flood, Davao City

Barangay	Exposure					Sensitivity						Impact
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to Hazard information	Number of Production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with Water impoundment	Degree of impact	
Gatungan	coconut	17.17	1.53%	534,413	-	-	-	Yes	-	-	1	
Ilang	-	5.80	2.54%	-	-	-	-	No	-	-	1	
Lasang	Pelagic Fishes	119.86	26.31%	-	-	-	-	Yes	-	-	1	
Mahayag	coconut	1.00	0.25%	29,982	-	-	-	No	-	-	1	
Mudiang	coconut	7.98	1.42%	253,629	-	-	-	No	-	-	1	
Panacan	-	9.49	4.71%	-	-	-	-	Yes	-	-	1	
San Isidro	banana local	23.69	4.57%	1,742,956	-	-	-	Yes	-	-	1	
Tibungco	-	4.74	1.05%	-	-	-	-	No	-	-	1	
Paquibato District												
Colosas	coconut	188.06	5.21%	1,089,632	105	50	105	Yes	-	-	2	
Fatima	coconut	0.05	0.00%	267	180	47	180	Yes	-	-	1	
Lumiad	corn	-	0.00%	-	110	60	110	Yes	-	-	1	
Mabuhay	coconut	31.24	3.13%	137,341	50	25	50	Yes	0.52	-	1	
Malabog	coconut	27.88	0.79%	329,856	300	100	300	Yes	-	-	1	
Mapula	coconut	0.22	0.01%	4,973	190	70	190	Yes	-	0.15	1	
Pandaitan	coconut	4.19	0.21%	55,050	240	80	240	Yes	-	-	1	
Pañalum	banana	5.03	0.83%	262,517	120	40	120	Yes	-	-	2	
Paquibato	coconut	1.32	0.10%	22,065	160	70	160	Yes	-	-	1	
Paradise Embac	coconut	134.06	7.74%	2,303,349	140	75	140	Yes	-	-	1	
Salapawan	coconut	12.73	7.21%	78,376	100	68	100	Yes	-	-	1	
Sumimao	coconut	70.30	4.90%	134,273	170	43	170	Yes	0.05	-	2	
Tapak	coconut	56.30	4.43%	908,155	140	40	140	Yes	-	-	2	
Baguio District												

Table NR – 11. Natural Resource-Based Production Areas, Degree of Impact Rating, Flood, Davao City

Barangay	Exposure					Sensitivity						Impact
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to Hazard information	Number of Production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with Water impoundment	Degree of impact	
Baguio	coconut	147.87	23.16%	5,646,771	47	215	47	Yes	-	-	2	
Cadalian	coconut	46.05	7.47%	1,804,988	115	383	115	Yes	-	-	1	
Carmen	cacao	19.64	5.78%	1,543,845	55	348	55	Yes	-	-	1	
Gumalang	coconut	302.40	21.68%	11,869,228	110	680	110	Yes	3.78	-	2	
Malagos	coconut	290.25	35.12%	11,133,819	160	571	160	Yes	2.26	-	2	
Tambobong	coconut	19.84	5.68%	636,650	75	150	75	Yes	-	-	1	
Tawan-Tawan	cacao	112.33	12.85%	9,498,189	156	544	156	Yes	1.49	-	1	
Wines	coconut	184.14	21.52%	7,199,602	80	355	80	Yes	8.25	-	1	
Calinan District												
Biao Joaquin	coconut	371.61	72.31%	13,114,701	60	16	60	Yes	-	0.52	1	
Calinan	rice	571.41	93.42%	46,821,452	70	10	70	Yes	6533.33	-	3	
Cawayan	pineapple	262.98	33.82%	151,005,737	35	5	35	Yes	1.53	-	3	
Dacudao	coconut	344.21	30.63%	13,102,325	40	-	40	Yes	-	-	2	
Dalagdag	coconut	62.35	19.63%	2,029,016	30	4	30	Yes	4.38	-	2	
Dominga	coconut	172.90	34.69%	5,885,865	45	10	45	No	-	-	3	
Inayangan	coconut	45.62	4.01%	1,553,211	45	10	45	Yes	-	-	1	
Lacson	coconut	186.95	24.46%	7,111,429	60	10	60	Yes	8.77	-	2	
Lamanan	coconut	359.99	25.23%	12,616,614	56	10	56	Yes	-	-	1	
Lampianao	coconut	136.12	17.14%	4,429,583	50	10	50	Yes	-	0.97	2	
Megkawayan	cacao	60.23	3.88%	4,178,160	36	20	36	Yes	-	-	1	

Table NR – 11. Natural Resource-Based Production Areas, Degree of Impact Rating, Flood, Davao City

Barangay	Exposure					Sensitivity						Impact
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to Hazard information	Number of Production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with Water impoundment	Degree of impact	
Pangyan	coconut	96.28	14.58%	2,552,956	31	10	31	Yes	-	-	1	
Riverside	coconut	267.60	63.51%	10,195,435	36	10	36	Yes	41.85	-	3	
Saloy	coconut	95.48	9.64%	3,730,482	70	10	70	Yes	-	-	2	
Sirib	banana cav.	761.51	35.92%	310,481,541	60	15	60	Yes	-	-	2	
Subasta	coconut	787.31	67.16%	29,964,258	65	5	65	Yes	1.02	-	1	
Talomo River	coconut	536.67	75.83%	19,917,471	65	20	65	Yes	-	1.48	2	
Tamayong	banana cav.	94.49	6.97%	52,381,458	75	15	75	Yes	-	-	1	
Wangan	coconut	555.44	48.39%	21,716,563	65	12	65	Yes	4.28	0.05	3	
Marilig District												
Baganihan	corn	-	0.00%	-	30	15	113	Yes	-	-	1	
Bantol	coconut	34.95	8.55%	1,264,108	150	200	150	Yes	-	-	2	
Buda	vegetables	-	0.00%	-	20	10	20	Yes	1.05	-	1	
Dalag Lumot	cacao	-	0.00%	-	100	200	100	Yes	-	-	1	
Datu Salumay	vegetables	-	0.00%	-	150	150	150	Yes	-	-	1	
Gumitan	rice	8.76	1.08%	276,302	25	25	25	Yes	-	-	2	
Magsaysay	corn	-	0.00%	-	100	75	212	Yes	-	-	1	
Malamba	coconut	95.50	5.52%	3,350,807	60	200	60	Yes	-	-	1	
Marilig	coconut	17.82	0.45%	609,484	500	375	860	Yes	0.30	-	1	
Salaysay	banana cav.	3.94	0.21%	143	150	300	150	Yes	0.42	-	1	
Suawan	coconut	342.68	20.34%	11,716,755	100	100	620	Yes	1.11	-	2	

Table NR – 11. Natural Resource-Based Production Areas, Degree of Impact Rating, Flood, Davao City

Barangay	Exposure					Sensitivity						Impact
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to Hazard information	Number of Production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with Water impoundment	Degree of impact	
Tamugan	coconut	215.60	22.79%	8,454,434	200	100	200	Yes	-	-	2	
Toril District												
Alambre	coconut	29.59	10.55%	1,302,151	25	20	25	Yes	3.79	-	1	
Atan-Awe	coconut	31.12	9.74%	1,322,661	25	30	25	No	-	-	1	
Bankas Heights	coconut	92.97	45.18%	4,090,507	5	30	5	Yes	-	-	1	
Baracatan	coconut	78.27	7.21%	3,208,946	30	30	30	No	-	-	1	
Bato	coconut	50.75	6.81%	1,776,393	25	25	25	No	2.55	-	1	
Bayabas	coconut	104.37	8.82%	3,913,911	5	20	5	No	-	-	1	
Crossing Bayabas	-	14.44	18.33%	-	-	-	-	No	-	-	1	
Binugao	coconut	129.37	44.50%	4,915,947	25	25	25	Yes	-	-	2	
Camansi	coconut	27.74	7.93%	1,040,386	35	30	35	Yes	-	-	1	
Catigan	coconut	134.50	5.77%	5,379,877	50	60	50	Yes	-	-	1	
Dalliao	-	0.00	0.00%	-	-	-	-	Yes	-	-	1	
Daliaon Plantation	banana	83.44	8.59%	53,402,330	30	25	30	Yes	-	-	1	
Eden	durian	38.95	8.38%	5,842,519	25	30	25	No	-	-	1	
Kilate	-	63.26	9.98%	-	-	15	-	No	-	-	1	
Lizada	-	77.83	30.92%	-	-	10	-	No	-	-	1	
Lubogan	-	20.39	27.97%	-	-	-	-	Yes	-	-	1	
Marapangi	-	122.52	23.26%	-	20	30	20	Yes	-	-	2	
Mulig	coconut	28.34	2.89%	1,261,318	55	30	55	No	-	-	1	
Sibulan	abaca	38.22	7.63%	3,439,384	120	80	120	Yes	-	-	1	
Sirawan	mango	121.18	16.58%	24,236,400	25	20	25	Yes	-	-	2	

Table NR – 11. Natural Resource-Based Production Areas, Degree of Impact Rating, Flood, Davao City

Barangay	Exposure					Sensitivity						Impact
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to Hazard information	Number of Production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with Water impoundment	Degree of impact	
Tagluno	coconut	36.28	6.58%	1,451,371	75	25	75	Yes	-	-	1	
Tagurano	coconut	28.67	5.75%	1,132,497	-	20	-	No	-	-	1	
Tibuloy	coconut	98.59	12.26%	3,943,628	-	10	-	Yes	-	-	1	
Toril	-	-	0.00%	-	-	-	-	-	-	-	1	
Tungkalan	coconut	210.71	12.00%	8,533,671	50	75	50	Yes	0.85	-	1	
Tugbok District												
Angalan	coconut	420.70	93.95%	15,153,037	-	-	-	Yes	-	-	1	
Bago Oshiro	-	18.37	5.27%	-	-	-	-	Yes	-	-	1	
Balengaeng	coconut	453.59	102.84%	16,329,314	-	15	-	Yes	11.48	-	3	
Biao Escuela	coconut	670.27	52.18%	22,956,907	-	8	-	Yes	-	0.50	1	
Biao Guianga	coconut	347.81	74.64%	12,044,035	-	6	-	Yes	-	2.86	1	
Matina Biao	coconut	858.79	85.81%	29,282,946	-	5	-	Yes	-	-	1	
Los Amigos	rice	323.96	88.99%	14,979,954	-	5	-	Yes	1987.58	15.53	3	
Los Amigos	hito	27.50	100.00%	46,961,384	-	5	-	Yes	1987.58	15.53	3	
Manambulan	coconut	175.84	23.40%	6,347,923	-	10	-	Yes	-	-	1	
Manuel Guianga	coconut	250.80	28.68%	9,155,048	-	-	-	Yes	-	-	1	
Mintal	coconut	65.66	15.09%	3,214,614	-	-	-	No	-	-	1	
New Carmen	coconut	184.37	19.28%	13,374,601	-	-	-	No	-	-	1	
New Valencia	coconut	224.22	25.46%	8,189,514	52	10	52	Yes	-	0.19	1	

Table NR – 11. Natural Resource-Based Production Areas, Degree of Impact Rating, Flood, Davao City

Barangay	Exposure					Sensitivity						Impact
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to Hazard information	Number of Production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with Water impoundment	Degree of impact	
Sto. Niño	-	0.58	39.02%	-	-	-	-	No	-	-	1	
Tacunan	coconut	320.36	40.54%	10,891,994	36	15	36	Yes	-	1.84	1	
Tagakpan	coconut	487.69	68.94%	22,299,409	-	10	-	Yes	-	-	1	
Talandang	coconut	233.86	19.16%	7,954,398	-	10	-	Yes	1.36	-	2	
Tugbok	coconut	610.77	85.24%	24,106,520	-	-	-	Yes	-	-	2	
Ula	coconut	527.44	61.61%	18,477,370	-	6	-	Yes	-	0.30	2	

Landslide – The highest degree of impact rating with a score of three (3) are given to NRBPA in Colosas, Fatima, Lumiad, Malabog, Mapula, Pandaitan, Panalun, Paqibato Proper, Paradise Embac, Salapawan, Sumimao, Tapak, Tambobong, Inayangan, Megkawayan, Tamayong, Baganihan, Dalag Lumot, Datu Salumay, Gumitan, Magsaysay, Malamba, Marilog, Salaysay, Daliaon Plantation, Eden, Tagurano, Tungkalan, and New Carmen (Table NR – 12). These areas are expected to have the highest extent of damage to natural resources whenever there are landslides. The Cavendish banana plantation in Tamayong will be the most affected, where the exposed value is estimated to amount at ₱499,524,728.

Table NR – 12. Natural Resource-Based Production Areas, Degree of Impact Rating, Landslide, Davao City

Barangay	Exposure			Exposed Value	Sensitivity						Impact	
	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage		Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment		Degree of impact
Talomo District												
Bago Aplaya	banana	-	0.00%	-	-	-	Yes	-	-	-	1	
Bago Gallera	coconut	-	0.00%	-	-	-	-	-	-	-	1	
Baliok	coconut	-	0.00%	-	-	-	Yes	-	-	-	1	
Bucana	-	-	0.00%	-	-	-	-	-	-	-	1	
Catalunan Grande	coconut	47.40	5.49%	3,513,303	-	-	Yes	-	-	-	1	
Catalunan Pequeño	coconut	-	0.00%	-	-	-	Yes	-	-	-	1	
Dumoy	coconut	-	0.00%	-	-	-	No	-	-	-	1	
Langub	coconut	357.51	71.16%	26,186,533	-	-	Yes	-	1.11	-	2	
Ma-a	coconut	32.05	41.74%	2,209,823	-	-	Yes	-	-	-	1	
Magtuod	coconut	324.94	91.38%	23,262,637	-	-	Yes	-	-	-	2	
Matina Aplaya	-	-	0.00%	-	-	-	-	-	-	-	1	
Matina Crossing	-	6.81	85.81%	-	-	-	-	-	-	-	1	
Matina Pangl	coconut	150.44	70.43%	8,243,208	-	-	Yes	-	-	-	2	
Talomo	-	14.42	16.18%	-	-	-	Yes	-	-	-	1	

Table NR – 12. Natural Resource-Based Production Areas, Degree of Impact Rating, Landslide, Davao City

Barangay	Exposure				Exposed Value	Sensitivity						Impact
	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage			Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	
Buhangin District												
Acacia	coconut	667.72	90.37%	14,022,028	-	-	-	No	-	-	1	
Buhangin	-	116.26	94.23%	-	-	-	-	No	-	-	1	
Cabantian	-	120.13	51.84%	-	-	-	-	No	-	-	1	
Callawa	coconut	463.36	55.47%	13,224,296	-	-	-	Yes	6.71	1.71	2	
Communal	-	183.55	66.22%	-	-	-	-	No	-	-	1	
Indangan	coconut	791.80	71.18%	23,754,134	-	-	-	Yes	-	-	2	
Mandug	coconut	343.04	56.85%	10,291,273	-	-	-	Yes	-	-	2	
Sasa	-	6.61	29.13%	-	-	-	-	No	-	-	1	
Tigatto	banana local	123.66	34.88%	12,489,429	-	-	-	Yes	8.82	-	1	
Waan	coconut	199.13	56.45%	2,013,038	-	-	-	Yes	-	-	1	
Bunawan District												
Bunawan	-	31.58	8.30%	-	-	-	-	No	-	-	1	
Gatungan	coconut	1,069.85	95.07%	33,306,418	-	-	-	Yes	-	-	2	
Ilang	-	127.96	56.04%	-	-	-	-	No	-	-	1	
Lasang	-	-	0.00%	-	-	-	-	Yes	-	-	1	
Mahayag	coconut	143.87	35.28%	4,316,053	-	-	-	No	-	-	1	
Mudiang	coconut	528.69	94.17%	16,806,480	-	-	-	No	-	-	1	
Panacan	-	66.39	32.92%	-	-	-	-	Yes	-	-	1	
San Isidro	banana local	76.68	14.79%	5,641,897	-	-	-	Yes	-	-	1	
Tibungco	-	223.65	49.63%	-	-	-	-	No	-	-	1	

Table NR – 12. Natural Resource-Based Production Areas, Degree of Impact Rating, Landslide, Davao City

Barangay	Exposure			Sensitivity						Impact	
	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage		% Areas with water impoundment
Paquibato District											
Colosas	coconut	3,311.11	91.75%	19,184,573	105	50	105	Yes	-	-	3
Fatima	coconut	2,186.58	88.40%	12,500,673	180	47	180	Yes	-	-	3
Lumiad	corn	869.46	98.15%	62,549,543	110	60	110	Yes	-	-	3
Mabuhay	coconut	717.09	71.88%	3,152,329	50	25	50	Yes	0.52	-	2
Malabog	coconut	3,498.42	99.16%	41,396,821	300	100	300	Yes	-	-	3
Mapula	coconut	1,923.59	99.55%	43,605,945	190	70	190	Yes	-	0.15	3
Pandaitan	coconut	1,951.07	95.82%	25,635,055	240	80	240	Yes	-	-	3
Pañalum	banana	507.03	83.23%	26,455,677	120	40	120	Yes	-	-	3
Paquibato	coconut	1,196.30	86.97%	19,997,383	160	70	160	Yes	-	-	3
Paradise Embac	coconut	1,484.55	85.74%	25,507,522	140	75	140	Yes	-	-	3
Salapawan	coconut	137.90	78.15%	849,217	100	68	100	Yes	-	-	3
Sumimao	coconut	1,425.87	99.37%	2,723,407	170	43	170	Yes	0.05	-	3
Tapak	coconut	1,258.96	99.17%	20,308,351	140	40	140	Yes	-	-	3
Baguio District											
Baguio	coconut	48.53	7.60%	1,853,329	47	215	47	Yes	-	-	1
Cadalian	coconut	96.35	15.63%	3,776,288	115	383	115	Yes	-	-	1
Carmen	cacao	108.82	32.00%	8,553,252	55	348	55	Yes	-	-	2
Gumalang	coconut	211.77	15.18%	8,312,132	110	680	110	Yes	3.78	-	1
Malagos	coconut	51.22	6.20%	1,964,829	160	571	160	Yes	2.26	-	1
Tambobong	coconut	326.52	93.45%	10,477,788	75	150	75	Yes	-	-	3
Tawan-Tawan	cacao	109.00	12.47%	9,216,742	156	544	156	Yes	1.49	-	2
Wines	coconut	73.90	8.64%	2,889,221	80	355	80	Yes	8.25	-	1

Table NR – 12. Natural Resource-Based Production Areas, Degree of Impact Rating, Landslide, Davao City

Barangay	Exposure			Sensitivity						Impact	
	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage		% Areas with water impoundment
Calinan District											
Biao Joaquin	coconut	133.13	25.90%	4,698,446	60	16	60	Yes	-	0.52	1
Calinan	rice	29.51	4.83%	2,418,371	70	10	70	Yes	6533.33	-	1
Cawayan	pineapple	27.24	3.50%	15,641,951	35	5	35	Yes	1.53	-	1
Dacudao	coconut	209.49	18.64%	7,974,275	40	-	40	Yes	-	-	1
Dalagdag	coconut	236.65	74.49%	7,700,661	30	4	30	Yes	4.38	-	2
Dominga	coconut	365.55	73.35%	12,444,522	45	10	45	No	-	-	2
Inayangan	coconut	1,062.21	93.32%	36,163,086	45	10	45	Yes	-	-	3
Lacson	coconut	218.29	28.57%	8,303,717	60	10	60	Yes	8.77	-	1
Lamanan	coconut	888.63	62.27%	31,143,916	56	10	56	Yes	-	-	2
Lampianao	coconut	452.97	57.02%	14,740,253	50	10	50	Yes	-	0.97	2
Megkawayan	cacao	1,470.45	94.77%	102,006,789	36	20	36	Yes	-	-	3
Pangyan	coconut	342.70	51.88%	9,087,289	31	10	31	Yes	-	-	1
Riverside	coconut	-	0.00%	-	36	10	36	Yes	41.85	-	1
Saloy	coconut	955.01	96.46%	37,313,302	70	10	70	Yes	-	-	2
Sirib	banana cav.	633.36	29.87%	258,234,375	60	15	60	Yes	-	-	1
Subasta	coconut	-	0.00%	-	65	5	65	Yes	1.02	-	1
Talomo River	coconut	73.17	10.34%	2,715,562	65	20	65	Yes	-	1.48	1
Tamayong	banana cav.	901.06	66.44%	499,524,728	75	15	75	Yes	-	-	3
Wangan	coconut	-	0.00%	-	65	12	65	Yes	4.28	0.05	1

Table NR – 12. Natural Resource-Based Production Areas, Degree of Impact Rating, Landslide, Davao City

Barangay	Exposure			Sensitivity						Impact	
	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage		% Areas with water impoundment
Marilog District											
Baganihan	corn	1.55	0.92%	74,450	30	15	113	Yes	-	-	3
Bantol	coconut	349.17	85.42%	12,630,595	150	200	150	Yes	-	-	2
Buda	vegetables	673.94	47.36%	50,949,549	20	10	20	Yes	1.05	-	2
Dalag Lumot	cacao	137.85	97.93%	-	100	200	100	Yes	-	-	3
Datu Salumay	vegetables	447.75	65.70%	-	150	150	150	Yes	-	-	3
Gumitan	rice	785.82	96.48%	24,796,986	25	25	25	Yes	-	-	3
Magsaysay	corn	1,416.06	89.62%	84,963,457	100	75	212	Yes	-	-	3
Malamba	coconut	1,535.40	88.79%	53,872,656	60	200	60	Yes	-	-	3
Marilog	coconut	3,803.93	96.62%	130,120,980	500	375	860	Yes	0.30	-	3
Salaysay	banana cav.	1,845.25	99.50%	67,108	150	300	150	Yes	0.42	-	3
Suawan	coconut	1,127.29	66.91%	38,544,405	100	100	620	Yes	1.11	-	2
Tamugan	coconut	157.57	16.66%	6,179,096	200	100	200	Yes	-	-	2
Toril District											
Alambre	coconut	26.82	9.56%	1,180,082	25	20	25	Yes	3.79	-	1
Atan-Awe	coconut	308.12	96.47%	13,095,091	25	30	25	No	-	-	1
Bankas Heights	coconut	-	0.00%	-	5	30	5	Yes	-	-	1
Baracatan	coconut	637.55	58.73%	26,139,546	30	30	30	No	-	-	1
Bato	coconut	273.05	36.65%	9,556,586	25	25	25	No	2.55	-	2
Bayabas	coconut	423.56	35.79%	15,883,424	5	20	5	No	-	-	2
Crossing Bayabas	-	-	0.00%	-	-	-	-	No	-	-	1
Binugao	coconut	159.30	54.80%	6,053,483	25	25	25	Yes	-	-	1

Table NR – 12. Natural Resource-Based Production Areas, Degree of Impact Rating, Landslide, Davao City

Barangay	Exposure			Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Impact
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage								
Camansi	coconut	216.16	61.80%	8,106,078	35	30	35	Yes	-	-	1
Catigan	coconut	1,196.79	51.37%	47,871,756	50	60	50	Yes	-	-	2
Dallao	-	-	0.00%	-	-	-	-	Yes	-	-	1
Dallao Plantation	banana	644.98	66.38%	412,790,380	30	25	30	Yes	-	-	3
Eden	durian	420.64	90.47%	63,095,335	25	30	25	No	-	-	3
Kilate	-	174.02	27.46%	-	-	15	-	No	-	-	2
Lizada	-	-	0.00%	-	-	10	-	No	-	-	1
Lubogan	-	-	0.00%	-	-	-	-	Yes	-	-	1
Marapangi	-	155.29	29.48%	-	20	30	20	Yes	-	-	1
Mulig	coconut	16.79	1.71%	747,042	55	30	55	No	-	-	1
Sibulan	abaca	498.92	99.56%	44,902,920	120	80	120	Yes	-	-	2
Sirawan	mango	191.32	26.18%	38,263,745	25	20	25	Yes	-	-	1
Tagluno	coconut	65.11	11.80%	2,604,366	75	25	75	Yes	-	-	2
Tagurano	coconut	308.57	61.92%	12,188,707	-	20	-	No	-	-	3
Tibuloy	coconut	643.98	80.09%	25,759,216	-	10	-	Yes	-	-	2
Toril	-	-	0.00%	-	-	-	-	-	-	-	1
Tungkalan	coconut	868.30	49.46%	35,166,168	50	75	50	Yes	0.85	-	3
Tugbok District											
Angalan	coconut	-	0.00%	-	-	-	-	Yes	-	-	1
Bago Oshiro	-	-	0.00%	-	-	-	-	Yes	-	-	1

Table NR – 12. Natural Resource-Based Production Areas, Degree of Impact Rating, Landslide, Davao City

Barangay	Exposure			Sensitivity							Impact
	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	
Balangaeng	coconut	-	0.00%	-	-	15	-	Yes	11.48	-	1
Biao Escuela	coconut	9.62	0.75%	329,363	-	8	-	Yes	-	0.50	1
Biao Guianga	coconut	-	0.00%	-	-	6	-	Yes	-	2.86	1
Matina Biao	coconut	92.57	9.25%	3,156,503	-	5	-	Yes	-	-	2
Los Amigos	rice	-	0.00%	-	-	5	-	Yes	1987.58	15.53	1
Manambulan	coconut	21.21	2.82%	765,858	-	-	-	Yes	-	-	1
Manuel Guianga	coconut	65.98	7.54%	2,408,559	-	10	-	Yes	-	-	2
Mintal	coconut	-	0.00%	-	-	-	-	No	-	-	1
New Carmen	coconut	688.77	72.02%	49,965,436	-	-	-	No	-	-	3
New Valencia	coconut	386.02	43.83%	14,099,012	52	10	52	Yes	-	0.19	2
Sto. Niño	-	-	0.00%	-	-	-	-	No	-	-	1
Tacunan	coconut	-	0.00%	-	36	15	36	Yes	-	1.84	1
Tagakpan	coconut	-	0.00%	-	-	10	-	Yes	-	-	1
Talandang	coconut	683.09	55.96%	23,234,568	-	10	-	Yes	1.36	-	2
Tugbok	coconut	-	0.00%	-	-	-	-	Yes	-	-	1
Ula	coconut	-	0.00%	-	-	6	-	Yes	-	0.30	1

Liquefaction – The NRBPA in Mandug, Tigatto, Waan, Lasang, Binugao, Lizada, and Sirawan garnered the highest degree of impact score as these areas are expected to have the highest extent of damage to natural resources when liquefaction arises (Table NR – 13). The mango farms will be the most affected area with an estimated exposed value at ₱16,704,611.

Table NR – 13. Natural Resource-Based Production Areas, Degree of Impact Rating, Liquefaction, Davao City

Barangay	Exposure				Sensitivity					Impact
	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Number of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	
Talomo District										
Bago Aplaya	banana	9.69	68.27%	287,724	-	-	Yes	-	-	1
Bago Gallera	coconut	15.90	4.73%	985,307	-	-	-	-	-	1
Bucana	-	2.91	92.14%	-	-	-	-	-	-	1
Catalunan Grande	coconut	2.84	0.33%	210,739	-	-	Yes	-	-	1
Dumoy	coconut	111.24	57.03%	6,976,694	-	-	No	-	-	1
Ma-a	coconut	42.25	55.01%	2,912,427	-	-	Yes	-	-	1
Matina Aplaya	-	2.18	68.92%	-	-	-	-	-	-	1
Matina Crossing	-	1.11	13.98%	-	-	-	-	-	-	1
Matina Pangil	coconut	30.88	14.46%	1,692,009	-	-	Yes	-	-	1
Talomo	-	2.49	2.79%	-	-	-	Yes	-	-	1
Buhangin District										
Mandug	coconut	10.13	1.68%	304,033	-	-	Yes	-	-	2
Tigatto	banana local	155.36	43.82%	15,690,959	-	-	Yes	8.82	-	2
Waan	coconut	125.74	35.65%	1,271,108	-	-	Yes	-	-	2
Bunawan District										
Bunawan	-	297.24	78.10%	-	-	-	No	-	-	1
Lasang	-	450.61	98.92%	-	-	-	Yes	-	-	2
Panacan	-	28.14	13.96%	-	-	-	Yes	-	-	1
San Isidro	banana local	289.70	55.87%	21,314,890	-	-	Yes	-	-	1

Table NR – 13. Natural Resource-Based Production Areas, Degree of Impact Rating, Liquefaction, Davao City

Barangay	Exposure					Sensitivity					Impact
	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	
Toril District											
Binugao	coconut	92.34	31.77%	3,508,903	25	25	25	Yes	-	-	2
Dalliao	-	4.61	98.53%	-	-	-	-	Yes	-	-	1
Lizada	-	248.81	98.85%	-	-	10	-	No	-	-	2
Sirawan	mango	83.52	11.43%	16,704,611	25	20	25	Yes	-	-	2
Toril		2.03	99.00%	-	-	-	-	-	-	-	1
Tugbok District											
New Carmen	coconut	42.00	4.39%	3,046,628	-	-	-	No	-	-	1

Storm Surge – Storm surges are expected to greatly affect the natural resources in Bago Aplaya, Bucana, Dumoy, Matina Aplaya, Talomo, Bunawan, Ilang, Lasang, Panacan, Tibungco, Binugao, Lizada, and Sirawan. Hence, these areas gained the highest degree of impact rating with regards to storm surge (Table NR – 14). The area with the expected highest impact in terms of value is Matina Aplaya, which may possibly incur a loss of ₱721,762,044 once the fish cages with pelagic fishes would be affected.

Table NR – 14. Natural Resource-Based Production Areas, Degree of Impact Rating, Storm Surge, Davao City

Barangay	EXPOSURE				SENSITIVITY						IMPACT
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	
Talomo District											
Bago Aplaya	banana	7.83	55.15%	232,426	-	-	-	Yes	-	-	3
Bucana	-	3.16	99.99%	-	-	-	-	-	-	-	3
Dumoy	coconut	39.92	20.47%	2,503,975	-	-	-	No	-	-	3
Matina Aplaya	Pelagic Fishes	4.30	83.22%	721,762,044	-	-	-	-	-	-	3
Talomo	-	5.11	5.73%	-	-	-	-	Yes	-	-	3
Bunawan District											
Bunawan	-	222.71	58.52%	-	-	-	-	No	-	-	3
Ilang	-	1.17	0.51%	-	-	-	-	No	-	-	3
Lasang	-	151.60	33.28%	-	-	-	-	Yes	-	-	3
Panacan	-	11.52	5.71%	-	-	-	-	Yes	-	-	3
San Isidro	banana local	7.36	1.42%	541,164	-	-	-	Yes	-	-	1
Tibungco	-	-	0.00%	-	-	-	-	No	-	-	3
Toril District											
Binugao	coconut	62.86	21.62%	2,388,578	25	25	25	Yes	-	-	3
Lizada	-	184.69	73.37%	-	-	10	-	No	-	-	3
Sirawan	mango	36.57	5.00%	7,313,778	25	20	25	Yes	-	-	3

Natural Resource-Based Production Areas' Adaptive Capacity

This section assesses whether there are proper adaptation and mitigation measures that are in place in the NRBAs. The lowest adaptive capacity score is three (3), which mean that addressing the impacts to natural resources would be costly. The moderate adaptive capacity score is two (2), which bare that the city government or concerned barangays can accommodate within its resources the cost for adapting and mitigating the hazard impacts to natural resources. The highest adaptive capacity score is one (1), which shows that the adaptation and mitigation measures are in place in the NRBPA.

Flood – NRBPA in nine (9) barangays have the lowest adaptive capacity score (Table NR – 15). These areas have the lowest adaptive capacity should there be flooding incidents in the areas. Among these include Malabog, Mapula, Pandaitan, Salapawan, Baganihan, Dalag Lumot, Datu Salumay, Tapak, and Gumitan. In case when their sources of income (e.g. farming, livelihood) would be affected by floods, a total of 2,120 individuals have alternative livelihood.

Table NR – 15. Natural Resource-Based Production Areas, Adaptive Capacity Score, Flood, Davao City

Barangay	Exposure				Impact Degree of Impact	Adaptive Capacity				Adaptive Capacity Score	
	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value		Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood		Government Resources
Talomo District											
Bago Aplaya	banana	2.13	15.02%	63,308	1	-	Yes	Yes	-	Yes	1
Bago Gallera	coconut	69.56	20.71%	4,311,015	1	-	Yes	Yes	-	Yes	1
Baliok	coconut	35.27	29.25%	2,153,449	1	-	Yes	Yes	-	Yes	1
Bucana	-	1.85	58.75%	-	1	-	-	Yes	-	Yes	1
Catalunan Grande	coconut	172.78	20.03%	12,806,285	2	-	Yes	Yes	-	Yes	1
Catalunan Pequeño	coconut	87.86	35.05%	5,335,778	1	-	Yes	Yes	-	Yes	1
Dumoy	coconut	19.59	10.04%	1,228,600	1	-	Yes	Yes	-	Yes	1
Langub	coconut	136.89	27.25%	10,027,132	2	-	Yes	Yes	-	Yes	1
Ma-a	coconut	30.57	39.80%	2,107,343	1	-	Yes	Yes	-	Yes	1
Magtuod	coconut	2.11	0.59%	151,224	2	-	Yes	Yes	-	Yes	1
Matina Aplaya	Pelagic Fishes	4.30	83.22%	721,762,044	1	-	Yes	Yes	-	Yes	1
Matina Crossing	-	1.11	13.98%	-	1	-	Yes	Yes	-	Yes	1

Table NR – 15. Natural Resource-Based Production Areas, Adaptive Capacity Score, Flood, Davao City

Barangay	Exposure					Impact Degree of Impact	Adaptive Capacity					Adaptive Capacity Score
	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value			Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources	
Matina Pangi	coconut	45.63	21.36%	2,500,194		1	-	Yes	-	Yes	1	
Talomo	-	45.71	51.27%	-		1	-	Yes	-	Yes	1	
Buhangin District												
Acacia	coconut	4.99	0.68%	104,855		1	-	Yes	-	Yes	1	
Buhangin	-	-	0.00%	-		1	-	Yes	-	Yes	1	
Cabantian	-	0.05	0.02%	-		1	-	Yes	-	Yes	1	
Callawa	coconut	68.56	8.21%	1,956,814		3	-	Yes	-	Yes	2	
Communal	-	15.77	5.69%	-		1	-	Yes	-	Yes	1	
Indangan	coconut	5.71	0.51%	171,253		1	-	Yes	-	Yes	1	
Mandug	coconut	83.26	13.80%	2,497,785		2	-	Yes	-	Yes	1	
Sasa	-	-	0.00%	-		1	-	Yes	-	Yes	1	
Tigatto	banana local	127.62	36.00%	12,889,877		2	-	Yes	-	Yes	1	
Waan	coconut	127.58	36.17%	1,289,702		3	-	Yes	-	Yes	1	
Bunawan District												
Bunawan	-	86.20	22.65%	-		1	-	Yes	-	Yes	1	
Gatangan	coconut	17.17	1.53%	534,413		1	-	Yes	-	Yes	1	
Ilang	-	5.80	2.54%	-		1	-	Yes	-	Yes	1	
Lasang	Pelagic Fishes	119.86	26.31%	-		1	-	Yes	-	Yes	1	
Mahayag	coconut	1.00	0.25%	29,982		1	-	Yes	-	Yes	1	
Mudiang	coconut	7.98	1.42%	253,629		1	-	Yes	-	Yes	1	
Panacan	-	9.49	4.71%	-		1	-	Yes	-	Yes	1	
San Isidro	banana local	23.69	4.57%	1,742,956		1	-	Yes	-	Yes	1	
Tibungco	-	4.74	1.05%	-		1	-	Yes	-	Yes	1	
Paquibato District												
Colosas	coconut	188.06	5.21%	1,089,632		2	30	Yes	45	Yes	2	
Fatima	coconut	0.05	0.00%	267		1	50	Yes	70	Yes	2	

Table NR – 15. Natural Resource-Based Production Areas, Adaptive Capacity Score, Flood, Davao City

Barangay	Exposure					Impact	Adaptive Capacity					Adaptive Capacity Score
	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Degree of Impact		Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources	
Lumiad	corn	-	0.00%	-	1	-	Yes	Yes	90	Yes	2	
Mabuhay	coconut	31.24	3.13%	137,341	1	9	Yes	Yes	12	Yes	2	
Malabog	coconut	27.88	0.79%	329,856	1	50	Yes	Yes	500	Yes	3	
Mapula	coconut	0.22	0.01%	4,973	1	54	Yes	Yes	100	Yes	3	
Pandaitan	coconut	4.19	0.21%	55,050	1	1	Yes	Yes	40	Yes	3	
Pañalum	banana	5.03	0.83%	262,517	2	35	Yes	Yes	20	Yes	2	
Paquibato	coconut	1.32	0.10%	22,065	1	2	Yes	Yes	200	Yes	2	
Paradise Embac	coconut	134.06	7.74%	2,303,349	1	-	Yes	Yes	36	Yes	2	
Salapawan	coconut	12.73	7.21%	78,376	1	-	Yes	Yes	10	Yes	3	
Sumimao	coconut	70.30	4.90%	134,273	2	15	Yes	Yes	25	Yes	2	
Tapak	coconut	56.30	4.43%	908,155	2	-	Yes	Yes	100	Yes	3	
Baguio District												
Baguio	coconut	147.87	23.16%	5,646,771	2	65	Yes	Yes	48	Yes	1	
Cadalian	coconut	46.05	7.47%	1,804,988	1	357	Yes	Yes	20	Yes	1	
Carmen	cacao	19.64	5.78%	1,543,845	1	24	Yes	Yes	68	Yes	1	
Gumalang	coconut	302.40	21.68%	11,869,228	2	45	Yes	Yes	59	Yes	1	
Malagos	coconut	290.25	35.12%	11,133,819	2	25	Yes	Yes	15	Yes	1	
Tambobong	coconut	19.84	5.68%	636,650	1	1,151	Yes	Yes	45	Yes	2	
Tawan-Tawan	cacao	112.33	12.85%	9,498,189	1	394	Yes	Yes	140	Yes	1	
Wines	coconut	184.14	21.52%	7,199,602	1	61	Yes	Yes	20	Yes	1	
Calinan District												
Biao Joaquin	coconut	371.61	72.31%	13,114,701	1	148	Yes	Yes	-	Yes	1	
Calinan	rice	571.41	93.42%	46,821,452	3	112	Yes	Yes	-	Yes	1	
Cawayan	pineapple	262.98	33.82%	151,005,737	3	25	Yes	Yes	-	Yes	1	
Dacudao	coconut	344.21	30.63%	13,102,325	2	60	Yes	Yes	-	Yes	1	

Table NR – 15. Natural Resource-Based Production Areas, Adaptive Capacity Score, Flood, Davao City

Barangay	Exposure					Impact	Adaptive Capacity					Adaptive Capacity Score
	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value	Degree of Impact		Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources	
Dalagdag	coconut	62.35	19.63%	2,029,016	2	15	Yes	Yes	-	Yes	2	
Dominga	coconut	172.90	34.69%	5,885,865	3	43	Yes	Yes	-	Yes	2	
Inayangan	coconut	45.62	4.01%	1,553,211	1	60	Yes	Yes	-	Yes	2	
Lacson	coconut	186.95	24.46%	7,111,429	2	20	Yes	Yes	-	Yes	1	
Lamanan	coconut	359.99	25.23%	12,616,614	1	45	Yes	Yes	-	Yes	1	
Lampianao	coconut	136.12	17.14%	4,429,583	2	35	Yes	Yes	-	Yes	2	
Megkawayan	cacao	60.23	3.88%	4,178,160	1	-	Yes	Yes	-	Yes	2	
Pangyan	coconut	96.28	14.58%	2,552,956	1	35	Yes	Yes	-	Yes	1	
Riverside	coconut	267.60	63.51%	10,195,435	3	11	Yes	Yes	-	Yes	1	
Saloy	coconut	95.48	9.64%	3,730,482	2	45	Yes	Yes	-	Yes	2	
Sirib	banana cav.	761.51	35.92%	310,481,541	2	14	Yes	Yes	-	Yes	1	
Subasta	coconut	787.31	67.16%	29,964,258	1	75	Yes	Yes	-	Yes	1	
Talomo River	coconut	536.67	75.83%	19,917,471	2	30	Yes	Yes	-	Yes	1	
Tamayong	banana cav.	94.49	6.97%	52,381,458	1	80	Yes	Yes	-	Yes	1	
Wangan	coconut	555.44	48.39%	21,716,563	3	-	Yes	Yes	-	Yes	1	
Marilog District												
Baganihan	corn	-	0.00%	-	1	80	Yes	Yes	262	Yes	3	
Bantol	coconut	34.95	8.55%	1,264,108	2	75	Yes	Yes	399	Yes	2	
Buda	vegetables	-	0.00%	-	1	-	Yes	Yes	388	Yes	2	
Dalag Lumot	cacao	-	0.00%	-	1	1	Yes	Yes	306	Yes	3	
Datu Salumay	vegetables	-	0.00%	-	1	-	Yes	Yes	404	Yes	3	
Gumitan	rice	8.76	1.08%	276,302	2	-	Yes	Yes	398	Yes	3	
Magsaysay	corn	-	0.00%	-	1	15	Yes	Yes	493	Yes	2	
Malamba	coconut	95.50	5.52%	3,350,807	1	27	Yes	Yes	132	Yes	2	
Marilog	coconut	17.82	0.45%	609,484	1	88	Yes	Yes	2,802	Yes	2	

Table NR – 15. Natural Resource-Based Production Areas, Adaptive Capacity Score, Flood, Davao City

Barangay	Exposure					Impact Degree of Impact	Adaptive Capacity					Adaptive Capacity Score
	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value			Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources	
Salaysay	banana cav.	3.94	0.21%	143		1	-	Yes	632	Yes	2	
Suawan	coconut	342.68	20.34%	11,716,755		2	95	Yes	868	Yes	1	
Tamugan	coconut	215.60	22.79%	8,454,434		2	80	Yes	1,910	Yes	1	
Toril District												
Alambre	coconut	29.59	10.55%	1,302,151		1	10	Yes	15	Yes	1	
Atan-Awe	coconut	31.12	9.74%	1,322,661		1	20	Yes	105	Yes	1	
Bankas Heights	coconut	92.97	45.18%	4,090,507		1	2	Yes	20	Yes	1	
Baracatan	coconut	78.27	7.21%	3,208,946		1	-	Yes	18	Yes	1	
Bato	coconut	50.75	6.81%	1,776,393		1	10	Yes	53	Yes	1	
Bayabas	coconut	104.37	8.82%	3,913,911		1	5	Yes	50	Yes	1	
Crossing Bayabas	-	14.44	18.33%	-		1	-	Yes	-	Yes	1	
Binugao	coconut	129.37	44.50%	4,915,947		2		Yes	35	Yes	1	
Camansi	coconut	27.74	7.93%	1,040,386		1	2	Yes	20	Yes	1	
Catigan	coconut	134.50	5.77%	5,379,877		1		Yes	170	Yes	1	
Dalliao	-	0.00	0.00%	-		1	-	Yes	-	Yes	1	
Dalliao Plantation	banana	83.44	8.59%	53,402,330		1		Yes	200	Yes	1	
Eden	durian	38.95	8.38%	5,842,519		1	5	Yes	70	Yes	1	
Kilate	-	63.26	9.98%	-		1	20	Yes	45	Yes	1	
Lizada	-	77.83	30.92%	-		1	-	Yes	-	Yes	1	
Lubogan	-	20.39	27.97%	-		1	-	Yes	-	Yes	1	
Marapangi	-	122.52	23.26%	-		2	5	Yes	60	Yes	1	
Mulig	coconut	28.34	2.89%	1,261,318		1	150	Yes	215	Yes	1	
Sibulan	abaca	38.22	7.63%	3,439,384		1	-	Yes	150	Yes	1	
Sirawan	mango	121.18	16.58%	24,236,400		2	-	Yes	50	Yes	1	
Tagluno	coconut	36.28	6.58%	1,451,371		1	-	Yes	35	Yes	1	
Tagurano	coconut	28.67	5.75%	1,132,497		1	10	Yes	30	Yes	1	

Table NR – 15. Natural Resource-Based Production Areas, Adaptive Capacity Score, Flood, Davao City

Barangay	Exposure					Impact Degree of Impact	Adaptive Capacity					Adaptive Capacity Score
	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value			Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources	
Tibuloy	coconut	98.59	12.26%	3,943,628	1	15	Yes	Yes	-	Yes	1	
Toril	-	-	0.00%	-	1	-	Yes	Yes	-	Yes	1	
Tungkalan	coconut	210.71	12.00%	8,533,671	1	40	Yes	Yes	115	Yes	1	
Tugbok District												
Angalan	coconut	420.70	93.95%	15,153,037	1	45	Yes	Yes	123	Yes	1	
Bago Oshiro	-	18.37	5.27%	-	1	-	Yes	Yes	30	Yes	1	
Balangaeng	coconut	453.59	102.84%	16,329,314	3	67	Yes	Yes	82	Yes	1	
Biao Escuela	coconut	670.27	52.18%	22,956,907	1	82	Yes	Yes	40	Yes	1	
Biao Guianga	coconut	347.81	74.64%	12,044,035	1	55	Yes	Yes	181	Yes	1	
Matina Biao	coconut	858.79	85.81%	29,282,946	1	54	Yes	Yes	71	Yes	1	
Los Amigos	rice	323.96	88.99%	14,979,954	3	42	Yes	Yes	75	Yes	1	
Los Amigos	hito	27.50	100.00%	46,961,384	3	42	Yes	Yes	75	Yes	1	
Manambulan	coconut	175.84	23.40%	6,347,923	1	30	Yes	Yes	31	Yes	1	
Manuel Guianga	coconut	250.80	28.68%	9,155,048	1	55	Yes	Yes	140	Yes	1	
Mintal	coconut	65.66	15.09%	3,214,614	1	8	Yes	Yes		Yes	1	
New Carmen	coconut	184.37	19.28%	13,374,601	1	76	Yes	Yes	102	Yes	2	
New Valencia	coconut	224.22	25.46%	8,189,514	1	154	Yes	Yes	131	Yes	2	
Sto. Niño	-	0.58	39.02%	-	1	-	Yes	Yes	-	Yes	1	
Tacunan	coconut	320.36	40.54%	10,891,994	1	85	Yes	Yes	109	Yes	1	
Tagakpan	coconut	487.69	68.94%	22,299,409	1	75	Yes	Yes	110	Yes	1	
Talandang	coconut	233.86	19.16%	7,954,398	2	138	Yes	Yes	219	Yes	1	
Tugbok	coconut	610.77	85.24%	24,106,520	2	-	Yes	Yes	64	Yes	1	
Ula	coconut	527.44	61.61%	18,477,370	2	110	Yes	Yes	60	Yes	1	

Landslide – A total of 25 barangays with NRBPA have the lowest adaptive score, where pursuing adaptation measures would be costly whenever there are landslide incidents (Table NR – 16). These include Colosas, Fatima, Lumiad, Malabog, Mapula, Pandaitan, Pañalum, Paquibato Proper, Paradise Embac, Salapawan, Sumimao, Tapak, Dominga, Megkawayan, Riverside, Baganihan, Bantol, Buda, Dalag Lumot, Datu Salumay, Gumitan, Magsaysay, Malamba, Marilog Proper, and Salaysay. At least 7,452 individuals would have an alternative livelihood if ever their main sources of income would be affected by landslides.

Table NR – 16. Natural Resource-Based Production Areas, Adaptive Capacity Score, Landslide, Davao City

Barangay	Exposure				Impact Degree of Impact	Access to insurance	Adaptive Capacity				Adaptive Capacity Score
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value			Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources	
Talomo District											
Bago Aplaya	banana	-	0.00%	-	1	-	Yes	Yes	-	Yes	1
Bago Gallera	coconut	-	0.00%	-	1	-	Yes	Yes	-	Yes	1
Baliok	coconut	-	0.00%	-	1	-	Yes	Yes	-	Yes	1
Bucana	-	-	0.00%	-	1	-	-	Yes	-	Yes	1
Catalunan Grande	coconut	47.40	5.49%	3,513,303	1	-	Yes	Yes	-	Yes	1
Catalunan Pequeño	coconut	-	0.00%	-	1	-	-	Yes	-	Yes	1
Dumoy	coconut	-	0.00%	-	1	-	Yes	Yes	-	Yes	1
Langub	coconut	357.51	71.16%	26,186,533	2	-	Yes	Yes	-	Yes	2
Ma-a	coconut	32.05	41.74%	2,209,823	1	-	Yes	Yes	-	Yes	1
Magtuod	coconut	324.94	91.38%	23,262,637	2	-	Yes	Yes	-	Yes	2
Matina Aplaya	-	-	0.00%	-	1	-	-	Yes	-	Yes	1
Matina Crossing	-	6.81	85.81%	-	1	-	-	Yes	-	Yes	1
Matina Pangí	coconut	150.44	70.43%	8,243,208	2	-	Yes	Yes	-	Yes	2
Talomo	-	14.42	16.18%	-	1	-	-	Yes	-	Yes	1
Buhangin District											
Acacia	coconut	667.72	90.37%	14,022,028	1	-	Yes	Yes	-	Yes	1
Buhangin		116.26	94.23%	-	1	-	Yes	Yes	-	Yes	1
Cabantian		120.13	51.84%	-	1	-	Yes	Yes	-	Yes	1
Callawa	coconut	463.36	55.47%	13,224,296	2	-	Yes	Yes	-	Yes	2

Table NR – 16. Natural Resource-Based Production Areas, Adaptive Capacity Score, Landslide, Davao City

Barangay	Exposure			Impact Degree of Impact	Adaptive Capacity				Adaptive Capacity Score	
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage		Exposed Value	Access to insurance	Agricultural extension services of the local government	Early warning systems		Alternative Livelihood
Communal		183.55	66.22%	-	-		Yes	-	Yes	1
Indangan	coconut	791.80	71.18%	23,754,134	-	Yes	Yes	-	Yes	1
Mandug	coconut	343.04	56.85%	10,291,273	-	Yes	Yes	-	Yes	1
Sasa		6.61	29.13%	-	-		Yes	-	Yes	1
Tigatto	banana local	123.66	34.88%	12,489,429	-	Yes	Yes	-	Yes	1
Waan	coconut	199.13	56.45%	2,013,038	-	Yes	Yes	-	Yes	1
Bunawan District										
Bunawan	-	31.58	8.30%	-	-	-	Yes	-	Yes	1
Gatungan	coconut	1,069.85	95.07%	33,306,418	-	Yes	Yes	-	Yes	2
Ilang	-	127.96	56.04%	-	-	-	Yes	-	Yes	1
Lasang	-	-	0.00%	-	-	-	Yes	-	Yes	1
Mahayag	coconut	143.87	35.28%	4,316,053	-	Yes	Yes	-	Yes	1
Mudiang	coconut	528.69	94.17%	16,806,480	-	Yes	Yes	-	Yes	1
Panacan	-	66.39	32.92%	-	-	-	Yes	-	Yes	1
San Isidro	banana local	76.68	14.79%	5,641,897	-	Yes	Yes	-	Yes	1
Tibungco	-	223.65	49.63%	-	-	-	Yes	-	Yes	1
Paquibato District										
Colosas	coconut	3,311.11	91.75%	19,184,573	30	Yes	Yes	45	Yes	3
Fatima	coconut	2,186.58	88.40%	12,500,673	50	Yes	Yes	70	Yes	3
Lumiad	corn	869.46	98.15%	62,549,543	-	Yes	Yes	90	Yes	3
Mabuhay	coconut	717.09	71.88%	3,152,329	9	Yes	Yes	12	Yes	2
Malabog	coconut	3,498.42	99.16%	41,396,821	50	Yes	Yes	500	Yes	3
Mapula	coconut	1,923.59	99.55%	43,605,945	54	Yes	Yes	100	Yes	3

Table NR – 16. Natural Resource-Based Production Areas, Adaptive Capacity Score, Landslide, Davao City

Barangay	Exposure			Impact Degree of Impact	Access to insurance	Agricultural extension services of the local government	Adaptive Capacity		Adaptive Capacity Score	
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage				Exposed Value	Early warning systems		Alternative Livelihood
Pandaitan	coconut	1,951.07	95.82%	3	1	Yes	Yes	40	Yes	3
Pañalum	banana	507.03	83.23%	3	35	Yes	Yes	20	Yes	3
Paquibato	coconut	1,196.30	86.97%	3	2	Yes	Yes	200	Yes	3
Paradise Embac	coconut	1,484.55	85.74%	3	-	Yes	Yes	36	Yes	3
Salapawan	coconut	137.90	78.15%	3	-	Yes	Yes	10	Yes	3
Sumimao	coconut	1,425.87	99.37%	3	15	Yes	Yes	25	Yes	3
Tapak	coconut	1,258.96	99.17%	3	-	Yes	Yes	100	Yes	3
Baguio District										
Baguio	coconut	48.53	7.60%	1	65	Yes	Yes	48	Yes	1
Cadalian	coconut	96.35	15.63%	1	357	Yes	Yes	20	Yes	1
Carmen	cacao	108.82	32.00%	2	24	Yes	Yes	68	Yes	1
Gumalang	coconut	211.77	15.18%	1	45	Yes	Yes	59	Yes	1
Malagos	coconut	51.22	6.20%	1	25	Yes	Yes	15	Yes	1
Tambobong	coconut	326.52	93.45%	3	1,151	Yes	Yes	45	Yes	2
Tawan-Tawan	cacao	109.00	12.47%	2	394	Yes	Yes	140	Yes	1
Wines	coconut	73.90	8.64%	1	61	Yes	Yes	20	Yes	1
Calinan District										
Biao Joaquin	coconut	133.13	25.90%	1	148	Yes	Yes	-	Yes	1
Calinan	rice	29.51	4.83%	1	112	Yes	Yes	-	Yes	1
Cawayan	pineapple	27.24	3.50%	1	25	Yes	Yes	-	Yes	1
Dacudao	coconut	209.49	18.64%	1	60	Yes	Yes	-	Yes	1
Dalagdag	coconut	236.65	74.49%	2	15	Yes	Yes	-	Yes	2
Dominga	coconut	365.55	73.35%	2	43	Yes	Yes	-	Yes	3

Table NR – 16. Natural Resource-Based Production Areas, Adaptive Capacity Score, Landslide, Davao City

Barangay	Exposure			Impact Degree of Impact	Access to insurance	Agricultural extension services of the local government	Adaptive Capacity		Alternative Livelihood	Government Resources	Adaptive Capacity Score
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage				Exposed Value	Early warning systems			
Inavangan	coconut	1,062.21	93.32%	36,163,086	60	Yes	Yes	Yes	-	Yes	2
Lacson	coconut	218.29	28.57%	8,303,717	20	Yes	Yes	Yes	-	Yes	1
Lamanan	coconut	888.63	62.27%	31,143,916	45	Yes	Yes	Yes	-	Yes	1
Lampianao	coconut	452.97	57.02%	14,740,253	35	Yes	Yes	Yes	-	Yes	2
Megkawayan	cacao	1,470.45	94.77%	102,006,789	-	Yes	Yes	Yes	-	Yes	3
Pangyan	coconut	342.70	51.88%	9,087,289	35	Yes	Yes	Yes	-	Yes	1
Riverside	coconut	-	0.00%	-	11	Yes	Yes	Yes	-	Yes	3
Saloy	coconut	955.01	96.46%	37,313,302	45	Yes	Yes	Yes	-	Yes	2
Sirib	banana cav.	633.36	29.87%	258,234,375	14	Yes	Yes	Yes	-	Yes	1
Subasta	coconut	-	0.00%	-	75	Yes	Yes	Yes	-	Yes	1
Talomo River	coconut	73.17	10.34%	2,715,562	30	Yes	Yes	Yes	-	Yes	1
Tamayong	banana cav.	901.06	66.44%	499,524,728	80	Yes	Yes	Yes	-	Yes	1
Wangan	coconut	-	0.00%	-	-	Yes	Yes	Yes	-	Yes	1
Marilog District											
Baganihan	corn	1.55	0.92%	74,450	80	Yes	Yes	Yes	262	Yes	3
Bantol	coconut	349.17	85.42%	12,630,595	75	Yes	Yes	Yes	399	Yes	3
Buda	vegetables	673.94	47.36%	50,949,549	-	Yes	Yes	Yes	388	Yes	3
Dalag Lumot	cacao	137.85	97.93%	-	1	Yes	Yes	Yes	306	Yes	3
Datu Salumay	vegetables	447.75	65.70%	-	-	Yes	Yes	Yes	404	Yes	3
Gumitan	rice	785.82	96.48%	24,796,986	-	Yes	Yes	Yes	398	Yes	3
Magsaysay	corn	1,416.06	89.62%	84,963,457	15	Yes	Yes	Yes	493	Yes	3
Malamba	coconut	1,535.40	88.79%	53,872,656	27	Yes	Yes	Yes	132	Yes	3
Marilog	coconut	3,803.93	96.62%	130,120,980	88	Yes	Yes	Yes	2,802	Yes	3

Table NR – 16. Natural Resource-Based Production Areas, Adaptive Capacity Score, Landslide, Davao City

Barangay	Exposure			Impact Degree of Impact	Adaptive Capacity					Adaptive Capacity Score	
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage		Exposed Value	Access to insurance	Agricultural extension services of the local government	Early warning systems	Alternative Livelihood		Government Resources
Salaysay	banana cav.	1,845.25	99.50%	67,108	3		Yes	Yes	632	Yes	3
Suawan	coconut	1,127.29	66.91%	38,544,405	2	95	Yes	Yes	868	Yes	2
Tamugan	coconut	157.57	16.66%	6,179,096	2	80	Yes	Yes	1,910	Yes	2
Toril District											
Alambre	coconut	26.82	9.56%	1,180,082	1	10	Yes	Yes	15	Yes	1
Atan-Awe	coconut	308.12	96.47%	13,095,091	1	20	Yes	Yes	105	Yes	1
Bankas Heights	coconut	-	0.00%	-	1	2	Yes	Yes	20	Yes	1
Baracatan	coconut	637.55	58.73%	26,139,546	1		Yes	Yes	18	Yes	1
Bato	coconut	273.05	36.65%	9,556,586	2	10	Yes	Yes	53	Yes	1
Bayabas	coconut	423.56	35.79%	15,883,424	2	5	Yes	Yes	50	Yes	1
Crossing Bayabas	-	-	0.00%	-	1	-	-	Yes	-	Yes	1
Binugao	coconut	159.30	54.80%	6,053,483	1		Yes	Yes	35	Yes	1
Camansi	coconut	216.16	61.80%	8,106,078	1	2	Yes	Yes	20	Yes	1
Catigan	coconut	1,196.79	51.37%	47,871,756	2		Yes	Yes	170	Yes	1
Daliao	-	-	0.00%	-	1	-	-	Yes	-	Yes	1
Daliao Plantation	banana	644.98	66.38%	412,790,380	3		Yes	Yes	200	Yes	2
Eden	durian	420.64	90.47%	63,095,335	3	5	Yes	Yes	70	Yes	1
Kilate	-	174.02	27.46%	-	2	20	Yes	Yes	45	Yes	2
Lizada	-	-	0.00%	-	1	-	-	Yes	-	Yes	1
Lubogan	-	-	0.00%	-	1	-	-	Yes	-	Yes	1
Marapangi	-	155.29	29.48%	-	1	5	Yes	Yes	60	Yes	1
Mulig	coconut	16.79	1.71%	747,042	1	150	Yes	Yes	215	Yes	1
Sibulan	abaca	498.92	99.56%	44,902,920	2	-	Yes	Yes	150	Yes	2
Sirawan	mango	191.32	26.18%	38,263,745	1	-	Yes	Yes	50	Yes	1

Table NR – 16. Natural Resource-Based Production Areas, Adaptive Capacity Score, Landslide, Davao City

Barangay	Exposure				Impact Degree of Impact	Adaptive Capacity				Adaptive Capacity Score
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Exposed Value		Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	Government Resources	
Tagluno	coconut	65.11	11.80%	2,604,366	2	Yes	Yes	35	Yes	2
Tagurano	coconut	308.57	61.92%	12,188,707	3	Yes	Yes	30	Yes	2
Tibuloy	coconut	643.98	80.09%	25,759,216	2	Yes	Yes	-	Yes	1
Toril	-	-	0.00%	-	1	Yes	Yes	-	Yes	1
Tungkalan	coconut	868.30	49.46%	35,166,168	3	Yes	Yes	115	Yes	2
Tugbok District										
Angalan	coconut	-	0.00%	-	1	Yes	Yes	123	Yes	1
Bago Oshiro	-	-	0.00%	-	1	Yes	Yes	30	Yes	1
Balangaeng	coconut	-	0.00%	-	1	Yes	Yes	82	Yes	1
Biao Escuela	coconut	9.62	0.75%	329,363	1	Yes	Yes	40	Yes	1
Biao Guianga	coconut	-	0.00%	-	1	Yes	Yes	181	Yes	1
Matina Biao	coconut	92.57	9.25%	3,156,503	2	Yes	Yes	71	Yes	2
Los Amigos	rice	-	0.00%	-	1	Yes	Yes	75	Yes	1
Manambulan	coconut	21.21	2.82%	765,858	1	Yes	Yes	31	Yes	1
Manuel Guianga	coconut	65.98	7.54%	2,408,559	2	Yes	Yes	140	Yes	1
Mintal	coconut	-	0.00%	-	1	Yes	Yes	-	Yes	1
New Carmen	coconut	688.77	72.02%	49,965,436	3	Yes	Yes	102	Yes	2
New Valencia	coconut	386.02	43.83%	14,099,012	2	Yes	Yes	131	Yes	2
Sto. Niño	-	-	0.00%	-	1	Yes	Yes	-	Yes	1
Tacunan	coconut	-	0.00%	-	1	Yes	Yes	109	Yes	1
Tagakpan	coconut	-	0.00%	-	1	Yes	Yes	110	Yes	1
Talandang	coconut	683.09	55.96%	23,234,568	2	Yes	Yes	219	Yes	1
Tugbok	coconut	-	0.00%	-	1	Yes	Yes	64	Yes	1
Ula	coconut	-	0.00%	-	1	Yes	Yes	60	Yes	1

Liquefaction – All the 24 barangays with NRBPA, which are listed in Table NR – 17, can address and pursue adaptation measures whenever a liquefaction would arise, and hence, these garnered the highest adaptive capacity score.

Table NR – 17. Natural Resource-Based Production Areas, Adaptive Capacity Score, Liquefaction, Davao City

Barangay	Exposure				Impact Degree of impact	Access to insurance	Adaptive Capacity			Adaptive Capacity Score
	Dominant Crop/Variety of Produce	Exposed Area	Exposed Percent-age	Exposed Value			Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	
Talomo District										
Bago Aplaya	banana	9.69	68.27%	287,724	1	-	Yes	-	Yes	1
Bago Gallera	coconut	15.90	4.73%	985,307	1	-	Yes	-	Yes	1
Bucana	-	2.91	92.14%	-	1	-	Yes	-	Yes	1
Catalunan Grande	coconut	2.84	0.33%	210,739	1	-	Yes	-	Yes	1
Dumoy	coconut	111.24	57.03%	6,976,694	1	-	Yes	-	Yes	1
Ma-a	coconut	42.25	55.01%	2,912,427	1	-	Yes	-	Yes	1
Matina Aplaya	-	2.18	68.92%	-	1	-	Yes	-	Yes	1
Matina Crossing	-	1.11	13.98%	-	1	-	Yes	-	Yes	1
Matina Pangí	coconut	30.88	14.46%	1,692,009	1	-	Yes	-	Yes	1
Talomo	-	2.49	2.79%	-	1	-	Yes	-	Yes	1
Buhangin District										
Mandung	coconut	10.13	1.68%	304,033	2	-	Yes	-	Yes	1
Tigatto	banana local	155.36	43.82%	15,690,959	2	-	Yes	-	Yes	1
Waan	coconut	125.74	35.65%	1,271,108	2	-	Yes	-	Yes	1
Bunawan District										
Bunawan	-	297.24	78.10%	-	1	-	Yes	-	Yes	1
Ilang	-	0.73	0.32%	-	1	-	Yes	-	Yes	1
Lasang	-	450.61	98.92%	-	2	-	Yes	-	Yes	1
Panacan	-	28.14	13.96%	-	1	-	Yes	-	Yes	1
San Isidro	banana local	289.70	55.87%	21,314,890	1	-	Yes	-	Yes	1
Toril District										
Binugao	coconut	92.34	31.77%	3,508,903	2	-	Yes	35	Yes	1
Daliao	-	4.61	98.53%	-	1	-	Yes	-	Yes	1
Lizada	-	248.81	98.85%	-	2	-	Yes	-	Yes	1
Sirawan	mango	83.52	11.43%	16,704,611	2	-	Yes	50	Yes	1
Toril	-	2.03	99.00%	-	1	-	Yes	-	Yes	1
Tugbok District										
New Carmen	coconut	42.00	4.39%	3,046,628	2	76	Yes	102	Yes	1

Storm Surge – A total of 12 barangays with NRBPA's have moderate adaptive capacity score. These include the natural resources in Bago Aplaya, Bucana, Matina Aplaya, Talomo, Bunawan Proper, Ilang, Lasang, Panacan, Tibungco, Binugao, Lizada, and Sirawan. This means that the city government or concerned barangays with NRBPA's can accommodate within its resources the cost for adapting and mitigating the hazard impacts to natural resources.

Table NR – 18. Natural Resource-Based Production Areas, Adaptive Capacity Score, Storm Surge, Davao City

Barangay	Exposure			Exposed Value	Impact Degree of Impact	Access to insurance	Adaptive Capacity			Adaptive Capacity Score
	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage				Agricultural extension services of the local government	Early warning systems	Alternative Livelihood	
Talomo District										
Bago Aplaya	banana	7.83	55.15%	232,426	3	-	Yes	-	Yes	2
Bucana	-	3.16	99.99%	-	3	-	Yes	-	Yes	2
Dumoy	coconut	39.92	20.47%	2,503,975	3	-	Yes	-	Yes	1
Matina Aplaya	Pelagic Fishes	4.30	83.22%	721,762,044	3	-	-	-	Yes	2
Talomo	-	5.11	5.73%	-	3	-	-	-	Yes	2
Bunawan District										
Bunawan	-	222.71	58.52%	-	3	-	Yes	-	Yes	2
Ilang	-	1.17	0.51%	-	3	-	Yes	-	Yes	2
Lasang	-	151.60	33.28%	-	3	-	Yes	-	Yes	2
Panacan	-	11.52	5.71%	-	3	-	Yes	-	Yes	2
San Isidro	banana local	7.36	1.42%	541,164	1	-	Yes	-	Yes	1
Tibungco	-	-	0.00%	-	3	-	Yes	-	Yes	2
Toril District										
Binugao	coconut	62.86	21.62%	2,388,578	3	-	Yes	35	Yes	2
Lizada	-	184.69	73.37%	-	3	-	Yes	-	Yes	2
Sirawan	mango	36.57	5.00%	7,313,778	3	-	Yes	50	Yes	2

Natural Resource-Based Production Areas' Vulnerability Categories

The succeeding tables bare the results on what are the NRBPA that are either low, moderate, or high vulnerable to such hazards. The NRBPA with high vulnerability are the areas where the hazard impacts are expected to be high, but with low adaptive capacities to cope with the expected impacts. The NRBPA with moderate vulnerability are the areas where the hazard impacts are expected to be moderate and with moderate adaptive capacities. The NRBPA with low vulnerability are those that are expected to have the least impacts as these have high adaptive capacities.

Flood – There are no NRBPA that have high vulnerability scores with regards to floods (Table NR – 19). Of the 129 barangays with NRBPA that are susceptible to floods, 11 sites have moderate vulnerabilities. These are Callawa, Colosas, Pañalum, Sumimao Tapak, Dalagdag, Dominga, Lampianao, Saloy, Bantol, and Gumitan. The rest, which consists 118 areas, have low vulnerabilities to floods.

Table NR – 19. Natural Resource-Based Production Areas, Vulnerability, Flood, Davao City

Barangay	Total Area Allocation (Has.)	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Average output per hectare (PHP)	Exposed Value	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Talomo District										
Bago Aplaya	14.19	banana	2.13	15.02%	29,700	63,308	1	1	1	Low
Bago Gallera	335.90	coconut	69.56	20.71%	61,972	4,311,015	1	1	1	Low
Baliok	120.58	coconut	35.27	29.25%	61,062	2,153,449	1	1	1	Low
Bucana	3.16	-	1.85	58.75%	-	-	1	1	1	Low
Catalunan Grande	862.74	coconut	172.78	20.03%	74,117	12,806,285	2	1	2	Low
Catalunan Pequeño	250.64	coconut	87.86	35.05%	60,731	5,335,778	1	1	1	Low
Dumoy	195.07	coconut	19.59	10.04%	62,718	1,228,600	1	1	1	Low
Langub	502.37	coconut	136.89	27.25%	73,248	10,027,132	2	1	2	Low
Ma-a	76.80	coconut	30.57	39.80%	68,941	2,107,343	1	1	1	Low
Magtuod	355.59	coconut	2.11	0.59%	71,590	151,224	2	1	2	Low
Matina Aplaya	5.16	Pelagic Fishes	4.30	83.22%	168,000,000	721,762,044	1	1	1	Low
Matina Crossing	7.94	-	1.11	13.98%	-	-	1	1	1	Low
Matina Pangí	213.60	coconut	45.63	21.36%	54,793	2,500,194	1	1	1	Low

Table NR – 19. Natural Resource-Based Production Areas, Vulnerability, Flood, Davao City

Barangay	Total Area Allocation (Has.)	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Average output per hectare (PHP)	Exposed Value	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Talomo	89.14	-	45.71	51.27%	-	-	1	1	1	Low
Buhangin District										
Acacia	738.89	coconut	4.99	0.68%	21,000	104,855	1	1	1	Low
Buhangin	123.37	-	-	0.00%	-	-	1	1	1	Low
Cabantian	231.75	-	0.05	0.02%	-	-	1	1	1	Low
Callawa	835.33	coconut	68.56	8.21%	28,540	1,956,814	3	2	6	Moderate
Communal	277.18	-	15.77	5.69%	-	-	1	1	1	Low
Indangan	1,112.40	coconut	5.71	0.51%	30,000	171,253	1	1	1	Low
Mandug	603.45	coconut	83.26	13.80%	30,000	2,497,785	2	1	2	Low
Sasa	22.71	-	-	0.00%	-	-	1	1	1	Low
Tigatto	354.51	banana local	127.62	36.00%	101,000	12,889,877	2	1	2	Low
Waan	352.74	coconut	127.58	36.17%	10,109	1,289,702	3	1	3	Low
Bunawan District										
Bunawan	380.57	-	86.20	22.65%	-	-	1	1	1	Low
Gatungan	1,125.29	coconut	17.17	1.53%	31,132	534,413	1	1	1	Low
Ilang	228.31	-	5.80	2.54%	-	-	1	1	1	Low
Lasang	455.52	Pelagic Fishes	119.86	26.31%	-	-	1	1	1	Low
Mahayag	407.79	coconut	1.00	0.25%	30,000	29,982	1	1	1	Low
Mudiang	561.40	coconut	7.98	1.42%	31,789	253,629	1	1	1	Low
Panacan	201.64	-	9.49	4.71%	-	-	1	1	1	Low
San Isidro	518.52	banana local	23.69	4.57%	73,575	1,742,956	1	1	1	Low
Tibungco	450.59	-	4.74	1.05%	-	-	1	1	1	Low
Paquibato District										
Colosas	3,608.87	coconut	188.06	5.21%	5,794	1,089,632	2	2	4	Moderate
Fatima	2,473.51	coconut	0.05	0.00%	5,717	267	1	2	2	Low
Lumiad	885.86	corn	-	0.00%	71,941	-	1	2	2	Low

Table NR – 19. Natural Resource-Based Production Areas, Vulnerability, Flood, Davao City

Barangay	Total Area Allocation (Has.)	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Average output per hectare (PHP)	Exposed Value	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Mabuhay	997.56	coconut	31.24	3.13%	4,396	137,341	1	2	2	Low
Malabog	3,527.92	coconut	27.88	0.79%	11,833	329,856	1	3	3	Low
Mapula	1,932.29	coconut	0.22	0.01%	22,669	4,973	1	3	3	Low
Pandaitan	2,036.11	coconut	4.19	0.21%	13,139	55,050	1	3	3	Low
Pañalum	609.23	banana	5.03	0.83%	52,178	262,517	2	2	4	Moderate
Paquibato	1,375.53	coconut	1.32	0.10%	16,716	22,065	1	2	2	Low
Paradise Embac	1,731.39	coconut	134.06	7.74%	17,182	2,303,349	1	2	2	Low
Salapawan	176.45	coconut	12.73	7.21%	6,158	78,376	1	3	3	Low
Sumimao	1,434.92	coconut	70.30	4.90%	1,910	134,273	2	2	4	Moderate
Tapak	1,269.49	coconut	56.30	4.43%	16,131	908,155	2	3	6	Moderate
Baguio District										
Baguio	638.57	coconut	147.87	23.16%	38,187	5,646,771	2	1	2	Low
Cadalian	616.55	coconut	46.05	7.47%	39,195	1,804,988	1	1	1	Low
Carmen	340.03	cacao	19.64	5.78%	78,600	1,543,845	1	1	1	Low
Gumalang	1,394.99	coconut	302.40	21.68%	39,250	11,869,228	2	1	2	Low
Malagos	826.54	coconut	290.25	35.12%	38,359	11,133,819	2	1	2	Low
Tambobong	349.39	coconut	19.84	5.68%	32,089	636,650	1	2	2	Low
Tawan-Tawan	874.21	cacao	112.33	12.85%	84,555	9,498,189	1	1	1	Low
Wines	855.76	coconut	184.14	21.52%	39,098	7,199,602	1	1	1	Low
Calinan District										
Biao Joaquin	513.94	coconut	371.61	72.31%	35,291	13,114,701	1	1	1	Low
Calinan	611.68	rice	571.41	93.42%	81,940	46,821,452	3	1	3	Low
Cawayan	777.62	pineapple	262.98	33.82%	574,200	151,005,737	3	1	3	Low
Dacudao	1,123.77	coconut	344.21	30.63%	38,065	13,102,325	2	1	2	Low
Dalagdag	317.69	coconut	62.35	19.63%	32,540	2,029,016	2	2	4	Moderate
Dominga	498.35	coconut	172.90	34.69%	34,043	5,885,865	3	2	6	Moderate

Table NR – 19. Natural Resource-Based Production Areas, Vulnerability, Flood, Davao City

Barangay	Total Area Allocation (Has.)	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Average output per hectare (PHP)	Exposed Value	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Inayangan	1,138.27	coconut	45.62	4.01%	34,045	1,553,211	1	2	2	Low
Lacson	764.19	coconut	186.95	24.46%	38,039	7,111,429	2	1	2	Low
Lamanan	1,427.04	coconut	359.99	25.23%	35,047	12,616,614	1	1	1	Low
Lampianao	794.41	coconut	136.12	17.14%	32,541	4,429,583	2	2	4	Moderate
Megkawayan	1,551.55	cacao	60.23	3.88%	69,371	4,178,160	1	2	2	Low
Pangyan	660.52	coconut	96.28	14.58%	26,517	2,552,956	1	1	1	Low
Riverside	421.37	coconut	267.60	63.51%	38,100	10,195,435	3	1	3	Low
Saloy	990.07	coconut	95.48	9.64%	39,071	3,730,482	2	2	4	Moderate
Sirib	2,120.12	banana cav.	761.51	35.92%	407,720	310,481,541	2	1	2	Low
Subasta	1,172.23	coconut	787.31	67.16%	38,059	29,964,258	1	1	1	Low
Talomo River	707.69	coconut	536.67	75.83%	37,113	19,917,471	2	1	2	Low
Tamayong	1,356.14	banana cav.	94.49	6.97%	554,376	52,381,458	1	1	1	Low
Wangan	1,147.83	coconut	555.44	48.39%	39,098	21,716,563	3	1	3	Low
Marrilog District										
Baganihan	168.75	corn	-	0.00%	48,000	-	1	3	3	Low
Bantol	408.76	coconut	34.95	8.55%	36,174	1,264,108	2	2	4	Moderate
Buda	1,422.90	vegetables	-	0.00%	75,600	-	1	2	2	Low
Dalag Lumot	140.76	cacao	-	0.00%	-	-	1	3	3	Low
Datu Salumay	681.46	vegetables	-	0.00%	-	-	1	3	3	Low
Gumitan	814.50	rice	8.76	1.08%	31,556	276,302	2	3	6	Moderate
Magsaysay	1,580.09	corn	-	0.00%	60,000	-	1	2	2	Low
Malamba	1,729.27	coconut	95.50	5.52%	35,087	3,350,807	1	2	2	Low
Marrilog	3,936.82	coconut	17.82	0.45%	34,207	609,484	1	2	2	Low
Salaysay	1,854.46	banana cav.	3.94	0.21%	36	143	1	2	2	Low
Suawan	1,684.68	coconut	342.68	20.34%	34,192	11,716,755	2	1	2	Low
Tamugan	946.09	coconut	215.60	22.79%	39,214	8,454,434	2	1	2	Low

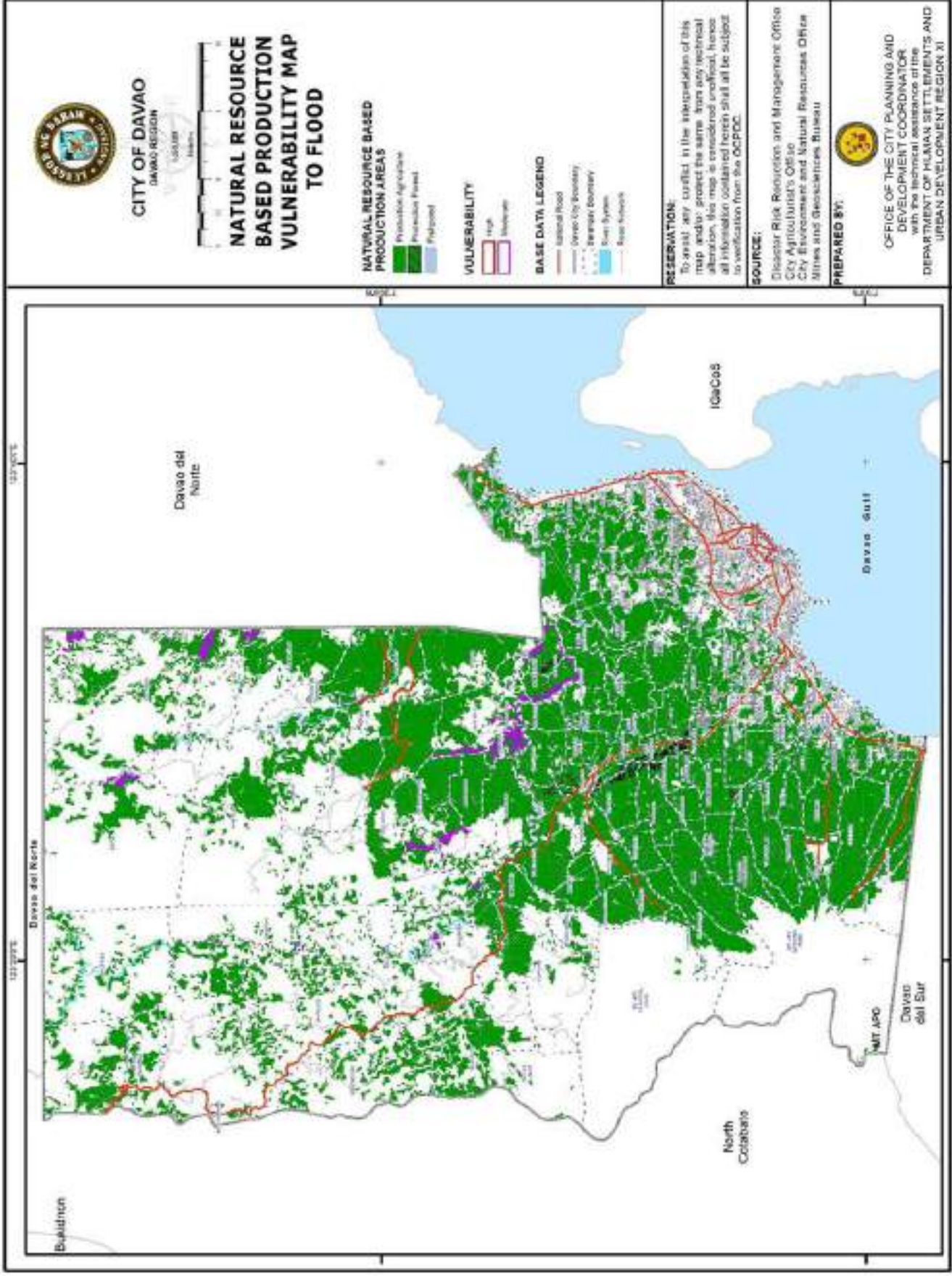
Table NR – 19. Natural Resource-Based Production Areas, Vulnerability, Flood, Davao City

Barangay	Total Area Allocation (Has.)	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Average output per hectare (PHP)	Exposed Value	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Toril District										
Alambre	280.59	coconut	29.59	10.55%	44,000	1,302,151	1	1	1	Low
Atan-Awe	319.38	coconut	31.12	9.74%	42,500	1,322,661	1	1	1	Low
Bankas Heights	205.75	coconut	92.97	45.18%	44,000	4,090,507	1	1	1	Low
Baracatan	1,085.56	coconut	78.27	7.21%	41,000	3,208,946	1	1	1	Low
Bato	745.05	coconut	50.75	6.81%	35,000	1,776,393	1	1	1	Low
Bayabas	1,183.42	coconut	104.37	8.82%	37,500	3,913,911	1	1	1	Low
Crossing Bayabas	78.79	-	14.44	18.33%	-	-	1	1	1	Low
Binugao	290.68	coconut	129.37	44.50%	38,000	4,915,947	2	1	2	Low
Camansi	349.76	coconut	27.74	7.93%	37,500	1,040,386	1	1	1	Low
Catigan	2,329.75	coconut	134.50	5.77%	40,000	5,379,877	1	1	1	Low
Daliao	4.68	-	0.00	0.00%	-	-	1	1	1	Low
Daliao Plantation	971.65	banana	83.44	8.59%	640,000	53,402,330	1	1	1	Low
Eden	464.93	durian	38.95	8.38%	150,000	5,842,519	1	1	1	Low
Kilate	633.71	-	63.26	9.98%	-	-	1	1	1	Low
Lizada	251.72	-	77.83	30.92%	-	-	1	1	1	Low
Lubogan	72.90	-	20.39	27.97%	-	-	1	1	1	Low
Marapangi	526.81	-	122.52	23.26%	-	-	2	1	2	Low
Mulig	980.43	coconut	28.34	2.89%	44,500	1,261,318	1	1	1	Low
Sibulan	501.15	abaca	38.22	7.63%	90,000	3,439,384	1	1	1	Low
Sirawan	730.75	mango	121.18	16.58%	200,000	24,236,400	2	1	2	Low
Tagluno	551.66	coconut	36.28	6.58%	40,000	1,451,371	1	1	1	Low
Tagurano	498.36	coconut	28.67	5.75%	39,500	1,132,497	1	1	1	Low
Tibuloy	804.03	coconut	98.59	12.26%	40,000	3,943,628	1	1	1	Low
Toril	2.05	-	-	0.00%	-	-	1	1	1	Low
Tungkalan	1,755.69	coconut	210.71	12.00%	40,500	8,533,671	1	1	1	Low

Table NR – 19. Natural Resource-Based Production Areas, Vulnerability, Flood, Davao City

Barangay	Total Area Allocation (Has.)	Dominant Crop/ Variety of Produce	Exposed Area	Exposure Percentage	Average output per hectare (PHP)	Exposed Value	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Tugbok District										
Angalan	447.77	coconut	420.70	93.95%	36,019	15,153,037	1	1	1	Low
Bago Oshiro	348.39	-	18.37	5.27%	-	-	1	1	1	Low
Balangaeng	441.08	coconut	453.59	102.84%	36,000	16,329,314	3	1	3	Low
Biao Escuela	1,284.53	coconut	670.27	52.18%	34,250	22,956,907	1	1	1	Low
Biao Guianga	466.00	coconut	347.81	74.64%	34,628	12,044,035	1	1	1	Low
Matina Biao	1,000.81	coconut	858.79	85.81%	34,098	29,282,946	1	1	1	Low
Los Amigos	364.04	rice	323.96	88.99%	46,240	14,979,954	3	1	3	Low
Los Amigos	27.50	hito	27.50	100.00%	1,707,687	46,961,384	3	1	3	Low
Manambulan	751.58	coconut	175.84	23.40%	36,100	6,347,923	1	1	1	Low
Manuel Guianga	874.55	coconut	250.80	28.68%	36,503	9,155,048	1	1	1	Low
Mintal	435.08	coconut	65.66	15.09%	48,958	3,214,614	1	1	1	Low
New Carmen	956.39	coconut	184.37	19.28%	72,543	13,374,601	1	2	2	Low
New Valencia	880.77	coconut	224.22	25.46%	36,524	8,189,514	1	2	2	Low
Sto. Niño	1.47	-	0.58	39.02%	-	-	1	1	1	Low
Tacunan	790.18	coconut	320.36	40.54%	33,999	10,891,994	1	1	1	Low
Tagakpan	707.45	coconut	487.69	68.94%	45,725	22,299,409	1	1	1	Low
Talandang	1,220.69	coconut	233.86	19.16%	34,014	7,954,398	2	1	2	Low
Tugbok	716.56	coconut	610.77	85.24%	39,469	24,106,520	2	1	2	Low
Ula	856.08	coconut	527.44	61.61%	35,032	18,477,370	2	1	2	Low

Map 6.5. Natural Resource-Based Production Vulnerability Map to Flood, Davao City



Landslide – Twenty-one (21) barangays with NRBPs are highly vulnerable to landslides (Table NR – 20). Among these are Colosas, Fatima, Lumiad, Malabog, Mapula, Pandaitan, Panalum, Paquibato Proper, Paradise Embac, Salapawan, Sumimao, Tapak, Megkawayan, Baganihan, Dalag Lumot, Datu Salumay, Gumitan, Magsaysay, Malamba, Marilog Proper, and Salaysay. At least 25 barangays with NRBPs are moderately vulnerable to landslides, which include langub, Magtuod, Matina Pangi, Callawa, Gatungan, Mabuhay, Tambobong, Dalagdag, Dominga, Inayangan, Lampianao, Saloy, Bantol, Buda, Suawan, Tamugan, Daliaon Plantation, Kilate, Sibulan, Tagluno, Tagurano, Tungkalan, Matina Biao, New Carmen, and New Valencia. The remaining or 82 barangays with NRBPs have low vulnerabilities to landslides.

Table NR – 20. Natural Resource-Based Production Areas, Vulnerability, Landslide, Davao City

Barangay	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Talomo District										
Bago Aplaya	14.19	banana	-	0.00%	29,700	-	1	1	1	Low
Bago Gallera	335.90	coconut	-	0.00%	61,972	-	1	1	1	Low
Baliok	120.58	coconut	-	0.00%	61,062	-	1	1	1	Low
Bucana	3.16	-	-	0.00%	-	-	1	1	1	Low
Catalunan Grande	862.74	coconut	47.40	5.49%	74,117	3,513,303	1	1	1	Low
Catalunan Pequeño	250.64	coconut	-	0.00%	60,731	-	1	1	1	Low
Dumoy	195.07	coconut	-	0.00%	62,718	-	1	1	1	Low
Langub	502.37	coconut	357.51	71.16%	73,248	26,186,533	2	2	4	Moderate
Ma-a	76.80	coconut	32.05	41.74%	68,941	2,209,823	1	1	1	Low
Magtuod	355.59	coconut	324.94	91.38%	71,590	23,262,637	2	2	4	Moderate
Matina Aplaya	3.16	-	-	0.00%	-	-	1	1	1	Low
Matina Crossing	7.94	-	6.81	85.81%	-	-	1	1	1	Low
Matina Pangi	213.60	coconut	150.44	70.43%	54,793	8,243,208	2	2	4	Moderate
Talomo	89.14	-	14.42	16.18%	-	-	1	1	1	Low
Buhangin District										
Acacia	738.89	coconut	667.72	90.37%	21,000	14,022,028	1	1	1	Low
Buhangin	123.37	-	116.26	94.23%	-	-	1	1	1	Low

Table NR – 20. Natural Resource-Based Production Areas, Vulnerability, Landslide, Davao City

Barangay	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Cabantian	231.75	-	120.13	51.84%	-	-	1	1	1	Low
Callawa	835.33	coconut	463.36	55.47%	28,540	13,224,296	2	2	4	Moderate
Communal	277.18	-	183.55	66.22%	-	-	1	1	1	Low
Indangan	1,112.40	coconut	791.80	71.18%	30,000	23,754,134	2	1	2	Low
Mandug	603.45	coconut	343.04	56.85%	30,000	10,291,273	2	1	2	Low
Sasa	22.71	-	6.61	29.13%	-	-	1	1	1	Low
Tigatto	354.51	banana local	123.66	34.88%	101,000	12,489,429	1	1	1	Low
Waan	352.74	coconut	199.13	56.45%	10,109	2,013,038	1	1	1	Low
Bunawan District										
Bunawan	380.57	-	31.58	8.30%	-	-	1	1	1	Low
Gatungan	1,125.29	coconut	1,069.85	95.07%	31,132	33,306,418	2	2	4	Moderate
Ilang	228.31	-	127.96	56.04%	-	-	1	1	1	Low
Lasang	455.52	-	-	0.00%	-	-	1	1	1	Low
Mahayag	407.79	coconut	143.87	35.28%	30,000	4,316,053	1	1	1	Low
Mudiang	561.40	coconut	528.69	94.17%	31,789	16,806,480	1	1	1	Low
Panacan	201.64	-	66.39	32.92%	-	-	1	1	1	Low
San Isidro	518.52	banana local	76.68	14.79%	73,575	5,641,897	1	1	1	Low
Tibungco	450.59	-	223.65	49.63%	-	-	1	1	1	Low
Paquibato District										
Colosas	3,608.87	coconut	3,311.11	91.75%	5,794	19,184,573	3	3	9	High
Fatima	2,473.51	coconut	2,186.58	88.40%	5,717	12,500,673	3	3	9	High
Lumiad	885.86	corn	869.46	98.15%	71,941	62,549,543	3	3	9	High
Mabuhay	997.56	coconut	717.09	71.88%	4,396	3,152,329	2	2	4	Moderate
Malabog	3,527.92	coconut	3,498.42	99.16%	11,833	41,396,821	3	3	9	High
Mapula	1,932.29	coconut	1,923.59	99.55%	22,669	43,605,945	3	3	9	High
Pandaitan	2,036.11	coconut	1,951.07	95.82%	13,139	25,635,055	3	3	9	High

Table NR – 20. Natural Resource-Based Production Areas, Vulnerability, Landslide, Davao City

Barangay	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Pañalum	609.23	banana	507.03	83.23%	52,178	26,455,677	3	3	9	High
Paquibato	1,375.53	coconut	1,196.30	86.97%	16,716	19,997,383	3	3	9	High
Paradise Embac	1,731.39	coconut	1,484.55	85.74%	17,182	25,507,522	3	3	9	High
Salapawan	176.45	coconut	137.90	78.15%	6,158	849,217	3	3	9	High
Sumimao	1,434.92	coconut	1,425.87	99.37%	1,910	2,723,407	3	3	9	High
Tapak	1,269.49	coconut	1,258.96	99.17%	16,131	20,308,351	3	3	9	High
Baguio District										
Baguio	638.57	coconut	48.53	7.60%	38,187	1,853,329	1	1	1	Low
Cadalian	616.55	coconut	96.35	15.63%	39,195	3,776,288	1	1	1	Low
Carmen	340.03	cacao	108.82	32.00%	78,600	8,553,252	2	1	2	Low
Gumalang	1,394.99	coconut	211.77	15.18%	39,250	8,312,132	1	1	1	Low
Malagos	826.54	coconut	51.22	6.20%	38,359	1,964,829	1	1	1	Low
Tambobong	349.39	coconut	326.52	93.45%	32,089	10,477,788	3	2	6	Moderate
Tawan-Tawan	874.21	cacao	109.00	12.47%	84,555	9,216,742	2	1	2	Low
Wines	855.76	coconut	73.90	8.64%	39,098	2,889,221	1	1	1	Low
Calinan District										
Biao Joaquin	513.94	coconut	133.13	25.90%	35,291	4,698,446	1	1	1	Low
Calinan	611.68	rice	29.51	4.83%	81,940	2,418,371	1	1	1	Low
Cawayan	777.62	pineapple	27.24	3.50%	574,200	15,641,951	1	1	1	Low
Dacudao	1,123.77	coconut	209.49	18.64%	38,065	7,974,275	1	1	1	Low
Dalagdag	317.69	coconut	236.65	74.49%	32,540	7,700,661	2	2	4	Moderate
Dominga	498.35	coconut	365.55	73.35%	34,043	12,444,522	2	3	6	Moderate
Inayangan	1,138.27	coconut	1,062.21	93.32%	34,045	36,163,086	3	2	6	Moderate
Lacson	764.19	coconut	218.29	28.57%	38,039	8,303,717	1	1	1	Low
Lamanan	1,427.04	coconut	888.63	62.27%	35,047	31,143,916	2	1	2	Low
Lampianao	794.41	coconut	452.97	57.02%	32,541	14,740,253	2	2	4	Moderate

Table NR – 20. Natural Resource-Based Production Areas, Vulnerability, Landslide, Davao City

Barangay	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Megkawayan	1,551.55	cacao	1,470.45	94.77%	69,371	102,006,789	3	3	9	High
Pangyan	660.52	coconut	342.70	51.88%	26,517	9,087,289	1	1	1	Low
Riverside	421.37	coconut	-	0.00%	38,100	-	1	3	3	Low
Saloy	990.07	coconut	955.01	96.46%	39,071	37,313,302	2	2	4	Moderate
Sirib	2,120.12	banana cav.	633.36	29.87%	407,720	258,234,375	1	1	1	Low
Subasta	1,172.23	coconut	-	0.00%	38,059	-	1	1	1	Low
Talomo River	707.69	coconut	73.17	10.34%	37,113	2,715,562	1	1	1	Low
Tamayong	1,356.14	banana cav.	901.06	66.44%	554,376	499,524,728	3	1	3	Low
Wangan	1,147.83	coconut	-	0.00%	39,098	-	1	1	1	Low
Marilog District										
Baganihan	168.75	corn	1.55	0.92%	48,000	74,450	3	3	9	High
Bantol	408.76	coconut	349.17	85.42%	36,174	12,630,595	2	3	6	Moderate
Buda	1,422.90	vegetables	673.94	47.36%	75,600	50,949,549	2	3	6	Moderate
Dalag Lumot	140.76	cacao	137.85	97.93%	-	-	3	3	9	High
Datu Salumay	681.46	vegetables	447.75	65.70%	-	-	3	3	9	High
Gumitan	814.50	rice	785.82	96.48%	31,556	24,796,986	3	3	9	High
Magsaysay	1,580.09	corn	1,416.06	89.62%	60,000	84,963,457	3	3	9	High
Malamba	1,729.27	coconut	1,535.40	88.79%	35,087	53,872,656	3	3	9	High
Marilog	3,936.82	coconut	3,803.93	96.62%	34,207	130,120,980	3	3	9	High
Salaysay	1,854.46	banana cav.	1,845.25	99.50%	36	67,108	3	3	9	High
Suawan	1,684.68	coconut	1,127.29	66.91%	34,192	38,544,405	2	2	4	Moderate
Tamugan	946.09	coconut	157.57	16.66%	39,214	6,179,096	2	2	4	Moderate
Toril District										
Alambre	280.59	coconut	26.82	9.56%	44,000	1,180,082	1	1	1	Low
Atan-Awe	319.38	coconut	308.12	96.47%	42,500	13,095,091	1	1	1	Low
Bankas Heights	205.75	coconut	-	0.00%	44,000	-	1	1	1	Low

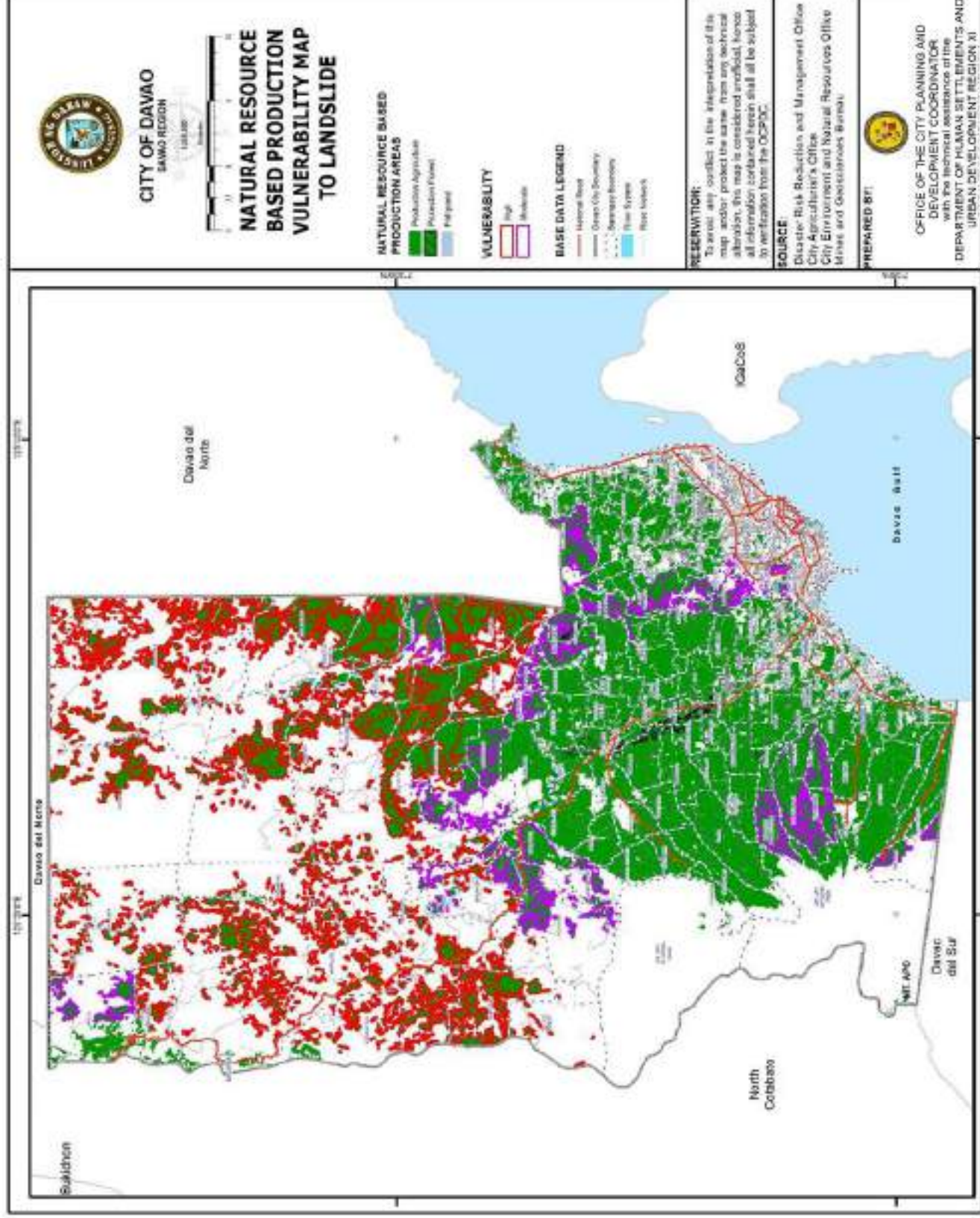
Table NR – 20. Natural Resource-Based Production Areas, Vulnerability, Landslide, Davao City

Barangay	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Baracatan	1,085.56	coconut	637.55	58.73%	41,000	26,139,546	1	1	1	Low
Bato	745.05	coconut	273.05	36.65%	35,000	9,556,586	2	1	2	Low
Bayabas	1,183.42	coconut	423.56	35.79%	37,500	15,883,424	2	1	2	Low
Crossing Bayabas	78.79	-	-	0.00%	-	-	1	1	1	Low
Binugao	290.68	coconut	159.30	54.80%	38,000	6,053,483	1	1	1	Low
Camansi	349.76	coconut	216.16	61.80%	37,500	8,106,078	1	1	1	Low
Catigan	2,329.75	coconut	1,196.79	51.37%	40,000	47,871,756	2	1	2	Low
Daliao	4.68	-	-	0.00%	-	-	1	1	1	Low
Daliao Plantation	971.65	banana	644.98	66.38%	640,000	412,790,380	3	2	6	Moderate
Eden	464.93	durian	420.64	90.47%	150,000	63,095,335	3	1	3	Low
Kilate	633.71	-	174.02	27.46%	-	-	2	2	4	Moderate
Lizada	251.72	-	-	0.00%	-	-	1	1	1	Low
Lubogan	72.90	-	-	0.00%	-	-	1	1	1	Low
Marapangi	526.81	-	155.29	29.48%	-	-	1	1	1	Low
Mulig	980.43	coconut	16.79	1.71%	44,500	747,042	1	1	1	Low
Sibulan	501.15	abaca	498.92	99.56%	90,000	44,902,920	2	2	4	Moderate
Sirawan	730.75	mango	191.32	26.18%	200,000	38,263,745	1	1	1	Low
Tagluno	551.66	coconut	65.11	11.80%	40,000	2,604,366	2	2	4	Moderate
Tagurano	498.36	coconut	308.57	61.92%	39,500	12,188,707	3	2	6	Moderate
Tibuloy	804.03	coconut	643.98	80.09%	40,000	25,759,216	2	1	2	Low
Toril	2.05	-	-	0.00%	-	-	1	1	1	Low
Tungkalan	1,755.69	coconut	868.30	49.46%	40,500	35,166,168	3	2	6	Moderate
Tugbok District										
Angalan	447.77	coconut	-	0.00%	36,019	-	1	1	1	Low
Bago Oshiro	348.39	-	-	0.00%	-	-	1	1	1	Low

Table NR – 20. Natural Resource-Based Production Areas, Vulnerability, Landslide, Davao City

Barangay	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Balengaeng	441.08	coconut	-	0.00%	36,000	-	1	1	1	Low
Biao Escuela	1,284.53	coconut	9.62	0.75%	34,250	329,363	1	1	1	Low
Biao Guianga	466.00	coconut	-	0.00%	34,628	-	1	1	1	Low
Matina Biao	1,000.81	coconut	92.57	9.25%	34,098	3,156,503	2	2	4	Moderate
Los Amigos	364.04	rice	-	0.00%	46,240	-	1	1	1	Low
Manambulan	751.58	coconut	21.21	2.82%	36,100	765,858	1	1	1	Low
Manuel Guianga	874.55	coconut	65.98	7.54%	36,503	2,408,559	2	1	2	Low
Mintal	435.08	coconut	-	0.00%	48,958	-	1	1	1	Low
New Carmen	956.39	coconut	688.77	72.02%	72,543	49,965,436	3	2	6	Moderate
New Valencia	880.77	coconut	386.02	43.83%	36,524	14,099,012	2	2	4	Moderate
Sto. Niño	1.47	-	-	0.00%	-	-	1	1	1	Low
Tacunan	790.18	coconut	-	0.00%	33,999	-	1	1	1	Low
Tagakpan	707.45	coconut	-	0.00%	45,725	-	1	1	1	Low
Talandang	1,220.69	coconut	683.09	55.96%	34,014	23,234,568	2	1	2	Low
Tugbok	716.56	coconut	-	0.00%	39,469	-	1	1	1	Low
Ula	856.08	coconut	-	0.00%	35,032	-	1	1	1	Low

Map 6.6. Natural Resource-Based Production Vulnerability Map to Landslide, Davao City



Liquefaction –All 19 barangays with NRBPA listed in the table have low vulnerabilities to liquefaction (Table NR – 21). These are Bago Aplaya, Bago Gallera, Bucana, Catalunan Grande, Dumoy, Ma-A, Matina Aplaya, Matina Crossing, Talomo Proper, Mandug, Tigatto, Waan, Bunawan Proper, Ilang, Lasang, Panacan, San Isidro, Binugao, Daliao, Lizada, Sirawan, Toril Proper, and New Carmen.

Table NR – 21. Natural Resource-Based Production Areas, Vulnerability, Liquefaction, Davao City

Barangay	Area by Dominant Crop (Has.)	Dominant Crop/ Variety of Produce	Exposed Area	Exposed Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Degree of impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Talomo District										
Bago Aplaya	14.19	banana	9.69	68.27%	29,700	287,724	1	1	1	Low
Bago Gallera	335.90	coconut	15.90	4.73%	61,972	985,307	1	1	1	Low
Bucana	3.16	-	2.91	92.14%	-	-	1	1	1	Low
Catalunan Grande	862.74	coconut	2.84	0.33%	74,117	210,739	1	1	1	Low
Dumoy	195.07	coconut	111.24	57.03%	62,718	6,976,694	1	1	1	Low
Ma-a	76.80	coconut	42.25	55.01%	68,941	2,912,427	1	1	1	Low
Matina Aplaya	3.16		2.18	68.92%		-	1	1	1	Low
Matina Crossing	7.94		1.11	13.98%		-	1	1	1	Low
Matina Pangí	213.60	coconut	30.88	14.46%	54,793	1,692,009	1	1	1	Low
Talomo	89.14		2.49	2.79%		-	1	1	1	Low
Buhangin District										
Mandug	603.45	coconut	10.13	1.68%	30,000	304,033	2	1	2	Low
Tigatto	354.51	banana local	155.36	43.82%	101,000	15,690,959	2	1	2	Low
Waan	352.74	coconut	125.74	35.65%	10,109	1,271,108	2	1	2	Low
Bunawan District										
Bunawan	380.57	-	297.24	78.10%	-	-	1	1	1	Low
Ilang	228.31	-	0.73	0.32%	-	-	1	1	1	Low
Lasang	455.52	-	450.61	98.92%	-	-	2	1	2	Low
Panacan	201.64	-	28.14	13.96%	-	-	1	1	1	Low
San Isidro	518.52	banana local	289.70	55.87%	73,575	21,314,890	1	1	1	Low
Toril District										
Binugao	290.68	coconut	92.34	31.77%	38,000	3,508,903	2	1	2	Low
Daliao	4.68	-	4.61	98.53%	-	-	1	1	1	Low
Lizada	251.72	-	248.81	98.85%	-	-	2	1	2	Low
Sirawan	730.75	mango	83.52	11.43%	200,000	16,704,611	2	1	2	Low
Toril	2.05	-	2.03	99.00%		-	1	1	1	Low
Tugbok District										
New Carmen	956.39	coconut	42.00	4.39%	72,543	3,046,628	2	1	2	Low

Storm Surge – Storm surges are expected to cause moderate impacts in NRBPA within Bago Aplaya, Bucana, Matina Aplaya, Talomo Proper, Bunawan Proper, Ilang, Lasang, Panacan, Tibungco, Binugao, Lizada, and Sirawan (Table NR – 22). Only the NRBPA in Dumoy and San Isidro have low vulnerabilities to storm surge.

Table NR – 22. Natural Resource-Based Production Areas, Vulnerability, Storm Surge, Davao City

Barangay	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value	Degree of impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Talomo District										
Bago Aplaya	14.19	banana	7.83	55.15%	29,700	232,426	3	2	6	Moderate
Bucana	3.16	-	3.16	99.99%	-	-	3	2	6	Moderate
Dumoy	195.07	coconut	39.92	20.47%	62,718	2,503,975	3	1	3	Low
Matina Aplaya	5.16	Pelagic Fishes	4.30	83.22%	168,000,000	721,762,044	3	2	6	Moderate
Talomo	89.14	-	5.11	5.73%	-	-	3	2	6	Moderate
Bunawan District										
Bunawan	380.57	-	222.71	58.52%	-	-	3	2	6	Moderate
Ilang	228.31	-	1.17	0.51%	-	-	3	2	6	Moderate
Lasang	455.52	-	151.60	33.28%	-	-	3	2	6	Moderate
Panacan	201.64	-	11.52	5.71%	-	-	3	2	6	Moderate
San Isidro	518.52	banana local	7.36	1.42%	73,575	541,164	1	1	1	Low
Tibungco	450.59	-	-	0.00%	-	-	3	2	6	Moderate
Toril District										
Binugao	290.68	coconut	62.86	21.62%	38,000	2,388,578	3	2	6	Moderate
Lizada	251.72	-	184.69	73.37%	-	-	3	2	6	Moderate
Sirawan	730.75	mango	36.57	5.00%	200,000	7,313,778	3	2	6	Moderate

Map 6.7. Natural Resource-Based Production Vulnerability Map to Storm Surge, Davao City

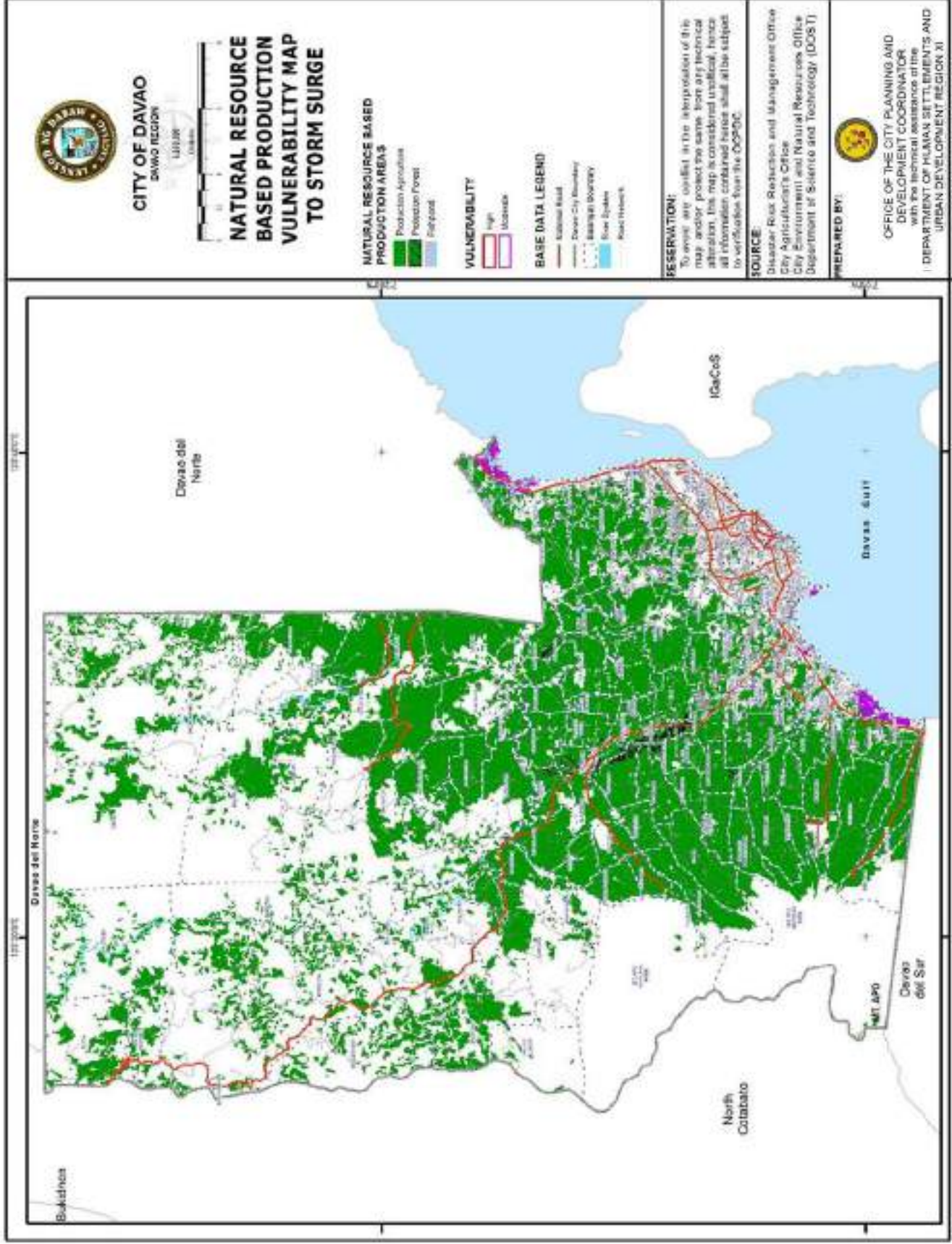


Table NR – 23. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Flood, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Bantol	<ol style="list-style-type: none"> 1. Susceptibility: /H/VH; 2. No. of Farming Dependent Households: 570; 3. Total Agricultural Area (Has): 408.75; 4. Exposed Area (Has):34.94; 5. Value Affected (Php): 1,264,108.47; 6. Farming families attended field school: 150; 7. Proportion of families using sustainable techniques : 200; 8. Families with access to hazard information:150; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: 12. Access to Insurance: 75; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 399; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>Potential reduction in crop production volume; detrimental effect on socio economic well-being of farming dependent families;</p>	<p>Strict implementation of riparian zone (20 meters A&D and 40 meters timberland; Planting of species appropriate in the easement zone (riparian) such as malibago, bamboo and fruit trees instead of cash crops; Establishment of rainwater catchment; Massive tree planting and stop cutting of trees) ; Adapt cropping pattern; Access to alternative livelihood and Access to Crop insurance (PCIC).</p>
Callawa	<ol style="list-style-type: none"> 1. Susceptibility: M/H/VH; 2. No. of Farming Dependent Households: 131; 3. Total Agricultural Area (Has): 835.33; 4. Exposed Area (Has):68.56; 5. Value Affected(Php): 1,956,813.57; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information:; 	<p>Potential reduction in crop production volume; detrimental effect on socio economic well-being of farming dependent families;</p>	<p>Strict implementation of riparian zone (20 meters A&D and 40 meters timberland; Planting of species appropriate in the easement zone(riparian) such as malibago, bamboo and fruit trees instead of cash crops; Establishment of rainwater catchment; Massive tree planting and stop cutting of trees) ; Adapt cropping pattern; Access to alternative livelihood and Access to Crop insurance (PCIC).</p>

Table NR – 23. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Flood, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Colosas	<p>9. Infra Coverage: Yes; 10. Irrigation Coverage: 6.70; 11. Water Impoundment: 1.70; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>	<p>Potential reduction in crop production volume; detrimental effect on socio economic well-being of farming dependent families;</p>	<p>Strict implementation of riparian zone (20 meters A&D and 40 meters timberland); Planting of species appropriate in the easement zone(riparian) such as malibago, bamboo and fruit trees instead of cash crops; Establishment of rainwater catchment; Massive tree planting and stop cutting of trees) ; Adapt cropping pattern; Access to alternative livelihood and Access to Crop insurance (PCIC).</p>
	<p>1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 1396; 3. Total Agricultural Area (Has): 3608.86; 4. Exposed Area (Has):188.06; 5. Value Affected(Php): 1,089,631.61; 6. Farming families attended field school: 105; 7. Proportion of families using sustainable techniques : 50; 8. Families with access to hazard information:105; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 30; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 45; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>		

Table NR – 23. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Flood, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Dalagdag	<ol style="list-style-type: none"> 1. Susceptibility: M/H/VH; 2. No of Farming Dependent Households: 280; 3. Total Agricultural Area (Has): 317.69; 4. Exposed Area (Has):62.35; 5. Value Affected(PhP): 2,029,015.60; 6. Farming families attended field school: 30; 7. Proportion of families using sustainable techniques : 4; 8. Families with access to hazard information:30; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 4.37; 11. Water Impoundment: ; 12. Access to Insurance: 15; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>Potential reduction in crop production volume; detrimental effect on socio economic well-being of farming dependent families;</p>	<p>Strict implementation of riparian zone (20 meters A&D and 40 meters timberland); Planting of species appropriate in the easement zone(riparian) such as malibago, bamboo and fruit trees instead of cash crops; Establishment of rainwater catchment; Massive tree planting and stop cutting of trees) ; Adapt cropping pattern; Access to alternative livelihood and Access to Crop insurance (PCIC).</p>
Dominga	<ol style="list-style-type: none"> 1. Susceptibility: M/H/VH; 2. No of Farming Dependent Households: 378; 3. Total Agricultural Area (Has): 498.35; 4. Exposed Area (Has):172.89; 5. Value Affected(PhP): 5,885,865.16; 6. Farming families attended field school: 45; 7. Proportion of families using sustainable techniques : 10; 8. Families with access to hazard information:45; 9. Infra Coverage: x; 10. Irrigation Coverage: ; 	<p>Potential reduction in crop production volume; detrimental effect on socio economic well-being of farming dependent families;</p>	<p>Strict implementation of riparian zone (20 meters A&D and 40 meters timberland); Planting of species appropriate in the easement zone(riparian) such as malibago, bamboo and fruit trees instead of cash crops; Establishment of rainwater catchment; Massive tree planting and stop cutting of trees) ; Adapt cropping pattern; Access to alternative livelihood and Access to Crop insurance (PCIC).</p>

Table NR – 23. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Flood, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
<p>Gumitan</p>	<p>11. Water Impoundment: ; 12. Access to Insurance: 43; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>	<p>Potential reduction in crop production volume; detrimental effect on socio economic well-being of farming dependent families;</p>	<p>Strict implementation of riparian zone (20 meters A&D and 40 meters timberland); Planting of species appropriate in the easement zone(riparian) such as malibago, bamboo and fruit trees instead of cash crops; Establishment of rainwater catchment; Massive tree planting and stop cutting of trees) ; Adapt cropping pattern; Access to alternative livelihood and Access to Crop insurance (PCIC).</p>
<p>1. Susceptibility: /H/; 2. No of Farming Dependent Households: 550; 3. Total Agricultural Area (Has): 814.49; 4. Exposed Area (Has):8.75; 5. Value Affected(PhP): 276,301.81; 6. Farming families attended field school: 25; 7. Proportion of families using sustainable techniques : 25; 8. Families with access to hazard information:25; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 398; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>			

Table NR – 23. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Flood, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Lampianao	<ol style="list-style-type: none"> 1. Susceptibility: M/H/VH; 2. No of Farming Dependent Households: 184; 3. Total Agricultural Area (Has): 794.41; 4. Exposed Area (Has):136.12; 5. Value Affected(PhP): 4,429,583.01; 6. Farming families attended field school: 50; 7. Proportion of families using sustainable techniques : 10; 8. Families with access to hazard information:50; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: 0.97; 12. Access to Insurance: 35; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>Potential reduction in crop production volume; detrimental effect on socio economic well-being of farming dependent families.</p>	<p>Strict implementation of riparian zone (20 meters A&D and 40 meters timberland); Planting of species appropriate in the easement zone(riparian) such as malibago, bamboo and fruit trees instead of cash crops; Establishment of rainwater catchment; Massive tree planting and stop cutting of trees) ; Adapt cropping pattern; Access to alternative livelihood and Access to Crop insurance (PCIC).</p>
Pañalum	<ol style="list-style-type: none"> 1. Susceptibility: /H/; 2. No of Farming Dependent Households: 560; 3. Total Agricultural Area (Has): 609.22; 4. Exposed Area (Has):5.03; 5. Value Affected(PhP): 262,517.30; 6. Farming families attended field school: 120; 7. Proportion of families using sustainable techniques : 40; 8. Families with access to hazard information:120; 9. Infra Coverage: Yes; 	<p>Potential reduction in crop production volume; detrimental effect on socio economic well-being of farming dependent families;</p>	<p>Strict implementation of riparian zone (20 meters A&D and 40 meters timberland); Planting of species appropriate in the easement zone(riparian) such as malibago, bamboo and fruit trees instead of cash crops; Establishment of rainwater catchment; Massive tree planting and stop cutting of trees) ; Adapt cropping pattern; Access to alternative livelihood and Access to Crop insurance (PCIC).</p>

Table NR – 23. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Flood, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Saloy	<p>10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 35; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 20; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p> <p>1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 459; 3. Total Agricultural Area (Has): 990.072475607415; 4. Exposed Area (Has):95.4795517511692; 5. Value Affected(Php): 3730481.56646993; 6. Farming families attended field school: 70; 7. Proportion of families using sustainable techniques : 10; 8. Families with access to hazard information:70; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 45; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>	<p>Potential reduction in crop production volume; detrimental effect on socio economic well-being of farming dependent families;</p>	<p>Strict implementation of riparian zone (20 meters A&D and 40 meters timberland; Planting of species appropriate in the easement zone(riparian) such as malibago, bamboo and fruit trees instead of cash crops; Establishment of rainwater catchment; Massive tree planting and stop cutting of trees) ; Adapt cropping pattern; Access to alternative livelihood and Access to Crop insurance (PCIC).</p>

Table NR – 23. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Flood, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Sumimao	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 407; 3. Total Agricultural Area (Has): 1,434.92; 4. Exposed Area (Has):70.30; 5. Value Affected(Php): 134,273.24; 6. Farming families attended field school: 170; 7. Proportion of families using sustainable techniques : 43; 8. Families with access to hazard information:170; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0.04; 11. Water Impoundment: ; 12. Access to Insurance: 15; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 25; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>Potential reduction in crop production volume; detrimental effect on socio economic well-being of farming dependent families;</p>	<p>Strict implementation of riparian zone (20 meters A&D and 40 meters timberland); Planting of species appropriate in the easement zone(riparian) such as malibago, bamboo and fruit trees instead of cash crops; Establishment of rainwater catchment; Massive tree planting and stop cutting of trees) ; Adapt cropping pattern; Access to alternative livelihood and Access to Crop insurance (PCIC).</p>
Tapak	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 1428; 3. Total Agricultural Area (Has): 1269.48937680136; 4. Exposed Area (Has):56.2987304944883; 5. Value Affected(Php): 908154.82160659; 6. Farming families attended field school: 140; 7. Proportion of families using sustainable techniques : 40; 8. Families with access to hazard information:140; 9. Infra Coverage: Yes; 	<p>Potential reduction in crop production volume; detrimental effect on socio economic well-being of farming dependent families;</p>	<p>Strict implementation of riparian zone (20 meters A&D and 40 meters timberland); Planting of species appropriate in the easement zone(riparian) such as malibago, bamboo and fruit trees instead of cash crops; Establishment of rainwater catchment; Massive tree planting and stop cutting of trees) ; Adapt cropping pattern; Access to alternative livelihood and Access to Crop insurance (PCIC).</p>

Table NR – 23. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Flood, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
	10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 100; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate		

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Moderate			
Bantol	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 570; 3. Total Agricultural Area (Has): 408.75; 4. Exposed Area (Has):349.16; 5. Value Affected(PHP): 12,630,595.05; 6. Farming families attended field school: 150; 7. Proportion of families using sustainable techniques : 200; 8. Families with access to hazard information:150; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 75; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 399; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	85% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families	Adapt conservation farming practices in the forest production areas; Planting of agro-forestry trees instead of cash crops; Access to Crop insurance (PCIC; Access to alternative livelihood.
Buda	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 554; 3. Total Agricultural Area (Has): 1422.89; 4. Exposed Area (Has):673.93; 5. Value Affected(PHP): 50,949,549.00; 6. Farming families attended field school: 20; 7. Proportion of families using sustainable techniques : 10; 	47% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families	Adapt conservation farming practices in the forest production areas; Planting of agro-forestry trees instead of cash crops; Access to Crop insurance (PCIC; Access to alternative livelihood.

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Callawa	<p>8. Families with access to hazard information: 20; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 1.05; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 388; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>	<p>55% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Dalagdag	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 280; 3. Total Agricultural Area (Has): 317.69; 4. Exposed Area (Has):236.65; 5. Value Affected(Php): 7,700,661.21; 6. Farming families attended field school: 30; 7. Proportion of families using sustainable techniques : 4; 8. Families with access to hazard information:30; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 4.37; 11. Water Impoundment: ; 12. Access to Insurance: 15; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>74% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>
Daliaon Plantation	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 1352; 3. Total Agricultural Area (Has): 971.64; 4. Exposed Area (Has):644.98; 5. Value Affected(Php): 412,790,380.32; 6. Farming families attended field school: 30; 7. Proportion of families using sustainable techniques : 25; 8. Families with access to hazard information:30; 	<p>66% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Dominga	<p>9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 200; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>	<p>73% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agro-forestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Gatungan	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 273; 3. Total Agricultural Area (Has): 1125.28; 4. Exposed Area (Has):1,069.84; 5. Value Affected(PHP): 33,306,417.60; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information:; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>95% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agro-forestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>
Inayangan	<ol style="list-style-type: none"> 1. Susceptibility: M/H/VH; 2. No of Farming Dependent Households: 1401; 3. Total Agricultural Area (Has): 1138.26; 4. Exposed Area (Has):1062.21; 5. Value Affected(PHP): 36,163,086.09; 6. Farming families attended field school: 45; 7. Proportion of families using sustainable techniques : 10; 8. Families with access to hazard information:45; 9. Infra Coverage: Yes; 	<p>90% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agro-forestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Kilate	<p>10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 60; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>	<p>27% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agro-forestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>
	<p>1. Susceptibility: /H/; 2. No of Farming Dependent Households: 305; 3. Total Agricultural Area (Has): 633.71; 4. Exposed Area (Has):174.02; 5. Value Affected(PhP): 0; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : 15; 8. Families with access to hazard information;; 9. Infra Coverage: x; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 20; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 45; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>		

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Lampianao	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 184; 3. Total Agricultural Area (Has): 794.41; 4. Exposed Area (Has):452.97; 5. Value Affected(Php): 14,740,253.06; 6. Farming families attended field school: 50; 7. Proportion of families using sustainable techniques : 10; 8. Families with access to hazard information:50; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: 0.97; 12. Access to Insurance: 35; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>57% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>
Langub	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 502.36; 4. Exposed Area (Has):357.50; 5. Value Affected(Php): 26,186,532.63; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques :; 8. Families with access to hazard information:; 9. Infra Coverage: Yes; 	<p>71% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Mabuhay	<p>10. Irrigation Coverage: ; 11. Water Impoundment: 1.10; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>	<p>72% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agro-forestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>
	<p>1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 385; 3. Total Agricultural Area (Has): 997.55; 4. Exposed Area (Has):717.09; 5. Value Affected(PhP): 3,152,329.42; 6. Farming families attended field school: 50; 7. Proportion of families using sustainable techniques : 25; 8. Families with access to hazard information:50; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0.52; 11. Water Impoundment: ; 12. Access to Insurance: 9; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 12; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>		

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Magtuod	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 355.58; 4. Exposed Area (Has):324.94; 5. Value Affected(Php): 23,262,637.25; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information:; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>91% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>
Matina Biao	<ol style="list-style-type: none"> 1. Susceptibility: /H/; 2. No of Farming Dependent Households: 155; 3. Total Agricultural Area (Has): 1000.80; 4. Exposed Area (Has):92.57; 5. Value Affected(Php): 3,156,503.28; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : 5; 8. Families with access to hazard information:; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 	<p>9% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Matina Biao	<p>11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p> <p>1. Susceptibility: /H/; 2. No of Farming Dependent Households: 155; 3. Total Agricultural Area (Has): 1000.80; 4. Exposed Area (Has):92.57; 5. Value Affected(PHP): 3,156,503.28; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : 5; 8. Families with access to hazard information:; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 54; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 71; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>	<p>9% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Matina Pangl	<ol style="list-style-type: none"> 1. Susceptibility: M/H/VH; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 213.59; 4. Exposed Area (Has):150.44; 5. Value Affected(Php): 8,243,207.93; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information: ; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>70% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agro-forestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>
New Carmen	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 234; 3. Total Agricultural Area (Has): 956.391082635864; 4. Exposed Area (Has):688.769910567184; 5. Value Affected(Php): 49965435.6222752; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information: ; 9. Infra Coverage: x; 	<p>72% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agro-forestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
New Valencia	<p>10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 76; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 102; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>	<p>43% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agro-forestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Saloy	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 459; 3. Total Agricultural Area (Has): 990.07; 4. Exposed Area (Has):955.01; 5. Value Affected(Php): 37313302.44; 6. Farming families attended field school: 70; 7. Proportion of families using sustainable techniques : 10; 8. Families with access to hazard information:70; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 45; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>96% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>
Sibulan	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 606; 3. Total Agricultural Area (Has): 501.14; 4. Exposed Area (Has):498.92; 5. Value Affected(Php): 44,902,919.94; 6. Farming families attended field school: 120; 7. Proportion of families using sustainable techniques : 80; 8. Families with access to hazard information:120; 	<p>99% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Suawan	<p>9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 150; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p> <p>1. Susceptibility: M/H/VH; 2. No of Farming Dependent Households: 1240; 3. Total Agricultural Area (Has): 1684.67; 4. Exposed Area (Has):1127.29; 5. Value Affected(Php): 38,544,404.61; 6. Farming families attended field school: 100; 7. Proportion of families using sustainable techniques : 100; 8. Families with access to hazard information:620; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 1.11; 11. Water Impoundment: ; 12. Access to Insurance: 95; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 868; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>	<p>67% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Suawan	<p>9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 150; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p> <p>1. Susceptibility: M/H/VH; 2. No of Farming Dependent Households: 1240; 3. Total Agricultural Area (Has): 1684.67; 4. Exposed Area (Has):1127.29; 5. Value Affected(Php): 38,544,404.61; 6. Farming families attended field school: 100; 7. Proportion of families using sustainable techniques : 100; 8. Families with access to hazard information:620; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 1.11; 11. Water Impoundment: ; 12. Access to Insurance: 95; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 868; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>	<p>67% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Tagluno	<ol style="list-style-type: none"> 1. Susceptibility: /H/; 2. No of Farming Dependent Households: 396; 3. Total Agricultural Area (Has): 551.65; 4. Exposed Area (Has):65.10; 5. Value Affected(PhP): 2,604,366.47; 6. Farming families attended field school: 75; 7. Proportion of families using sustainable techniques : 25; 8. Families with access to hazard information:75; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 35; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>12 % potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>
Tagurano	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 319; 3. Total Agricultural Area (Has): 498.35; 4. Exposed Area (Has):308.57; 5. Value Affected(PhP): 12,188,707.05; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : 20; 8. Families with access to hazard information:; 9. Infra Coverage: x; 	<p>62% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Tambobong	<p>10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 10; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 30; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p> <p>1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 1082; 3. Total Agricultural Area (Has): 349.39; 4. Exposed Area (Has):326.52; 5. Value Affected(PhP): 10,477,788.48; 6. Farming families attended field school: 75; 7. Proportion of families using sustainable techniques : 150; 8. Families with access to hazard information:75; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 1151; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 45; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>	<p>93% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Tamugan	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 2123; 3. Total Agricultural Area (Has): 946.091858970564; 4. Exposed Area (Has):157.573720836657; 5. Value Affected(Php): 6179095.88888866; 6. Farming families attended field school: 200; 7. Proportion of families using sustainable techniques : 100; 8. Families with access to hazard information:200; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 80; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 1910; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>16% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agro-forestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>
Tungkalan	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 790; 3. Total Agricultural Area (Has): 1755.68; 4. Exposed Area (Has):868.30; 5. Value Affected(Php): 35,166,167.84; 6. Farming families attended field school: 50; 7. Proportion of families using sustainable techniques : 75; 	<p>49% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families</p>	<p>Adapt conservation farming practices in the forest production areas; Planting of agro-forestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
	<p>8. Families with access to hazard information:50; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0.85; 11. Water Impoundment: ; 12. Access to Insurance: 40; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 115; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>		
High			
Baganihan	<p>1. Susceptibility: M/H/VH; 2. No of Farming Dependent Households: 375; 3. Total Agricultural Area (Has): 168.75; 4. Exposed Area (Has):1.55; 5. Value Affected(Php): 74,450.20; 6. Farming families attended field school: 30; 7. Proportion of families using sustainable techniques : 15; 8. Families with access to hazard information:112.5; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 80; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 262;</p>	<p>1% potential loss of production areas; detrimental effect on socio-economic well-being of farming dependent families</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agro-forestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Colosas	<p>16. Government Resources: Yes; 17. Vulnerability Rating : High</p> <p>1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 1396; 3. Total Agricultural Area (Has): 3608.86; 4. Exposed Area (Has):3311.11; 5. Value Affected(PHP): 19,184,572.70; 6. Farming families attended field school: 105; 7. Proportion of families using sustainable techniques : 50; 8. Families with access to hazard information:105; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 30; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 45; 16. Government Resources: Yes; 17. Vulnerability Rating : High</p>	<p>92% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>
Dalag Lumot	<p>1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 569; 3. Total Agricultural Area (Has): 140.76; 4. Exposed Area (Has):137.84; 5. Value Affected(PHP): 0; 6. Farming families attended field school: 100; 7. Proportion of families using sustainable techniques : 200;</p>	<p>98% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
	<p>8. Families with access to hazard information:100; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 1; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 306; 16. Government Resources: Yes; 17. Vulnerability Rating : High</p>		
Datu Salumay	<p>1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 578; 3. Total Agricultural Area (Has): 681.46; 4. Exposed Area (Has):447.74; 5. Value Affected(Php): 0; 6. Farming families attended field school: 150; 7. Proportion of families using sustainable techniques : 150; 8. Families with access to hazard information:150; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 404; 16. Government Resources: Yes; 17. Vulnerability Rating : High</p>	<p>65% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Fatima	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 992; 3. Total Agricultural Area (Has): 2473.50; 4. Exposed Area (Has):2186.57; 5. Value Affected(Php): 12,500,672.71; 6. Farming families attended field school: 180; 7. Proportion of families using sustainable techniques : 47; 8. Families with access to hazard information:180; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 50; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 70; 16. Government Resources: Yes; 17. Vulnerability Rating : High 	<p>88% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>
Gumitan	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 550; 3. Total Agricultural Area (Has): 814.49; 4. Exposed Area (Has):785.81; 5. Value Affected(Php): 24,796,985.70; 6. Farming families attended field school: 25; 7. Proportion of families using sustainable techniques : 25; 8. Families with access to hazard information:25; 	<p>96% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Lumiad	<p>9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 398; 16. Government Resources: Yes; 17. Vulnerability Rating : High</p> <p>1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 488; 3. Total Agricultural Area (Has): 885.86; 4. Exposed Area (Has):869.45; 5. Value Affected(PhP): 62,549,542.73; 6. Farming families attended field school: 110; 7. Proportion of families using sustainable techniques : 60; 8. Families with access to hazard information:110; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 90; 16. Government Resources: Yes; 17. Vulnerability Rating : High</p>	<p>98% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Magsaysay	<ol style="list-style-type: none"> 1. Susceptibility: M/H/VH; 2. No of Farming Dependent Households: 705; 3. Total Agricultural Area (Has): 1580.08; 4. Exposed Area (Has):1416.05; 5. Value Affected(Php): 84,963,456.74; 6. Farming families attended field school: 100; 7. Proportion of families using sustainable techniques : 75; 8. Families with access to hazard information:211.5; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 15; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 493; 16. Government Resources: Yes; 17. Vulnerability Rating : High 	<p>89% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>
Malabog	<ol style="list-style-type: none"> 1. Susceptibility: M/H/VH; 2. No of Farming Dependent Households: 3030; 3. Total Agricultural Area (Has): 3527.92; 4. Exposed Area (Has):3498.42; 5. Value Affected(Php): 41,396,820.68; 6. Farming families attended field school: 300; 7. Proportion of families using sustainable techniques : 100; 8. Families with access to hazard information:300; 	<p>99% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Malamba	<p>9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 50; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 500; 16. Government Resources: Yes; 17. Vulnerability Rating : High</p> <p>1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 1318; 3. Total Agricultural Area (Has): 1729.26; 4. Exposed Area (Has):1535.40; 5. Value Affected(Php): 53,872,656.15; 6. Farming families attended field school: 60; 7. Proportion of families using sustainable techniques : 200; 8. Families with access to hazard information:60; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 27; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 132; 16. Government Resources: Yes; 17. Vulnerability Rating : High</p>	<p>88% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Mapula	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 992; 3. Total Agricultural Area (Has): 1932.29; 4. Exposed Area (Has):1923.59; 5. Value Affected(PhP): 43,605,945.15; 6. Farming families attended field school: 190; 7. Proportion of families using sustainable techniques : 70; 8. Families with access to hazard information:190; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: 0.15; 12. Access to Insurance: 54; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 100; 16. Government Resources: Yes; 17. Vulnerability Rating : High 	<p>99% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>
Marilog	<ol style="list-style-type: none"> 1. Susceptibility: M/H/VH; 2. No of Farming Dependent Households: 4300; 3. Total Agricultural Area (Has): 3936.82; 4. Exposed Area (Has):3803.92; 5. Value Affected(PhP): 130,120,979.76; 6. Farming families attended field school: 500; 7. Proportion of families using sustainable techniques : 375; 8. Families with access to hazard information:860; 	<p>97% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Megkawayan	<p>9. Infra Coverage: Yes; 10. Irrigation Coverage: 0.29; 11. Water Impoundment: ; 12. Access to Insurance: 88; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 2802; 16. Government Resources: Yes; 17. Vulnerability Rating : High</p> <p>1. Susceptibility: M/H/VH; 2. No of Farming Dependent Households: 706; 3. Total Agricultural Area (Has): 1551.54; 4. Exposed Area (Has):1470.45; 5. Value Affected(Php): 102,006,788.96; 6. Farming families attended field school: 36; 7. Proportion of families using sustainable techniques : 20; 8. Families with access to hazard information:36; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : High</p>	<p>95% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Pañalum	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 560; 3. Total Agricultural Area (Has): 609.22; 4. Exposed Area (Has):507.03; 5. Value Affected(Php): 26,455,677.12; 6. Farming families attended field school: 120; 7. Proportion of families using sustainable techniques : 40; 8. Families with access to hazard information:120; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 35; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 20; 16. Government Resources: Yes; 17. Vulnerability Rating : High 	<p>83% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>
Pandaitan	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 1045; 3. Total Agricultural Area (Has): 2036.11; 4. Exposed Area (Has):1951.06; 5. Value Affected(Php): 25,635,054.87; 6. Farming families attended field school: 240; 7. Proportion of families using sustainable techniques : 80; 8. Families with access to hazard information:240; 	<p>96% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Paquibato	<p>9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 1; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 40; 16. Government Resources: Yes; 17. Vulnerability Rating : High</p>	<p>87% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Paradise Embac	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 980; 3. Total Agricultural Area (Has): 1731.39; 4. Exposed Area (Has):1484.54; 5. Value Affected(Php): 25,507,522.43; 6. Farming families attended field school: 140; 7. Proportion of families using sustainable techniques : 75; 8. Families with access to hazard information:140; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 36; 16. Government Resources: Yes; 17. Vulnerability Rating : High 	<p>85% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>
Salapawan	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 678; 3. Total Agricultural Area (Has): 176.45; 4. Exposed Area (Has):137.90; 5. Value Affected(Php): 849,216.94; 6. Farming families attended field school: 100; 7. Proportion of families using sustainable techniques : 68; 8. Families with access to hazard information:100; 	<p>78% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Salaysay	<p>9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 10; 16. Government Resources: Yes; 17. Vulnerability Rating : High</p>	<p>99% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socio-economic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agro-forestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>
	<p>1. Susceptibility: M/H/VH; 2. No of Farming Dependent Households: 904; 3. Total Agricultural Area (Has): 1854.45; 4. Exposed Area (Has):1845.24; 5. Value Affected(PhP): 67,108.33; 6. Farming families attended field school: 150; 7. Proportion of families using sustainable techniques : 300; 8. Families with access to hazard information:150; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0.42; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 632; 16. Government Resources: Yes; 17. Vulnerability Rating : High</p>		

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Sumimao	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 407; 3. Total Agricultural Area (Has): 1434.92; 4. Exposed Area (Has):1425.86; 5. Value Affected(Php): 2,723,406.54; 6. Farming families attended field school: 170; 7. Proportion of families using sustainable techniques : 43; 8. Families with access to hazard information:170; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0.047; 11. Water Impoundment: ; 12. Access to Insurance: 15; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 25; 16. Government Resources: Yes; 17. Vulnerability Rating : High 	<p>99% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>
Tapak	<ol style="list-style-type: none"> 1. Susceptibility: M/H/; 2. No of Farming Dependent Households: 1428; 3. Total Agricultural Area (Has): 1269.48; 4. Exposed Area (Has):1258.96; 5. Value Affected(Php): 20,308,350.89; 6. Farming families attended field school: 140; 7. Proportion of families using sustainable techniques : 40; 8. Families with access to hazard information:140; 	<p>99% potential loss or reduction of production areas; reduction of production volume; detrimental effect on socioeconomic well-being of farming dependent families.</p>	<p>Strict implementation of no tillage in sloping areas; Adapt conservation farming practices in the forest production areas; Planting of agroforestry trees instead of cash crops; Access to Crop insurance (PCIC); Access to alternative livelihood; Plant more trees stop cutting of trees.</p>

Table NR – 24. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Landslide, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
	9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 100; 16. Government Resources: Yes; 17. Vulnerability Rating : High		

Table NR – 25. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Storm Surge, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Bago Aplaya	<ol style="list-style-type: none"> 1. Susceptibility: ; 2. No of Farming Dependent Households: 550; 3. Total Agricultural Area (Has): 14.19; 4. Exposed Area (Has):7.82; 5. Value Affected(PHP): 232,425.69; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques: ; 8. Families with access to hazard information:; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>Potential reduction in crop production volume; detrimental effect on socioeconomic well-being of farming dependent families;</p>	<p>Access to Crop insurance (PCIC; Access to alternative livelihood Change crop (planting of saline tolerant varieties) Enhance planting of mangroves</p>
Binugao	<ol style="list-style-type: none"> 1. Susceptibility: ; 2. No of Farming Dependent Households: 1996; 3. Total Agricultural Area (Has): 290.68; 4. Exposed Area (Has):62.85; 5. Value Affected(PHP): 2,388,577.66; 6. Farming families attended field school: 25; 7. Proportion of families using sustainable techniques: 25; 8. Families with access to hazard information:25; 9. Infra Coverage: Yes; 	<p>Potential reduction in crop production volume; detrimental effect on socioeconomic well-being of farming dependent families;</p>	<p>Access to Crop insurance (PCIC; Access to alternative livelihood Change crop (planting of saline tolerant varieties) Enhance planting of mangroves</p>

Table NR – 25. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Storm Surge, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Bucana	<p>10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 35; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>	<p>Potential reduction in crop production volume; detrimental effect on socioeconomic well-being of farming dependent families;</p>	<p>Access to Crop insurance (PCIC; Access to alternative livelihood Change crop (planting of saline tolerant varieties) Enhance planting of mangroves</p>
	<p>1. Susceptibility: ; 2. No of Farming Dependent Households: 23624; 3. Total Agricultural Area (Has): 3.15; 4. Exposed Area (Has):3.15; 5. Value Affected(PhP): 0; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques ; ; 8. Families with access to hazard information; ; 9. Infra Coverage: ; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: ; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>		

Table NR – 25. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Storm Surge, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Bunawan	<ol style="list-style-type: none"> 1. Susceptibility: ; 2. No of Farming Dependent Households: 200; 3. Total Agricultural Area (Has): 380.574888110217; 4. Exposed Area (Has):222.711662161346; 5. Value Affected(PhP): 0; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques ; ; 8. Families with access to hazard information;; 9. Infra Coverage: x; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: ; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>Potential reduction in crop production volume; detrimental effect on socioeconomic well-being of farming dependent families;</p>	<p>Access to Crop insurance (PCIC; Access to alternative livelihood Change crop (planting of saline tolerant varieties) Enhance planting of mangroves</p>
Ilang	<ol style="list-style-type: none"> 1. Susceptibility: ; 2. No of Farming Dependent Households: 4305; 3. Total Agricultural Area (Has): 228.310329734728; 4. Exposed Area (Has):1.17058179949715; 5. Value Affected(PhP): 0; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques ; ; 8. Families with access to hazard information;; 	<p>Potential reduction in crop production volume; detrimental effect on socioeconomic well-being of farming dependent families;</p>	<p>Access to Crop insurance (PCIC; Access to alternative livelihood Change crop (planting of saline tolerant varieties) Enhance planting of mangroves</p>

Table NR – 25. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Storm Surge, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Lasang	<p>9. Infra Coverage: x; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: ; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p> <p>1. Susceptibility: ; 2. No of Farming Dependent Households: 300; 3. Total Agricultural Area (Has): 455.51; 4. Exposed Area (Has):151.59; 5. Value Affected(Php): 0; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information: ; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: ; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>	<p>Potential reduction in crop production volume; detrimental effect on socio economic well-being of farming dependent families;</p>	<p>Access to Crop insurance (PCIC; Access to alternative livelihood Change crop (planting of saline tolerant varieties) Enhance planting of mangroves</p>

Table NR – 25. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Storm Surge, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Lizada	<ol style="list-style-type: none"> 1. Susceptibility: ; 2. No of Farming Dependent Households: 4147; 3. Total Agricultural Area (Has): 251.71; 4. Exposed Area (Has):184.68; 5. Value Affected(PHP): 0; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : 10; 8. Families with access to hazard information:; 9. Infra Coverage: x; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: ; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>Potential reduction in crop production volume; detrimental effect on socioeconomic well-being of farming dependent families;</p>	<p>Access to Crop insurance (PCIC; Access to alternative livelihood Change crop (planting of saline tolerant varieties) Enhance planting of mangroves</p>
Matina Aplaya	<ol style="list-style-type: none"> 1. Susceptibility: ; 2. No of Farming Dependent Households: 266; 3. Total Agricultural Area (Has): 5.16; 4. Exposed Area (Has):4.29; 5. Value Affected(PHP): 721,762,044.07; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information:; 9. Infra Coverage: ; 10. Irrigation Coverage: ; 	<p>Potential reduction in crop production volume; detrimental effect on socioeconomic well-being of farming dependent families;</p>	<p>Access to Crop insurance (PCIC; Access to alternative livelihood Change crop (planting of saline tolerant varieties) Enhance planting of mangroves</p>

Table NR – 25. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Storm Surge, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Panacan	<p>11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: ; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate</p>	<p>Potential reduction in crop production volume; detrimental effect on socioeconomic well-being of farming dependent families;</p>	<p>Access to Crop insurance (PCIC; Access to alternative livelihood Change crop (planting of saline tolerant varieties) Enhance planting of mangroves</p>

Table NR – 25. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Storm Surge, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
Sirawan	<ol style="list-style-type: none"> 1. Susceptibility: ; 2. No of Farming Dependent Households: 1430; 3. Total Agricultural Area (Has): 730.74; 4. Exposed Area (Has):36.56; 5. Value Affected(Php): 7,313,778.07; 6. Farming families attended field school: 25; 7. Proportion of families using sustainable techniques : 20; 8. Families with access to hazard information:25; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 50; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate 	<p>Potential reduction in crop production volume; detrimental effect on socioeconomic well-being of farming dependent families;</p>	<p>Access to Crop insurance (PCIC; Access to alternative livelihood Change crop (planting of saline tolerant varieties) Enhance planting of mangroves</p>
Talomo	<ol style="list-style-type: none"> 1. Susceptibility: ; 2. No of Farming Dependent Households: 72538; 3. Total Agricultural Area (Has): 89.14; 4. Exposed Area (Has):5.11; 5. Value Affected(Php): 0; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques ; ; 8. Families with access to hazard information:; 9. Infra Coverage: Yes; 	<p>Potential reduction in crop production volume; detrimental effect on socioeconomic well-being of farming dependent families;</p>	<p>Access to Crop insurance (PCIC; Access to alternative livelihood Change crop (planting of saline tolerant varieties) Enhance planting of mangroves</p>

Table NR – 25. Climate Change Vulnerability Assessment Summary Matrix for Natural Resource-Based Production Areas, Storm Surge, Davao City

Decision Areas	Technical Findings	Planning Implications	Interventions
	10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: ; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Vulnerability Rating : Moderate		

Disaster Risk Assessment to Natural Resource-Based Production Areas

Natural Resource-Based Production Areas (NRBPAs) are also vulnerable/susceptible to disaster impacts. Forest and agricultural resources may be affected once disasters occur in the areas. As precautionary measure, the Disaster Risk Assessment (DRA) to NRBPAs is conducted to enable the city government determine the risk areas and lay down mitigation and adaptation measures to prevent massive disaster destruction in resource-rich areas.

Exposure to Natural Resource Production Areas

The following tables* show NRBPAs that have occurrences of floods and landslides. The likelihood of occurrence differs from one NRBPA to another. The NRBPAs with likelihood score of six (6) have frequent occurrence to disasters, which happen one (1) to three (3) years. Those with a score of five (5) have moderate occurrence to disasters, which happen every three (3) to 10 years. Occasional occurrences with a score of four (4) happen every 10 to 30 years improbable occurrences with a score of three (3) ensure every 100 to 200 years. The scores two (2) and one (1) are called rare event (every 100 to 200 years) and very rare event (every less than 200 years), respectively. Below are the summary of the tables per hazard:

* The column with flood/landslide susceptibility in the succeeding tables indicates that the areas with L are considered as low susceptibility area, M as moderate susceptibility area, and H as high susceptibility area.

Flood – A total of 76 barangays with NRBPA have flood occurrences (Table NR – 1). Of the total, 13 areas have frequent flood occurrences. These are Ma-a, Matina Aplaya, Matina Crossing, Matina Pangi, Talomo Proper, Mandug, Tigatto, Bunawan Proper, Lasang, Gumitan, Tamugan, Marapangi, and Tugbok Proper. At least 12 areas have moderate occurrences to floods, which include Bago Aplaya, Buhangin, Panacan, Calinan, Magsaysay, Malamba, Marilog Proper, Crossing Bayabas, Lizada, Los Amigos, and Mintal. The NRBPA in Bago Gallera, Bucana, Dumoy, Communal, Waan, Mahayag, Gumalang, Malagos, Riverside, Saloy, Wangan, Bantol, Bayabas, Camansi, Lubogan, Sirawan, Toril Proper, and Sto. Niño. The rest of the areas, which are within the 33 barangays, have improbable flood occurrences. Floods may rise at more than one (1) meter in most NRBPA except in Baliok, Daliao, and Talandang where the flood depth is less than one (1) meter. All are either moderate or high susceptible to floods.

Table NR – 26. Natural Resource Production Area Exposure Table, Flood, Davao City

Hazard				Exposure					
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value
Talomo District									
Bago Aplaya	M/H	5	≥ 1 meter	14.19	banana	2.13	15.02%	29,700	63,308
Bago Gallera	M/H	4	≥ 1 meter	335.90	coconut	69.56	20.71%	61,972	4,311,015
Baliok	M	3	<1 meter	120.58	coconut	35.27	29.25%	61,062	2,153,449
Bucana	M/H	4	≥ 1 meter	3.16	-	1.85	58.75%	-	-
Catalunan Grande	M/H	3	≥ 1 meter	862.74	coconut	172.78	20.03%	74,117	12,806,285
Catalunan Pequeño	M/H	3	≥ 1 meter	250.64	coconut	87.86	35.05%	60,731	5,335,778
Dumoy	M/H	4	≥ 1 meter	195.07	coconut	19.59	10.04%	62,718	1,228,600
Ma-A	M/H	6	≥ 1 meter	76.80	coconut	30.57	39.80%	68,941	2,107,343
Matina Aplaya	M/H	6	≥ 1 meter	5.16	Pelagic Fishes	4.30	83.22%	168,000,000	721,762,044
Matina Crossing	M/H	6	≥ 1 meter	7.94	-	1.11	13.98%	-	-
Matina Pangi	M/H	6	≥ 1 meter	213.60	coconut	45.63	21.36%	54,793	2,500,194
Talomo	M/H	6	≥ 1 meter	89.14	-	45.71	51.27%	-	-
Buhangin District									
Buhangin	M/H	5	≥ 1 meter	123.37	-	-	0.00%	-	-
Cabantian	M/H	3	≥ 1 meter	231.75	-	0.05	0.02%	-	-

Table NR – 26. Natural Resource Production Area Exposure Table, Flood, Davao City

Hazard				Exposure					
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value
Communal	M/H	4	≥ 1 meter	277.18	-	15.77	5.69%	-	-
Mandug	M/H	6	≥ 1 meter	603.45	coconut	83.26	13.80%	30,000	2,497,785
Sasa	M/H	3	≥ 1 meter	22.71	-	-	0.00%	-	-
Tigatto	M/H	6	≥ 1 meter	354.51	banana local	127.62	36.00%	101,000	12,889,877
Waan	M	4	≥ 1 meter	352.74	coconut	127.58	36.17%	10,109	1,289,702
Bunawan District									
Bunawan	M/H	6	≥ 1 meter	380.57	-	86.20	22.65%	-	-
Ilang	M/H	3	≥ 1 meter	228.31	-	5.80	2.54%	-	-
Lasang	M/H	6	≥ 1 meter	455.52	Pelagic Fishes	119.86	26.31%	-	-
Mahayag	M/H	4	≥ 1 meter	407.79	coconut	1.00	0.25%	30,000	29,982
Panacan	M/H	5	≥ 1 meter	201.64	-	9.49	4.71%	-	-
Tibungco	M/H	3	≥ 1 meter	450.59	-	4.74	1.05%	-	-
Paquibato District									
Pañalum	H	3	≥ 1 meter	609.23	banana	5.03	0.83%	52,178	262,517
Paquibato	H	3	≥ 1 meter	1,375.53	coconut	1.32	0.10%	16,716	22,065
Sumimao	M/H	3	≥ 1 meter	1,434.92	coconut	70.30	4.90%	1,910	134,273
Tapak	M/H	3	≥ 1 meter	1,269.49	coconut	56.30	4.43%	16,131	908,155
Baguio District									
Baguio	M/H	3	≥ 1 meter	638.57	coconut	147.87	23.16%	38,187	5,646,771
Gumalang	M/H	4	≥ 1 meter	1,394.99	coconut	302.40	21.68%	39,250	11,869,228
Malagos	M/H	4	≥ 1 meter	826.54	coconut	290.25	35.12%	38,359	11,133,819
Tambobong	H	3	≥ 1 meter	349.39	coconut	19.84	5.68%	32,089	636,650
Tawan-Tawan	M/H	3	≥ 1 meter	874.21	cacao	112.33	12.85%	84,555	9,498,189
Calinan District									

Table NR – 26. Natural Resource Production Area Exposure Table, Flood, Davao City

Hazard				Exposure					
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value
Calinan	M/H	5	≥ 1 meter	611.68	rice	571.41	93.42%	81,940	46,821,452
Dominga	M/H	3	≥ 1 meter	498.35	coconut	172.90	34.69%	34,043	5,885,865
Inayangan	H	3	≥ 1 meter	1,138.27	coconut	45.62	4.01%	34,045	1,553,211
Lamanan	M/H	3	≥ 1 meter	1,427.04	coconut	359.99	25.23%	35,047	12,616,614
Pangyan	M/H	3	≥ 1 meter	660.52	coconut	96.28	14.58%	26,517	2,552,956
Riverside	M/H	4	≥ 1 meter	421.37	coconut	267.60	63.51%	38,100	10,195,435
Saloy	M/H	4	≥ 1 meter	990.07	coconut	95.48	9.64%	39,071	3,730,482
Tamayong	M/H	3	≥ 1 meter	1,356.14	banana cav.	94.49	6.97%	554,376	52,381,458
Wangan	M/H	4	≥ 1 meter	1,147.83	coconut	555.44	48.39%	39,098	21,716,563
Marilog District									
Baganihan	-	3	≥ 1 meter	168.75	corn	-	0.00%	48,000	-
Bantol	H	4	≥ 1 meter	408.76	coconut	34.95	8.55%	36,174	1,264,108
Buda	-	3	≥ 1 meter	1,422.90	vegetables	-	0.00%	75,600	-
Datu Salumay	-	3	≥ 1 meter	681.46	vegetables	-	0.00%	-	-
Gumitan	H	6	≥ 1 meter	814.50	rice	8.76	1.08%	31,556	276,302
Magsaysay	-	5	≥ 1 meter	1,580.09	corn	-	0.00%	60,000	-
Malamba	M/H	5	≥ 1 meter	1,729.27	coconut	95.50	5.52%	35,087	3,350,807
Marilog	H	5	≥ 1 meter	3,936.82	coconut	17.82	0.45%	34,207	609,484
Salaysay	H	3	≥ 1 meter	1,854.46	banana cav.	3.94	0.21%	36	143
Suawan	M/H	3	≥ 1 meter	1,684.68	coconut	342.68	20.34%	34,192	11,716,755
Tamugan	M/H	6	≥ 1 meter	946.09	coconut	215.60	22.79%	39,214	8,454,434
Toril District									
Bayabas	H	4	≥ 1 meter	1,183.42	coconut	104.37	8.82%	37,500	3,913,911
Crossing Bayabas	M/H	5	≥ 1 meter	78.79	-	14.44	18.33%	-	-
Binugao	M/H	3	≥ 1 meter	290.68	coconut	129.37	44.50%	38,000	4,915,947

Table NR – 26. Natural Resource Production Area Exposure Table, Flood, Davao City

Hazard				Exposure					
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value
Camansi	H	4	≥ 1 meter	349.76	coconut	27.74	7.93%	37,500	1,040,386
Daliao	M	3	< 1 meter	4.68	-	0.00	0.00%		-
Daliaon Plantation	H	3	≥ 1 meter	971.65	banana	83.44	8.59%	640,000	53,402,330
Lizada	M/H	5	≥ 1 meter	251.72	-	77.83	30.92%	-	-
Lubogan	H	4	≥ 1 meter	72.90	-	20.39	27.97%	-	-
Marapangi	M/H	6	≥ 1 meter	526.81	-	122.52	23.26%	-	-
Sirawan	M/H	4	≥ 1 meter	730.75	mango	121.18	16.58%	200,000	24,236,400
Tagluno	H	3	≥ 1 meter	551.66	coconut	36.28	6.58%	40,000	1,451,371
Toril	-	4	≥ 1 meter	2.05	-	-	0.00%	-	-
Tugbok District									
Bago Oshiro	M/H	3	≥ 1 meter	348.39	-	18.37	5.27%	-	-
Los Amigos	M/H	5	≥ 1 meter	364.04	rice	323.96	88.99%	46,240	14,979,954
Los Amigos	M/H	5	≥ 1 meter	27.50	hito	27.50	100.00%	1,707,687	46,961,384
Manambulan	M/H	3	≥ 1 meter	751.58	coconut	175.84	23.40%	36,100	6,347,923
Mintal	M/H	5	≥ 1 meter	435.08	coconut	65.66	15.09%	48,958	3,214,614
Sto. Niño	M/H	4	≥ 1 meter	1.47	-	0.58	39.02%	-	-
Tacunan	M/H	3	≥ 1 meter	790.18	coconut	320.36	40.54%	33,999	10,891,994
Talandang	M	3	<1 meter	1,220.69	coconut	233.86	19.16%	34,014	7,954,398
Tugbok	M/H	6	≥ 1 meter	716.56	coconut	610.77	85.24%	39,469	24,106,520
Ula	M/H	3	≥ 1 meter	856.08	coconut	527.44	61.61%	35,032	18,477,370

Landslide – Table NR – 2 shows that landslides happen in 100 barangays with NRBPA in the city. Frequent occurrences are observed particularly in Pandaitan, Buda, and Suawan. Moderate occurrences are also recorded in Langub, Ma-a, Matina Crossing, Tigatto, Fatima, Lumiad, Malabog, Tambobong, Inayangan, Baganihan, Datu Salumay, Gumitan, Malamba, Marilog Proper, Salaysay, Tamugan, and New Carmen. On the other hand, floods occasionally occur in NRBPA particularly in Matina Pangi, Mandug, Paquibato Proper, Baguio Proper, Carmen, and Magsaysay. All are either moderate or high susceptible to landslides.

Table NR – 27. Natural Resource Production Area Exposure Table, Landslide, Davao City

Hazard			Exposure					
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area (Has.)	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value
Talomo District								
Catalunan Grande	M/H	3	862.74	coconut	47.40	5.49%	74,117	3,513,303
Catalunan Pequeño	-	2	250.64	coconut	-	0.00%	60,731	-
Langub	M/H	5	502.37	coconut	357.51	71.16%	73,248	26,186,533
Ma-A	M/H	5	76.80	coconut	32.05	41.74%	68,941	2,209,823
Matina Crossing	H	5	7.94	-	6.81	85.81%	-	-
Matina Pangi	M/H	4	213.60	coconut	150.44	70.43%	54,793	8,243,208
Talomo	M/H	2	89.14	-	14.42	16.18%	-	-
Buhangin District								
Acacia	M/H	1	738.89	coconut	667.72	90.37%	21,000	14,022,028
Buhangin	M/H	3	123.37	-	116.26	94.23%	-	-
Cabantian	M/H	3	231.75	-	120.13	51.84%	-	-
Callawa	M/H	1	835.33	coconut	463.36	55.47%	28,540	13,224,296
Communal	M/H	1	277.18	-	183.55	66.22%	-	-
Indangan	M/H	1	1,112.40	coconut	791.80	71.18%	30,000	23,754,134
Mandug	M/H	4	603.45	coconut	343.04	56.85%	30,000	10,291,273
Sasa	M/H	1	22.71	-	6.61	29.13%	-	-
Tigatto	M/H	5	354.51	banana local	123.66	34.88%	101,000	12,489,429
Waan	M/H	1	352.74	coconut	199.13	56.45%	10,109	2,013,038

Table NR – 27. Natural Resource Production Area Exposure Table, Landslide, Davao City

Hazard			Exposure					
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area (Has.)	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value
Bunawan District								
Bunawan	M	1	380.57	-	31.58	8.30%	-	-
Gatungan	M/H	1	1,125.29	coconut	1,069.85	95.07%	31,132	33,306,418
Ilang	M/H	1	228.31	-	127.96	56.04%	-	-
Mahayag	M/H	1	407.79	coconut	143.87	35.28%	30,000	4,316,053
Mudiang	M/H	1	561.40	coconut	528.69	94.17%	31,789	16,806,480
Panacan	M/H	1	201.64	-	66.39	32.92%	-	-
San Isidro	M/H	2	518.52	banana local	76.68	14.79%	73,575	5,641,897
Tibungco	M/H	1	450.59	-	223.65	49.63%	-	-
Paquibato District								
Colosas	M/H	1	3,608.87	coconut	3,311.11	91.75%	5,794	19,184,573
Fatima	M/H	5	2,473.51	coconut	2,186.58	88.40%	5,717	12,500,673
Lumiad	M/H	5	885.86	corn	869.46	98.15%	71,941	62,549,543
Mabuhay	M/H	1	997.56	coconut	717.09	71.88%	4,396	3,152,329
Malabog	M/H	5	3,527.92	coconut	3,498.42	99.16%	11,833	41,396,821
Mapula	M/H	1	1,932.29	coconut	1,923.59	99.55%	22,669	43,605,945
Pandaitan	M/H	6	2,036.11	coconut	1,951.07	95.82%	13,139	25,635,055
Pañalum	M/H	1	609.23	banana	507.03	83.23%	52,178	26,455,677
Paquibato	M/H	4	1,375.53	coconut	1,196.30	86.97%	16,716	19,997,383
Paradise Embac	M/H	1	1,731.39	coconut	1,484.55	85.74%	17,182	25,507,522
Salapawan	M/H	1	176.45	coconut	137.90	78.15%	6,158	849,217
Sumimao	M/H	1	1,434.92	coconut	1,425.87	99.37%	1,910	2,723,407
Tapak	M/H	1	1,269.49	coconut	1,258.96	99.17%	16,131	20,308,351
Baguio District								
Baguio	H	4	638.57	coconut	48.53	7.60%	38,187	1,853,329

Table NR – 27. Natural Resource Production Area Exposure Table, Landslide, Davao City

Hazard			Exposure					
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area (Has.)	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value
Cadalian	H	1	616.55	coconut	96.35	15.63%	39,195	3,776,288
Carmen	M/H	4	340.03	cacao	108.82	32.00%	78,600	8,553,252
Gumalang	M/H	1	1,394.99	coconut	211.77	15.18%	39,250	8,312,132
Malagos	M/H	1	826.54	coconut	51.22	6.20%	38,359	1,964,829
Tambobong	M/H	5	349.39	coconut	326.52	93.45%	32,089	10,477,788
Tawan-Tawan	M/H	1	874.21	cacao	109.00	12.47%	84,555	9,216,742
Wines	M/H	1	855.76	coconut	73.90	8.64%	39,098	2,889,221
Calinan District								
Biao Joaquin	M/H	1	513.94	coconut	133.13	25.90%	35,291	4,698,446
Calinan	M/H	3	611.68	rice	29.51	4.83%	81,940	2,418,371
Cawayan	H	1	777.62	pineapple	27.24	3.50%	574,200	15,641,951
Dacudao	M/H	1	1,123.77	coconut	209.49	18.64%	38,065	7,974,275
Dalagdag	M/H	1	317.69	coconut	236.65	74.49%	32,540	7,700,661
Dominga	M/H	1	498.35	coconut	365.55	73.35%	34,043	12,444,522
Inayangan	M/H	5	1,138.27	coconut	1,062.21	93.32%	34,045	36,163,086
Lacson	M/H	1	764.19	coconut	218.29	28.57%	38,039	8,303,717
Lamanan	M/H	1	1,427.04	coconut	888.63	62.27%	35,047	31,143,916
Lampianao	M/H	1	794.41	coconut	452.97	57.02%	32,541	14,740,253
Megkawayan	M/H	1	1,551.55	cacao	1,470.45	94.77%	69,371	102,006,789
Pangyan	M/H	1	660.52	coconut	342.70	51.88%	26,517	9,087,289
Saloy	M/H	1	990.07	coconut	955.01	96.46%	39,071	37,313,302
Sirib	M/H	1	2,120.12	banana cav.	633.36	29.87%	407,720	258,234,375
Talomo River	M/H	1	707.69	coconut	73.17	10.34%	37,113	2,715,562
Tamayong	M/H	1	1,356.14	banana cav.	901.06	66.44%	554,376	499,524,728

Table NR – 27. Natural Resource Production Area Exposure Table, Landslide, Davao City

Hazard			Exposure					
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area (Has.)	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value
Marilog District								
Baganihan	M/H	5	168.75	corn	1.55	0.92%	48,000	74,450
Bantol	M/H	1	408.76	coconut	349.17	85.42%	36,174	12,630,595
Buda	M/H	6	1,422.90	vegetables	673.94	47.36%	75,600	50,949,549
Dalag Lumot	M/H	1	140.76	cacao	137.85	97.93%		-
Datu Salumay	M/H	5	681.46	vegetables	447.75	65.70%		-
Gumitan	M/H	5	814.50	rice	785.82	96.48%	31,556	24,796,986
Magsaysay	M/H	4	1,580.09	corn	1,416.06	89.62%	60,000	84,963,457
Malamba	M/H	5	1,729.27	coconut	1,535.40	88.79%	35,087	53,872,656
Marilog	M/H	5	3,936.82	coconut	3,803.93	96.62%	34,207	130,120,980
Salaysay	M/H	5	1,854.46	banana cav.	1,845.25	99.50%	36	67,108
Suawan	M/H	6	1,684.68	coconut	1,127.29	66.91%	34,192	38,544,405
Tamugan	M/H	5	946.09	coconut	157.57	16.66%	39,214	6,179,096
Toril District								
Alambre	H	1	280.59	coconut	26.82	9.56%	44,000	1,180,082
Atan-Awe	M/H	1	319.38	coconut	308.12	96.47%	42,500	13,095,091
Baracatan	M/H	1	1,085.56	coconut	637.55	58.73%	41,000	26,139,546
Bato	M/H	1	745.05	coconut	273.05	36.65%	35,000	9,556,586
Bayabas	M/H	1	1,183.42	coconut	423.56	35.79%	37,500	15,883,424
Binugao	M/H	1	290.68	coconut	159.30	54.80%	38,000	6,053,483
Camansi	M/H	1	349.76	coconut	216.16	61.80%	37,500	8,106,078
Catigan	M/H	1	2,329.75	coconut	1,196.79	51.37%	40,000	47,871,756
Daliaon Plantation	M/H	1	971.65	banana	644.98	66.38%	640,000	412,790,380
Eden	M/H	1	464.93	durian	420.64	90.47%	150,000	63,095,335

Table NR – 27. Natural Resource Production Area Exposure Table, Landslide, Davao City

Hazard			Exposure					
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Area by Dominant Crop (Has.)	Dominant Crop/Variety of Produce	Exposed Area (Has.)	Exposure Percentage	Average potential income per hectare per year (PHP)	Exposed Value
Kilate	H	1	633.71	-	174.02	27.46%	-	-
Marapangi	M/H	1	526.81	-	155.29	29.48%	-	-
Mulig	H	1	980.43	coconut	16.79	1.71%	44,500	747,042
Sibulan	M/H	1	501.15	abaca	498.92	99.56%	90,000	44,902,920
Sirawan	M	1	730.75	mango	191.32	26.18%	200,000	38,263,745
Tagluno	H	1	551.66	coconut	65.11	11.80%	40,000	2,604,366
Tagurano	M/H	1	498.36	coconut	308.57	61.92%	39,500	12,188,707
Tibuloy	M/H	1	804.03	coconut	643.98	80.09%	40,000	25,759,216
Tungkalan	M/H	1	1,755.69	coconut	868.30	49.46%	40,500	35,166,168
Tugbok District								
Biao Escuela	H	1	1,284.53	coconut	9.62	0.75%	34,250	329,363
Matina Biao	H	1	1,000.81	coconut	92.57	9.25%	34,098	3,156,503
Manambulan	H	1	751.58	coconut	21.21	2.82%	36,100	765,858
Manuel Guianga	H	1	874.55	coconut	65.98	7.54%	36,503	2,408,559
New Carmen	M/H	5	956.39	coconut	688.77	72.02%	72,543	49,965,436
New Valencia	M/H	1	880.77	coconut	386.02	43.83%	36,524	14,099,012
Talandang	M/H	1	1,220.69	coconut	683.09	55.96%	34,014	23,234,568

Consequence Analysis

Part of the DRA is to identify how severe the impact would be when disasters hit the NRBPA's. The severity of consequence, which garners a score of four (4) is very high if over 40% of exposed production areas including fish ponds, crops, poultry and livestock, and other agricultural/forest products are severely damaged. The score three (3) is considered as high especially when 20% to 40% of exposed production areas are severely damaged. The score two (2), is identified as moderate, where 10% to 20% of the exposed production areas are severely damaged. The lowest is one (1), where less than 10% of the exposed production areas are severely damaged.

Flood – Flood incidents are expected to greatly affect the NRBPA in Bucana, Toril, Ma-a, Tigatto, Waan, Lasang, and Los Amigos (Table NR – 3). The extent of damages to natural resources, including farms and fish ponds, are also expected to be high NRBPA within Matina Aplaya, Talomo, Bunawan Proper, Lizada, Calinan, Riverside, Tamugan, Matina Pangi, Mandug, Panacan, Tibungco, Pañalum, Gumalang, Dominga, Bantol, and Gumitan. On the other hand, the severity of consequence is seen to be moderate in Matina Crossing, Ilang, Marapangi, Tugbok Proper, Bago Aplaya, Catalunan Grande, Cabantian, Mahayag, Paquibato Proper, Malagos, Wangan, Magsaysay, Malamba, Crossing Bayabas, Binugao, Lubogan, Ula, Bago Gallera, Baliok, Tapak, Baguio Proper, Suawan, Mintal, Buhangin, and Buda. The rest of the flood-affected areas are low in terms of potential severity.

Table NR – 28. Natural Resource Production Area, Severity of Consequence Estimation, Flood, Davao City

Hazard				Exposure						Vulnerability						Severity Of Consequence	
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure Percentage	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to Early Warning Systems	Severity of Consequence Score
Talomo District																	
Bago Aplaya	M/H	5	≥ 1 meter	14.19	banana	29,700	2.13	63,308	15.02%	-	-	-	Yes	-	-	Yes	2
Bago Gallera	M/H	4	≥ 1 meter	335.90	coconut	61,972	69.56	4,311,015	20.71%	-	-	-	-	-	-	Yes	2
Baliok	M	3	< 1 meter	120.58	coconut	61,062	35.27	2,153,449	29.25%	-	-	-	Yes	-	-	Yes	2
Bucana	M/H	4	≥ 1 meter	3.16	-	-	1.85	-	58.75%	-	-	-	-	-	-	Yes	4
Catalunan Grande	M/H	3	≥ 1 meter	862.74	coconut	74,117	172.78	12,806,285	20.03%	-	-	-	Yes	-	-	Yes	2
Catalunan Pequeño	M/H	3	≥ 1 meter	250.64	coconut	60,731	87.86	5,335,778	35.05%	-	-	-	Yes	-	-	Yes	1
Dumoy	M/H	4	≥ 1 meter	195.07	coconut	62,718	19.59	1,228,600	10.04%	-	-	-	No	-	-	Yes	1
Ma-A	M/H	6	≥ 1 meter	76.80	coconut	68,941	30.57	2,107,343	39.80%	-	-	-	Yes	-	-	Yes	4
Matina Aplaya	M/H	6	≥ 1 meter	5.16	Pelagic Fishes	168,000,000	4.30	721,762,044	83.22%	-	-	-	-	-	-	Yes	3
Matina Crossing	M/H	6	≥ 1 meter	7.94	-	-	1.11	-	13.98%	-	-	-	-	-	-	Yes	2
Matina Pangi	M/H	6	≥ 1 meter	213.60	coconut	54,793	45.63	2,500,194	21.36%	-	-	-	Yes	-	-	Yes	3
Talomo	M/H	6	≥ 1 meter	89.14	-	-	45.71	-	51.27%	-	-	-	Yes	-	-	Yes	3
Buhangin District																	

Table NR – 28. Natural Resource Production Area, Severity of Consequence Estimation, Flood, Davao City

Hazard				Exposure						Vulnerability						Severity Of Consequence	
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure Percentage	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to Early Warning Systems	Severity of Consequence Score
Buhangin	M/H	5	≥ 1 meter	123.37	-	-	-	-	0.00%	-	-	-	No	-	-	Yes	2
Cabantian	M/H	3	≥ 1 meter	231.75	-	-	0.05	-	0.02%	-	-	-	No	-	-	Yes	2
Communal	M/H	4	≥ 1 meter	277.18	-	-	15.77	-	5.69%	-	-	-	No	-	-	Yes	1
Mandug	M/H	6	> 1 meter	603.45	coconut	30,000	83.26	2,497,785	13.80%	-	-	-	Yes	-	-	Yes	3
Tigatto	M/H	6	≥ 1 meter	354.51	banana local	101,000	127.62	12,889,877	36.00%	-	-	-	Yes	8.82	-	Yes	4
Waan	M	4	< 1 meter	352.74	coconut	10,109	127.58	1,289,702	36.17%	-	-	-	Yes	-	-	Yes	4
Bunawan District																	
Bunawan	M/H	6	≥ 1 meter	380.57	-	-	86.20	-	22.65%	-	-	-	No	-	-	Yes	3
Ilang	M/H	3	≥ 1 meter	228.31	-	-	5.80	-	2.54%	-	-	-	No	-	-	Yes	2
Lasang	M/H	6	≥ 1 meter	455.52	Pelagic Fishes	-	119.86	-	26.31%	-	-	-	Yes	-	-	Yes	4
Mahayag	M/H	4	≥ 1 meter	407.79	coconut	30,000	1.00	29,982	0.25%	-	-	-	No	-	-	Yes	2
Panacan	M/H	5	≥ 1 meter	201.64	-	-	9.49	-	4.71%	-	-	-	Yes	-	-	Yes	3
Tibungco	M/H	3	≥ 1 meter	450.59	-	-	4.74	-	1.05%	-	-	-	No	-	-	Yes	3
Paquibato District																	
Pañalum	H	3	≥ 1 meter	609.23	banana	52,178	5.03	262,517	0.83%	120	40	120	Yes	-	-	Yes	3
Paquibato	H	3	≥ 1 meter	1,375.53	coconut	16,716	1.32	22,065	0.10%	160	70	160	Yes	-	-	Yes	2
Sumimao	M/H	3	≥ 1 meter	1,434.92	coconut	1,910	70.30	134,273	4.90%	170	43	170	Yes	0.05	-	Yes	1
Tapak	M/H	3	≥ 1 meter	1,269.49	coconut	16,131	56.30	908,155	4.43%	140	40	140	Yes	-	-	Yes	2
Baguio District																	
Baguio	M/H	3	≥ 1 meter	638.57	coconut	38,187	147.87	5,646,771	23.16%	47	215	47	Yes	-	-	Yes	2
Gumalang	M/H	4	≥ 1 meter	1,394.99	coconut	39,250	302.40	11,869,228	21.68%	110	680	110	Yes	3.78	-	Yes	3

Table NR – 28. Natural Resource Production Area, Severity of Consequence Estimation, Flood, Davao City

Hazard				Exposure						Vulnerability						Severity Of Consequence	
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure Percentage	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to Early Warning Systems	Severity of Consequence Score
Malagos	M/H	4	≥ 1 meter	826.54	coconut	38,359	290.25	11,133,819	35.12%	160	571	160	Yes	2.26	-	Yes	2
Tambobong	H	3	≥ 1 meter	349.39	coconut	32,089	19.84	636,650	5.68%	75	150	75	Yes	-	-	Yes	1
Tawan-Tawan	M/H	3	≥ 1 meter	874.21	cacao	84,555	112.33	9,498,189	12.85%	156	544	156	Yes	1.49	-	Yes	1
Calinan District																Yes	
Calinan	M/H	5	≥ 1 meter	611.68	rice	81,940	571.41	46,821,452	93.42%	70	10	70	Yes	6533.33	-	Yes	3
Dominga	M/H	3	≥ 1 meter	498.35	coconut	34,043	172.90	5,885,865	34.69%	45	10	45	No	-	-	Yes	3
Inayangan	H	3	≥ 1 meter	1,138.27	coconut	34,045	45.62	1,553,211	4.01%	45	10	45	Yes	-	-	Yes	1
Lamanan	M/H	3	≥ 1 meter	1,427.04	coconut	35,047	359.99	12,616,614	25.23%	56	10	56	Yes	-	-	Yes	1
Pangyan	M/H	3	≥ 1 meter	660.52	coconut	26,517	96.28	2,552,956	14.58%	31	10	31	Yes	-	-	Yes	1
Riverside	M/H	4	≥ 1 meter	421.37	coconut	38,100	267.60	10,195,435	63.51%	36	10	36	Yes	41.85	-	Yes	3
Saloy	M/H	4	≥ 1 meter	990.07	coconut	39,071	95.48	3,730,482	9.64%	70	10	70	Yes	-	-	Yes	1
Tamayong	M/H	3	≥ 1 meter	1,356.14	banana cav.	554,376	94.49	52,381,458	6.97%	75	15	75	Yes	-	-	Yes	1
Wangan	M/H	4	≥ 1 meter	1,147.83	coconut	39,098	555.44	21,716,563	48.39%	65	12	65	Yes	4.28	-	Yes	2
Marilog District																Yes	
Baganihan	-	3	≥ 1 meter	168.75	corn	48,000	-	-	0.00%	30	15	113	Yes	-	-	Yes	1
Bantol	H	4	≥ 1 meter	408.76	coconut	36,174	34.95	1,264,108	8.55%	150	200	150	Yes	-	-	Yes	3
Buda	-	3	≥ 1 meter	1,422.90	vegetables	75,600	-	-	0.00%	20	10	20	Yes	1.05	-	Yes	2
Datu Salumay	-	3	≥ 1 meter	681.46	vegetables	-	-	-	0.00%	150	150	150	Yes	-	-	Yes	1
Gumitan	H	6	≥ 1 meter	814.50	rice	31,556	8.76	276,302	1.08%	25	25	25	Yes	-	-	Yes	3
Magsaysay	-	5	≥ 1 meter	1,580.09	corn	60,000	-	-	0.00%	100	75	212	Yes	-	-	Yes	2
Malamba	M/H	5	≥ 1 meter	1,729.27	coconut	35,087	95.50	3,350,807	5.52%	60	200	60	Yes	-	-	Yes	2
Marilog	H	5	≥ 1 meter	3,936.82	coconut	34,207	17.82	609,484	0.45%	500	375	860	Yes	0.30	-	Yes	1

Table NR – 28. Natural Resource Production Area, Severity of Consequence Estimation, Flood, Davao City

Hazard				Exposure						Vulnerability						Severity Of Consequence	
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure Percentage	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to Early Warning Systems	Severity of Consequence Score
Salaysay	H	3	≥ 1 meter	1,854.46	banana cav.	36	3.94	143	0.21%	150	300	150	Yes	0.42	-	Yes	1
Suawan	M/H	3	≥ 1 meter	1,684.68	coconut	34,192	342.68	11,716,755	20.34%	100	100	620	Yes	1.11	-	Yes	2
Tamugan	M/H	6	≥ 1 meter	946.09	coconut	39,214	215.60	8,454,434	22.79%	200	100	200	Yes	-	-	Yes	3
Toril District																Yes	
Bayabas	H	4	≥ 1 meter	1,183.42	coconut	37,500	104.37	3,913,911	8.82%	5	20	5	No	-	-	Yes	1
Crossing Bayabas	M/H	5	≥ 1 meter	78.79	-	-	14.44	-	18.33%	-	-	-	No	-	-	Yes	2
Binugao	M/H	3	≥ 1 meter	290.68	coconut	38,000	129.37	4,915,947	44.50%	25	25	25	Yes	-	-	Yes	2
Camansi	H	4	≥ 1 meter	349.76	coconut	37,500	27.74	1,040,386	7.93%	35	30	35	Yes	-	-	Yes	1
Daliaon Plantation	H	3	≥ 1 meter	971.65	banana	640,000	83.44	53,402,330	8.59%	30	25	30	Yes	-	-	Yes	1
Lizada	M/H	5	≥ 1 meter	251.72	-	-	77.83	-	30.92%	-	10	-	No	-	-	Yes	3
Lubogan	H	4	≥ 1 meter	72.90	-	-	20.39	-	27.97%	-	-	-	Yes	-	-	Yes	2
Marapangi	M/H	6	≥ 1 meter	526.81	-	-	122.52	-	23.26%	20	30	20	Yes	-	-	Yes	2
Sirawan	M/H	4	≥ 1 meter	730.75	mango	200,000	121.18	24,236,400	16.58%	25	20	25	Yes	-	-	Yes	1
Tagluno	H	3	≥ 1 meter	551.66	coconut	40,000	36.28	1,451,371	6.58%	75	25	75	Yes	-	-	Yes	1
Toril	-	4	≥ 1 meter	2.05	-	-	-	-	0.00%	-	-	-	-	-	-	Yes	4
Tugbok District																Yes	
Bago Oshiro	M/H	3	≥ 1 meter	348.39	-	-	18.37	-	5.27%	-	-	-	Yes	-	-	Yes	1
Los Amigos	M/H	5	≥ 1 meter	364.04	rice	46,240	323.96	14,979,954	88.99%	-	5	-	Yes	1987.58	15.53	Yes	4
Los Amigos	M/H	5	≥ 1 meter	27.50	hito	1,707,687	27.50	46,961,384	100.00%	-	5	-	Yes	1987.58	15.53	Yes	4
Manambulan	M/H	3	≥ 1 meter	751.58	coconut	36,100	175.84	6,347,923	23.40%	-	-	-	Yes	-	-	Yes	1
Mintal	M/H	5	≥ 1 meter	435.08	coconut	48,958	65.66	3,214,614	15.09%	-	-	-	No	-	-	Yes	2

Table NR – 28. Natural Resource Production Area, Severity of Consequence Estimation, Flood, Davao City

Hazard				Exposure						Vulnerability						Severity Of Consequence	
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure Percentage	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to Early Warning Systems	Severity of Consequence Score
Tacunan	M/H	3	≥ 1 meter	790.18	coconut	33,999	320.36	10,891,994	40.54%	36	15	36	Yes	-	1.84	Yes	1
Talandang	M	3	< 1 meter	1,220.69	coconut	34,014	233.86	7,954,398	19.16%	-	10	-	Yes	1.36	-	Yes	1
Tugbok	M/H	6	≥ 1 meter	716.56	coconut	39,469	610.77	24,106,520	85.24%	-	-	-	Yes	-	-	Yes	2
Ula	M/H	3	> 1 meter	856.08	coconut	35,032	527.44	18,477,370	61.61%	-	6	-	Yes	-	0.30	Yes	2

Landslide – A total of 11 barangays with NRBPA may potentially incur massive impacts whenever there are destructive landslides, and thus, rated with the highest severity of consequence score. These are Fatima, Mapula, Paquibato Proper, Sumimao, Tapak, Malabog, Pandaitan, Paradise Embac, Inayangan, Megkawayan, and Gumitan, which are all situated in forest areas. The severity of consequence score for 38 barangays with NRBPA is three (3), which would mean that below 40% of the exposed areas are expected to be greatly affected. The rest of the barangays either have moderate and low severity of consequence scores.

Table NR – 29. Natural Resource Production Area, Severity of Consequence Estimation, Landslide, Davao City

Hazard			Exposure						Sensitivity						Severity Of Consequence	
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Total Area Allocation	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure Percentage	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to early warning systems	Severity of Consequence Score
Talomo District																
Catalunan Grande	M/H	3	862.74	coconut	74,117	47.40	3,513,303	5.49%	-	-	-	Yes	-	-	Yes	3
Catalunan Pequeño	-	2	250.64	coconut	60,731	-	-	0.00%	-	-	-	Yes	-	-	Yes	1
Langub	M/H	5	502.37	coconut	73,248	357.51	26,186,533	71.16%	-	-	-	Yes	-	1.11	Yes	3
Ma-a	M/H	5	76.80	coconut	68,941	32.05	2,209,823	41.74%	-	-	-	Yes	-	-	Yes	2
Matina Crossing	H	5	7.94	-	-	6.81	-	85.81%	-	-	-	-	-	-	Yes	2
Matina Pangí	M/H	4	213.60	coconut	54,793	150.44	8,243,208	70.43%	-	-	-	Yes	-	-	Yes	3
Talomo	M/H	2	89.14	-	-	14.42	-	16.18%	-	-	-	Yes	-	-	Yes	2
Buhangin District																
Acacia	M/H	1	738.89	coconut	21,000	667.72	14,022,028	90.37%	-	-	-	No	-	-	Yes	2
Buhangin	M/H	3	123.37	-	-	116.26	-	94.23%	-	-	-	No	-	-	Yes	2
Cabantian	M/H	3	231.75	-	-	120.13	-	51.84%	-	-	-	No	-	-	Yes	2
Callawa	M/H	1	835.33	coconut	28,540	463.36	13,224,296	55.47%	-	-	-	Yes	6.71	1.71	Yes	3
Communal	M/H	1	277.18	-	-	183.55	-	66.22%	-	-	-	No	-	-	Yes	2
Indangan	M/H	1	1,112.40	coconut	30,000	791.80	23,754,134	71.18%	-	-	-	Yes	-	-	Yes	2
Mandug	M/H	4	603.45	coconut	30,000	343.04	10,291,273	56.85%	-	-	-	Yes	-	-	Yes	2
Sasa	M/H	1	22.71	-	-	6.61	-	29.13%	-	-	-	No	-	-	Yes	1
Tigatto	M/H	5	354.51	banana local	101,000	123.66	12,489,429	34.88%	-	-	-	Yes	8.82	-	Yes	2
Waan	M/H	1	352.74	coconut	10,109	199.13	2,013,038	56.45%	-	-	-	Yes	-	-	Yes	2
Bunawan District																
Bunawan	M	1	380.57	-	-	31.58	-	8.30%	-	-	-	No	-	-	Yes	2
Gatungan	M/H	1	1,125.29	coconut	31,132	1,069.85	33,306,418	95.07%	-	-	-	Yes	-	-	Yes	3

Table NR – 29. Natural Resource Production Area, Severity of Consequence Estimation, Landslide, Davao City

Hazard			Exposure						Sensitivity						Severity Of Consequence	
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Total Area Allocation	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure Percentage	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to early warning systems	Severity of Consequence Score
Ilang	M/H	1	228.31	-	-	127.96	-	56.04%	-	-	-	No	-	-	Yes	2
Mahayag	M/H	1	407.79	coconut	30,000	143.87	4,316,053	35.28%	-	-	-	No	-	-	Yes	2
Mudiang	M/H	1	561.40	coconut	31,789	528.69	16,806,480	94.17%	-	-	-	No	-	-	Yes	2
Panacan	M/H	1	201.64	-	-	66.39	-	32.92%	-	-	-	Yes	-	-	Yes	2
San Isidro	M/H	2	518.52	banana local	73,575	76.68	5,641,897	14.79%	-	-	-	Yes	-	-	Yes	2
Tibungco	M/H	1	450.59	-	-	223.65	-	49.63%	-	-	-	No	-	-	Yes	2
Paquibato District																
Colosas	M/H	1	3,608.87	coconut	5,794	3,311.11	19,184,573	91.75%	105	50	105	Yes	-	-	Yes	3
Fatima	M/H	5	2,473.51	coconut	5,717	2,186.58	12,500,673	88.40%	180	47	180	Yes	-	-	Yes	4
Lumiad	M/H	5	885.86	corn	71,941	869.46	62,549,543	98.15%	110	60	110	Yes	-	-	Yes	3
Mabuhay	M/H	1	997.56	coconut	4,396	717.09	3,152,329	71.88%	50	25	50	Yes	0.52	-	Yes	3
Malabog	M/H	5	3,527.92	coconut	11,833	3,498.42	41,396,821	99.16%	300	100	300	Yes	-	-	Yes	4
Mapula	M/H	1	1,932.29	coconut	22,669	1,923.59	43,605,945	99.55%	190	70	190	Yes	-	0.15	Yes	4
Pandaitan	M/H	6	2,036.11	coconut	13,139	1,951.07	25,635,055	95.82%	240	80	240	Yes	-	-	Yes	4
Pañalum	M/H	1	609.23	banana	52,178	507.03	26,455,677	83.23%	120	40	120	Yes	-	-	Yes	3
Paquibato	M/H	4	1,375.53	coconut	16,716	1,196.30	19,997,383	86.97%	160	70	160	Yes	-	-	Yes	4
Paradise Embac	M/H	1	1,731.39	coconut	17,182	1,484.55	25,507,522	85.74%	140	75	140	Yes	-	-	Yes	4
Salapawan	M/H	1	176.45	coconut	6,158	137.90	849,217	78.15%	100	68	100	Yes	-	-	Yes	3
Sumimao	M/H	1	1,434.92	coconut	1,910	1,425.87	2,723,407	99.37%	170	43	170	Yes	0.05	-	Yes	4
Tapak	M/H	1	1,269.49	coconut	16,131	1,258.96	20,308,351	99.17%	140	40	140	Yes	-	-	Yes	4
Baguio District																
Baguio	H	4	638.57	coconut	38,187	48.53	1,853,329	7.60%	47	215	47	Yes	-	-	Yes	2
Cadalian	H	1	616.55	coconut	39,195	96.35	3,776,288	15.63%	115	383	115	Yes	-	-	Yes	2

Table NR – 29. Natural Resource Production Area, Severity of Consequence Estimation, Landslide, Davao City

Hazard			Exposure						Sensitivity							Severity Of Consequence
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Total Area Allocation	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure Percentage	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to early warning systems	Severity of Consequence Score
Carmen	M/H	4	340.03	cacao	78,600	108.82	8,553,252	32.00%	55	348	55	Yes	-	-	Yes	3
Gumalang	M/H	1	1,394.99	coconut	39,250	211.77	8,312,132	15.18%	110	680	110	Yes	3.78	-	Yes	2
Malagos	M/H	1	826.54	coconut	38,359	51.22	1,964,829	6.20%	160	571	160	Yes	2.26	-	Yes	1
Tambobong	M/H	5	349.39	coconut	32,089	326.52	10,477,788	93.45%	75	150	75	Yes	-	-	Yes	3
Tawan-Tawan	M/H	1	874.21	cacao	84,555	109.00	9,216,742	12.47%	156	544	156	Yes	1.49	-	Yes	2
Wines	M/H	1	855.76	coconut	39,098	73.90	2,889,221	8.64%	80	355	80	Yes	8.25	-	Yes	2
Calinan District																
Biao Joaquin	M/H	1	513.94	coconut	35,291	133.13	4,698,446	25.90%	60	16	60	Yes	-	0.52	Yes	1
Calinan	M/H	3	611.68	rice	81,940	29.51	2,418,371	4.83%	70	10	70	Yes	6533.33	-	Yes	1
Cawayan	H	1	777.62	pineapple	574,200	27.24	15,641,951	3.50%	35	5	35	Yes	1.53	-	Yes	2
Dacudao	M/H	1	1,123.77	coconut	38,065	209.49	7,974,275	18.64%	40	-	40	Yes	-	-	Yes	2
Dalagdag	M/H	1	317.69	coconut	32,540	236.65	7,700,661	74.49%	30	4	30	Yes	4.38	-	Yes	3
Dominga	M/H	1	498.35	coconut	34,043	365.55	12,444,522	73.35%	45	10	45	No	-	-	Yes	3
Inayangan	M/H	5	1,138.27	coconut	34,045	1,062.21	36,163,086	93.32%	45	10	45	Yes	-	-	Yes	4
Lacson	M/H	1	764.19	coconut	38,039	218.29	8,303,717	28.57%	60	10	60	Yes	8.77	-	Yes	1
Lamanan	M/H	1	1,427.04	coconut	35,047	888.63	31,143,916	62.27%	56	10	56	Yes	-	-	Yes	2
Lampianao	M/H	1	794.41	coconut	32,541	452.97	14,740,253	57.02%	50	10	50	Yes	-	0.97	Yes	3
Megkawayan	M/H	1	1,551.55	cacao	69,371	1,470.45	102,006,789	94.77%	36	20	36	Yes	-	-	Yes	4
Pangyan	M/H	1	660.52	coconut	26,517	342.70	9,087,289	51.88%	31	10	31	Yes	-	-	Yes	2
Saloy	M/H	1	990.07	coconut	39,071	955.01	37,313,302	96.46%	70	10	70	Yes	-	-	Yes	3

Table NR – 29. Natural Resource Production Area, Severity of Consequence Estimation, Landslide, Davao City

Hazard			Exposure						Sensitivity							Severity Of Consequence
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Total Area Allocation	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure Percentage	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to early warning systems	Severity of Consequence Score
Sirib	M/H	1	2,120.12	banana cav.	407,720	633.36	258,234,375	29.87%	60	15	60	Yes	-	-	Yes	3
Talomo River	M/H	1	707.69	coconut	37,113	73.17	2,715,562	10.34%	65	20	65	Yes	-	1.48	Yes	1
Tamayong	M/H	1	1,356.14	banana cav.	554,376	901.06	499,524,728	66.44%	75	15	75	Yes	-	-	Yes	3
Marilog District																
Baganihan	M/H	5	168.75	corn	48,000	1.55	74,450	0.92%	30	15	113	Yes	-	-	Yes	3
Bantol	M/H	1	408.76	coconut	36,174	349.17	12,630,595	85.42%	150	200	150	Yes	-	-	Yes	3
Buda	M/H	6	1,422.90	vegetables	75,600	673.94	50,949,549	47.36%	20	10	20	Yes	1.05	-	Yes	3
Dalag Lumot	M/H	1	140.76	cacao		137.85	-	97.93%	100	200	100	Yes	-	-	Yes	3
Datu Salumay	M/H	5	681.46	vegetables		447.75	-	65.70%	150	150	150	Yes	-	-	Yes	3
Gumitan	M/H	5	814.50	rice	31,556	785.82	24,796,986	96.48%	25	25	25	Yes	-	-	Yes	4
Magsaysay	M/H	4	1,580.09	corn	60,000	1,416.06	84,963,457	89.62%	100	75	212	Yes	-	-	Yes	3
Malamba	M/H	5	1,729.27	coconut	35,087	1,535.40	53,872,656	88.79%	60	200	60	Yes	-	-	Yes	3
Marilog	M/H	5	3,936.82	coconut	34,207	3,803.93	130,120,980	96.62%	500	375	860	Yes	0.30	-	Yes	3
Salaysay	M/H	5	1,854.46	banana cav.	36	1,845.25	67,108	99.50%	150	300	150	Yes	0.42	-	Yes	3
Suawan	M/H	6	1,684.68	coconut	34,192	1,127.29	38,544,405	66.91%	100	100	620	Yes	1.11	-	Yes	3
Tamugan	M/H	5	946.09	coconut	39,214	157.57	6,179,096	16.66%	200	100	200	Yes	-	-	Yes	3
Toril District																
Alambre	H	1	280.59	coconut	44,000	26.82	1,180,082	9.56%	25	20	25	Yes	3.79	-	Yes	2
Atan-Awe	M/H	1	319.38	coconut	42,500	308.12	13,095,091	96.47%	25	30	25	No	-	-	Yes	3
Baracatan	M/H	1	1,085.56	coconut	41,000	637.55	26,139,546	58.73%	30	30	30	No	-	-	Yes	2

Table NR – 29. Natural Resource Production Area, Severity of Consequence Estimation, Landslide, Davao City

Hazard			Exposure						Sensitivity						Severity Of Consequence	
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Total Area Allocation	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure Percentage	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to early warning systems	Severity of Consequence Score
Bato	M/H	1	745.05	coconut	35,000	273.05	9,556,586	36.65%	25	25	25	No	2.55	-	Yes	2
Bayabas	M/H	1	1,183.42	coconut	37,500	423.56	15,883,424	35.79%	5	20	5	No	-	-	Yes	2
Binugao	M/H	1	290.68	coconut	38,000	159.30	6,053,483	54.80%	25	25	25	Yes	-	-	Yes	1
Camansi	M/H	1	349.76	coconut	37,500	216.16	8,106,078	61.80%	35	30	35	Yes	-	-	Yes	2
Catigan	M/H	1	2,329.75	coconut	40,000	1,196.79	47,871,756	51.37%	50	60	50	Yes	-	-	Yes	2
Daliaon Plantation	M/H	1	971.65	banana	640,000	644.98	412,790,380	66.38%	30	25	30	Yes	-	-	Yes	3
Eden	M/H	1	464.93	durian	150,000	420.64	63,095,335	90.47%	25	30	25	No	-	-	Yes	3
Kilate	H	1	633.71	-	-	174.02	-	27.46%	-	15	-	No	-	-	Yes	3
Marapangi	M/H	1	526.81	-	-	155.29	-	29.48%	20	30	20	Yes	-	-	Yes	2
Mulig	H	1	980.43	coconut	44,500	16.79	747,042	1.71%	55	30	55	No	-	-	Yes	2
Sibulan	M/H	1	501.15	abaca	90,000	498.92	44,902,920	99.56%	120	80	120	Yes	-	-	Yes	3
Sirawan	M	1	730.75	mango	200,000	191.32	38,263,745	26.18%	25	20	25	Yes	-	-	Yes	2
Tagluno	H	1	551.66	coconut	40,000	65.11	2,604,366	11.80%	75	25	75	Yes	-	-	Yes	3
Tagurano	M/H	1	498.36	coconut	39,500	308.57	12,188,707	61.92%	-	20	-	No	-	-	Yes	3
Tibuloy	M/H	1	804.03	coconut	40,000	643.98	25,759,216	80.09%	-	10	-	Yes	-	-	Yes	2
Tungkalan	M/H	1	1,755.69	coconut	40,500	868.30	35,166,168	49.46%	50	75	50	Yes	0.85	-	Yes	3
Tugbok District																
Biao Escuela	H	1	1,284.53	coconut	34,250	9.62	329,363	0.75%	-	8	-	Yes	-	0.50	Yes	1
Matina Biao	H	1	1,000.81	coconut	34,098	92.57	3,156,503	9.25%	-	5	-	Yes	-	-	Yes	2
Manambulan	H	1	751.58	coconut	36,100	21.21	765,858	2.82%	-	-	-	Yes	-	-	Yes	2

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Hazard			Exposure						Sensitivity						Severity Of Consequence	
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Total Area Allocation	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure Percentage	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to early warning systems	Severity of Consequence Score
Manuel Guianga	H	1	874.55	coconut	36,503	65.98	2,408,559	7.54%	-	10	-	Yes	-	-	Yes	2
New Carmen	M/H	5	956.39	coconut	72,543	688.77	49,965,436	72.02%	-	-	-	No	-	-	Yes	3
New Valencia	M/H	1	880.77	coconut	36,524	386.02	14,099,012	43.83%	52	10	52	Yes	-	0.19	Yes	2
Talandang	M/H	1	1,220.69	coconut	34,014	683.09	23,234,568	55.96%	-	10	-	Yes	1.36	-	Yes	2

Risk Areas

The succeeding tables below show the overall results of the DRA in terms of NRBPA, which bare the low, moderate, and high risk areas. The results differ depending on the level of likelihood of occurrence and severity of consequence.

Flood – Noting on the possible extent of damages to NRBPA, the natural resources in Bucana, Ma-a, Matina Aplaya, Matina Crossing, Matina Pang, Talomo Proper, Mandug, Tigatto, Waan, Bunawan Proper, Lasang, Panacan, Calinan, Riverside, Gumitan, Tamugan, Lizada, Marapangi, Toril Proper, Los Amigos, and Tugbok Proper are identified as high risk areas (Table NR – 5). On the other hand, the risks in terms of floods are moderate in 32 barangays with NRBPA as well as considered low in 22 barangays with NRBPA.

Table NR – 30. Natural Resource Production Area Risk to Flood, Davao City

Hazard				Exposure						Vulnerability							Severity of Consequence Score	Risk	
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Total Area Alloc. (Has.)	Dominant Crop/ Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure %	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to Early Warning Systems		Risk Score	Risk Category
Talomo District																			
Bago Aplaya	M/H	5	≥ 1 m	14.19	banana	29,700	2.13	63,308	15.02%	-	-	-	Yes	-	-	Yes	2	11.67	Moderate
Bago Gallera	M/H	4	≥ 1 m	335.90	coconut	61,972	69.56	4,311,015	20.71%	-	-	-	-	-	-	Yes	2	7	Moderate
Baliok	M	3	< 1 m	120.58	coconut	61,062	35.27	2,153,449	29.25%	-	-	-	Yes	-	-	Yes	2	5	Moderate
Bucana	M/H	4	≥ 1 m	3.16	-	-	1.85	-	58.75%	-	-	-	-	-	-	Yes	4	16	High
Catalunan Grande	M/H	3	≥ 1 m	862.74	coconut	74,117	172.78	12,806,285	20.03%	-	-	-	Yes	-	-	Yes	2	6	Moderate
Catalunan Peque-O	M/H	3	≥ 1 m	250.64	coconut	60,731	87.86	5,335,778	35.05%	-	-	-	Yes	-	-	Yes	1	3	Low
Dumoy	M/H	4	≥ 1 m	195.07	coconut	62,718	19.59	1,228,600	10.04%	-	-	-	No	-	-	Yes	1	5	Moderate
Ma-A	M/H	6	≥ 1 m	76.80	coconut	68,941	30.57	2,107,343	39.80%	-	-	-	Yes	-	-	Yes	4	22	High
Matina Aplaya	M/H	6	≥ 1 m	5.16	Pelagic Fishes	168,000,000	4.30	721,762,044	83.22%	-	-	-	-	-	-	Yes	3	20	High
Matina Crossing	M/H	6	≥ 1 m	7.94	-	-	1.11	-	13.98%	-	-	-	-	-	-	Yes	2	14	High
Matina Pang	M/H	6	≥ 1 m	213.60	coconut	54,793	45.63	2,500,194	21.36%	-	-	-	Yes	-	-	Yes	3	16	High
Talomo	M/H	6	≥ 1 m	89.14	-	-	45.71	-	51.27%	-	-	-	Yes	-	-	Yes	3	20	High
Buhangin District																			
Buhangin	M/H	5	≥ 1 m	123.37	-	-	-	-	0.00%	-	-	-	No	-	-	Yes	2	8	Moderate

Table NR – 30. Natural Resource Production Area Risk to Flood, Davao City

Hazard				Exposure						Vulnerability							Severity of Consequence Score	Risk	
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Total Area Alloc. (Has.)	Dominant Crop/ Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure %	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to Early Warning Systems		Risk Score	Risk Category
Cabantian	M/H	3	≥1 m	231.75	-	-	0.05	-	0.02%	-	-	-	No	-	-	Yes	2	6	Moderate
Communal	M/H	4	≥1 m	277.18	-	-	15.77	-	5.69%	-	-	-	No	-	-	Yes	1	5	Moderate
Mandug	M/H	6	≥1 m	603.45	coconut	30,000	83.26	2,497,785	13.80%	-	-	-	Yes	-	-	Yes	3	16	High
Sasa	M/H	3	≥1 m	22.71	-	-	-	-	0.00%	-	-	-	No	-	-	Yes	-	-	Low
Tigatto	M/H	6	≥1 m	354.51	banana local	101,000	127.62	12,889,877	36.00%	-	-	-	Yes	8.82	-	Yes	4	22	High
Waan	M	4	<1 m	352.74	coconut	10,109	127.58	1,289,702	36.17%	-	-	-	Yes	-	-	Yes	4	15	High
Bunawan District																		-	
Bunawan	M/H	6	≥1 m	380.57	-	-	86.20	-	22.65%	-	-	-	No	-	-	Yes	3	20	High
Ilang	M/H	3	≥1 m	228.31	-	-	5.80	-	2.54%	-	-	-	No	-	-	Yes	2	7	Moderate
Lasang	M/H	6	≥1 m	455.52	Pelagic Fishes	-	119.86	-	26.31%	-	-	-	Yes	-	-	Yes	4	22	High
Mahayag	M/H	4	≥1 m	407.79	coconut	30,000	1.00	29,982	0.25%	-	-	-	No	-	-	Yes	2	8	Moderate
Panacan	M/H	5	≥1 m	201.64	-	-	9.49	-	4.71%	-	-	-	Yes	-	-	Yes	3	13	High
Tibungco	M/H	3	≥1 m	450.59	-	-	4.74	-	1.05%	-	-	-	No	-	-	Yes	3	8	Moderate
Paquibato District																		-	
Pañalum	H	3	≥1 m	609.23	banana	52,178	5.03	262,517	0.83%	120	40	120	Yes	-	-	Yes	3	8	Moderate
Paquibato	H	3	≥1 m	1,375.53	coconut	16,716	1.32	22,065	0.10%	160	70	160	Yes	-	-	Yes	2	6	Moderate
Sumimao	M/H	3	≥1 m	1,434.92	coconut	1,910	70.30	134,273	4.90%	170	43	170	Yes	0.05	-	Yes	1	4	Low
Tapak	M/H	3	≥1 m	1,269.49	coconut	16,131	56.30	908,155	4.43%	140	40	140	Yes	-	-	Yes	2	5	Moderate
Baguio District																		-	

Table NR – 30. Natural Resource Production Area Risk to Flood, Davao City

Hazard				Exposure						Vulnerability							Severity of Consequence Score	Risk	
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Total Area Alloc. (Has.)	Dominant Crop/ Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure %	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to Early Warning Systems		Risk Score	Risk Category
Baguio	M/H	3	≥1 m	638.57	coconut	38,187	147.87	5,646,771	23.16%	47	215	47	Yes	-	-	Yes	2	5	Moderate
Gumalang	M/H	4	≥1 m	1,394.99	coconut	39,250	302.40	11,869,228	21.68%	110	680	110	Yes	3.78	-	Yes	3	11	Moderate
Malagos	M/H	4	≥1 m	826.54	coconut	38,359	290.25	11,133,819	35.12%	160	571	160	Yes	2.26	-	Yes	2	8	Moderate
Tambobong	H	3	≥1 m	349.39	coconut	32,089	19.84	636,650	5.68%	75	150	75	Yes	-	-	Yes	1	3	Low
Tawan-Tawan	M/H	3	≥1 m	874.21	cacao	84,555	112.33	9,498,189	12.85%	156	544	156	Yes	1.49	-	Yes	1	3	Low
Calinan District																Yes		-	
Calinan	M/H	5	≥1 m	611.68	rice	81,940	571.41	46,821,452	93.42%	70	10	70	Yes	6533.33	-	Yes	3	15	High
Dominga	M/H	3	≥1 m	498.35	coconut	34,043	172.90	5,885,865	34.69%	45	10	45	No	-	-	Yes	3	8	Moderate
Inayangan	H	3	≥1 m	1,138.27	coconut	34,045	45.62	1,553,211	4.01%	45	10	45	Yes	-	-	Yes	1	3	Low
Lamanan	M/H	3	≥1 m	1,427.04	coconut	35,047	359.99	12,616,614	25.23%	56	10	56	Yes	-	-	Yes	1	3	Low
Pangyan	M/H	3	≥1 m	660.52	coconut	26,517	96.28	2,552,956	14.58%	31	10	31	Yes	-	-	Yes	1	3	Low
Riverside	M/H	4	≥1 m	421.37	coconut	38,100	267.60	10,195,435	63.51%	36	10	36	Yes	41.85	-	Yes	3	12	High
Saloy	M/H	4	≥1 m	990.07	coconut	39,071	95.48	3,730,482	9.64%	70	10	70	Yes	-	-	Yes	1	5	Moderate
Tamayong	M/H	3	≥1 m	1,356.14	banana cav.	554,376	94.49	52,381,458	6.97%	75	15	75	Yes	-	-	Yes	1	3	Low
Wangan	M/H	4	≥1 m	1,147.83	coconut	39,098	555.44	21,716,563	48.39%	65	12	65	Yes	4.28	-	Yes	2	8	Moderate
Marilog District																Yes		-	
Baganihan	-	3	≥1 m	168.75	corn	48,000	-	-	0.00%	30	15	113	Yes	-	-	Yes	1	3	Low
Bantol	H	4	≥1 m	408.76	coconut	36,174	34.95	1,264,108	8.55%	150	200	150	Yes	-	-	Yes	3	11	Moderate
Buda	-	3	≥1 m	1,422.90	vegetables	75,600	-	-	0.00%	20	10	20	Yes	1.05	-	Yes	2	5	Low
Datu Salumay	-	3	≥1 m	681.46	vegetables	-	-	-	0.00%	150	150	150	Yes	-	-	Yes	1	3	Low

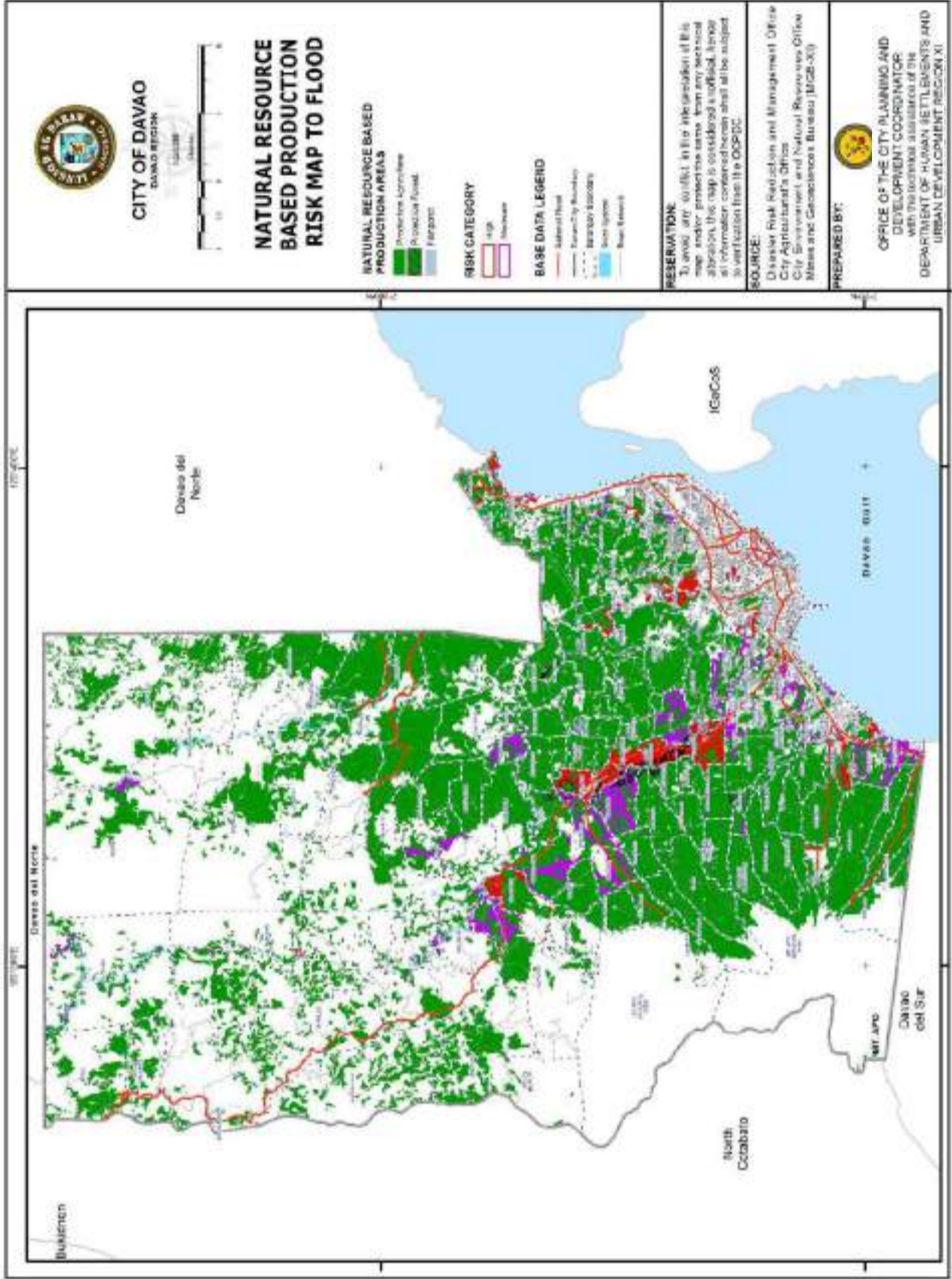
Table NR – 30. Natural Resource Production Area Risk to Flood, Davao City

Hazard				Exposure						Vulnerability							Severity of Consequence Score	Risk	
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Total Area Alloc. (Has.)	Dominant Crop/ Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure %	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to Early Warning Systems		Risk Score	Risk Category
Gumitan	H	6	≥1 m	814.50	rice	31,556	8.76	276,302	1.08%	25	25	25	Yes	-	-	Yes	3	16	High
Magsaysay	-	5	≥1 m	1,580.09	corn	60,000	-	-	0.00%	100	75	212	Yes	-	-	Yes	2	10	Moderate
Malamba	M/H	5	≥1 m	1,729.27	coconut	35,087	95.50	3,350,807	5.52%	60	200	60	Yes	-	-	Yes	2	10	Moderate
Marilog	H	5	≥1 m	3,936.82	coconut	34,207	17.82	609,484	0.45%	500	375	860	Yes	0.30	-	Yes	1	7	Moderate
Salaysay	H	3	≥1 m	1,854.46	banana cav.	36	3.94	143	0.21%	150	300	150	Yes	0.42	-	Yes	1	4	Low
Suawan	M/H	3	≥1 m	1,684.68	coconut	34,192	342.68	11,716,755	20.34%	100	100	620	Yes	1.11	-	Yes	2	5	Moderate
Tamugan	M/H	6	≥1 m	946.09	coconut	39,214	215.60	8,454,434	22.79%	200	100	200	Yes	-	-	Yes	3	18	High
Toril District																Yes		-	
Bayabas	H	4	≥1 m	1,183.42	coconut	37,500	104.37	3,913,911	8.82%	5	20	5	No	-	-	Yes	1	4	Low
Crossing Bayabas	M/H	5	≥1 m	78.79	-	-	14.44	-	18.33%	-	-	-	No	-	-	Yes	2	10	Moderate
Binugao	M/H	3	≥1 m	290.68	coconut	38,000	129.37	4,915,947	44.50%	25	25	25	Yes	-	-	Yes	2	6	Moderate
Camansi	H	4	≥1 m	349.76	coconut	37,500	27.74	1,040,386	7.93%	35	30	35	Yes	-	-	Yes	1	5	Moderate
Daliao	M	3	<1 m	4.68	-	-	0.00	-	0.00%	-	-	-	Yes	-	-	Yes		-	Low
Daliaon Plantation	H	3	≥1 m	971.65	banana	640,000	83.44	53,402,330	8.59%	30	25	30	Yes	-	-	Yes	1	4	Low
Lizada	M/H	5	≥1 m	251.72	-	-	77.83	-	30.92%	-	10	-	No	-	-	Yes	3	17	High
Lubogan	H	4	≥1 m	72.90	-	-	20.39	-	27.97%	-	-	-	Yes	-	-	Yes	2	8	Moderate
Marapangi	M/H	6	≥1 m	526.81	-	-	122.52	-	23.26%	20	30	20	Yes	-	-	Yes	2	14	High
Sirawan	M/H	4	≥1 m	730.75	mango	200,000	121.18	24,236,400	16.58%	25	20	25	Yes	-	-	Yes	1	5	Moderate
Tagluno	H	3	≥1 m	551.66	coconut	40,000	36.28	1,451,371	6.58%	75	25	75	Yes	-	-	Yes	1	4	Low
Toril	-	4	≥1 m	2.05	-	-	-	-	0.00%	-	-	-	-	-	-	Yes	4	16	High

Table NR – 30. Natural Resource Production Area Risk to Flood, Davao City

Hazard				Exposure						Vulnerability							Severity of Consequence Score	Risk	
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Total Area Alloc. (Has.)	Dominant Crop/ Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure %	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to Early Warning Systems		Risk Score	Risk Category
Tugbok District																Yes		-	
Bago Oshiro	M/H	3	≥ 1 m	348.39	-	-	18.37	-	5.27%	-	-	-	Yes	-	-	Yes	1	4	Low
Los Amigos	M/H	5	≥ 1 m	364.04	rice	46,240	323.96	14,979,954	88.99%	-	5		Yes	1987.58	15.53	Yes	4	18	High
Los Amigos	M/H	5	≥ 1 m	27.50	hito	1,707,687	27.50	46,961,384	100.00%	-	5		Yes	1987.58	15.53	Yes	4	18	High
Manambulan	M/H	3	≥ 1 m	751.58	coconut	36,100	175.84	6,347,923	23.40%	-	-	-	Yes	-	-	Yes	1	4	Low
Mintal	M/H	5	≥ 1 m	435.08	coconut	48,958	65.66	3,214,614	15.09%	-	-	-	No	-	-	Yes	2	8	Moderate
Sto. Niño	M/H	4	≥ 1 m	1.47	-	-	0.58	-	39.02%	-	-	-	No	-	-	Yes		-	Low
Tacunan	M/H	3	≥ 1 m	790.18	coconut	33,999	320.36	10,891,994	40.54%	36	15	36	Yes	-	1.84	Yes	1	4	Low
Talandang	M	3	< 1 m	1,220.69	coconut	34,014	233.86	7,954,398	19.16%	-	10	-	Yes	1.36	-	Yes	1	3	Low
Tugbok	M/H	6	≥ 1 m	716.56	coconut	39,469	610.77	24,106,520	85.24%	-	-	-	Yes	-	-	Yes	2	14	High
Ula	M/H	3	≥ 1 m	856.08	coconut	35,032	527.44	18,477,370	61.61%	-	6	-	Yes	-	0.30	Yes	2	6	Moderate

Map 6.8. Natural Resource-Based Production Risk Map to Flood, Davao City



Landslide – Landslides are expected to massively hit the natural resources in Langub, Matina Pangi, Lumiad, Malabog, Pandaitan, Paquibato Proper, Carmen, Tambobong, Inayangan, Baganihan, Buda, Datu Salumay, Gumitan, Magsaysay, Malamba, Marilog Proper, Salaysay, Suawan, Tamugan, and New Carmen (Table NR – 6). These areas are identified as high risk areas to landslides. On the other hand, moderate risk areas are plotted in NRBPA within Catalunan Grande, Ma-a, Matina Crossing, Buhangin Proper, Cabantian, Mandug, Tigatto, and Baguio Proper. The rest of the barangays with natural resources have low risk to landslides.

Table NR – 31. Natural Resource Production Area Risk to Landslide, Davao City

Hazard			Exposure						Sensitivity							Risk		
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure %	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to early warning systems	Severity of Consequence Score	Risk Score	Risk Category
Talomo District																		
Catalunan Grande	M/H	3	862.74	coconut	74,117	47.40	3,513,303	5.49%	-	-	-	Yes	-	-	Yes	3	8	Moderate
Catalunan Pequeño	-	2	250.64	coconut	60,731	-	-	0.00%	-	-	-	Yes	-	-	Yes	1	3	Low
Langub	M/H	5	502.37	coconut	73,248	357.51	26,186,533	71.16%	-	-	-	Yes	-	1.11	Yes	3	17	High
Ma-A	M/H	5	76.80	coconut	68,941	32.05	2,209,823	41.74%	-	-	-	Yes	-	-	Yes	2	12	Moderate
Matina Crossing	H	5	7.94	-	-	6.81	-	85.81%	-	-	-	-	-	-	Yes	2	12	Moderate
Matina Pangi	M/H	4	213.60	coconut	54,793	150.44	8,243,208	70.43%	-	-	-	Yes	-	-	Yes	3	12	High
Talomo	M/H	2	89.14	-	-	14.42	-	16.18%	-	-	-	Yes	-	-	Yes	2	3	Low
Buhangin District																		
Acacia	M/H	1	738.89	coconut	21,000	667.72	14,022,028	90.37%	-	-	-	No	-	-	Yes	2	2	Low
Buhangin	M/H	3	123.37	-	-	116.26	-	94.23%	-	-	-	No	-	-	Yes	2	6	Moderate
Cabantian	M/H	3	231.75	-	-	120.13	-	51.84%	-	-	-	No	-	-	Yes	2	5	Moderate
Callawa	M/H	1	835.33	coconut	28,540	463.36	13,224,296	55.47%	-	-	-	Yes	6.71	1.71	Yes	3	3	Low
Communal	M/H	1	277.18	-	-	183.55	-	66.22%	-	-	-	No	-	-	Yes	2	2	Low

Table NR – 31. Natural Resource Production Area Risk to Landslide, Davao City

Hazard			Exposure						Sensitivity							Severity of Consequence Score	Risk	
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Total Area Allocation (Has.)	Dominant Crop/ Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure %	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to early warning systems		Risk Score	Risk Category
Indangan	M/H	1	1,112.40	coconut	30,000	791.80	23,754,134	71.18%	-	-	-	Yes	-	-	Yes	2	2	Low
Mandug	M/H	4	603.45	coconut	30,000	343.04	10,291,273	56.85%	-	-	-	Yes	-	-	Yes	2	9	Moderate
Sasa	M/H	1	22.71	-	-	6.61	-	29.13%	-	-	-	No	-	-	Yes	1	1	Low
Tigatto	M/H	5	354.51	banana local	101,000	123.66	12,489,429	34.88%	-	-	-	Yes	8.82	-	Yes	2	12	Moderate
Waan	M/H	1	352.74	coconut	10,109	199.13	2,013,038	56.45%	-	-	-	Yes	-	-	Yes	2	2	Low
Bunawan District																		
Bunawan	M	1	380.57	-	-	31.58	-	8.30%	-	-	-	No	-	-	Yes	2	2	Low
Gatungan	M/H	1	1,125.29	coconut	31,132	1,069.85	33,306,418	95.07%	-	-	-	Yes	-	-	Yes	3	3	Low
Ilang	M/H	1	228.31	-	-	127.96	-	56.04%	-	-	-	No	-	-	Yes	2	2	Low
Mahayag	M/H	1	407.79	coconut	30,000	143.87	4,316,053	35.28%	-	-	-	No	-	-	Yes	2	2	Low
Mudiang	M/H	1	561.40	coconut	31,789	528.69	16,806,480	94.17%	-	-	-	No	-	-	Yes	2	2	Low
Panacan	M/H	1	201.64	-	-	66.39	-	32.92%	-	-	-	Yes	-	-	Yes	2	2	Low
San Isidro	M/H	2	518.52	banana local	73,575	76.68	5,641,897	14.79%	-	-	-	Yes	-	-	Yes	2	3	Low
Tibungco	M/H	1	450.59	-	-	223.65	-	49.63%	-	-	-	No	-	-	Yes	2	2	Low
Paquibato District																		
Colosas	M/H	1	3,608.87	coconut	5,794	3,311.11	19,184,573	91.75%	105	50	105	Yes	-	-	Yes	3	3	Low
Fatima	M/H	5	2,473.51	coconut	5,717	2,186.58	12,500,673	88.40%	180	47	180	Yes	-	-	Yes	4	20	High
Lumiad	M/H	5	885.86	corn	71,941	869.46	62,549,543	98.15%	110	60	110	Yes	-	-	Yes	3	13	High
Mabuhay	M/H	1	997.56	coconut	4,396	717.09	3,152,329	71.88%	50	25	50	Yes	0.52	-	Yes	3	3	Low
Malabog	M/H	5	3,527.92	coconut	11,833	3,498.42	41,396,821	99.16%	300	100	300	Yes	-	-	Yes	4	18	High

Table NR – 31. Natural Resource Production Area Risk to Landslide, Davao City

Hazard			Exposure						Sensitivity							Severity of Consequence Score	Risk	
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Total Area Allocation (Has.)	Dominant Crop/Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure %	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to early warning systems		Risk Score	Risk Category
Mapula	M/H	1	1,932.29	coconut	22,669	1,923.59	43,605,945	99.55%	190	70	190	Yes	-	0.15	Yes	4	4	Low
Pandaitan	M/H	6	2,036.11	coconut	13,139	1,951.07	25,635,055	95.82%	240	80	240	Yes	-	-	Yes	4	22	High
Pañalum	M/H	1	609.23	banana	52,178	507.03	26,455,677	83.23%	120	40	120	Yes	-	-	Yes	3	3	Low
Paquibato	M/H	4	1,375.53	coconut	16,716	1,196.30	19,997,383	86.97%	160	70	160	Yes	-	-	Yes	4	16	High
Paradise Embac	M/H	1	1,731.39	coconut	17,182	1,484.55	25,507,522	85.74%	140	75	140	Yes	-	-	Yes	4	4	Low
Salapawan	M/H	1	176.45	coconut	6,158	137.90	849,217	78.15%	100	68	100	Yes	-	-	Yes	3	3	Low
Sumimao	M/H	1	1,434.92	coconut	1,910	1,425.87	2,723,407	99.37%	170	43	170	Yes	0.05	-	Yes	4	4	Low
Tapak	M/H	1	1,269.49	coconut	16,131	1,258.96	20,308,351	99.17%	140	40	140	Yes	-	-	Yes	4	4	Low
Baguio District																		
Baguio	H	4	638.57	coconut	38,187	48.53	1,853,329	7.60%	47	215	47	Yes	-	-	Yes	2	9	Moderate
Cadalian	H	1	616.55	coconut	39,195	96.35	3,776,288	15.63%	115	383	115	Yes	-	-	Yes	2	2	Low
Carmen	M/H	4	340.03	cacao	78,600	108.82	8,553,252	32.00%	55	348	55	Yes	-	-	Yes	3	13	High
Gumalang	M/H	1	1,394.99	coconut	39,250	211.77	8,312,132	15.18%	110	680	110	Yes	3.78	-	Yes	2	2	Low
Malagos	M/H	1	826.54	coconut	38,359	51.22	1,964,829	6.20%	160	571	160	Yes	2.26	-	Yes	1	1	Low
Tambobong	M/H	5	349.39	coconut	32,089	326.52	10,477,788	93.45%	75	150	75	Yes	-	-	Yes	3	17	High
Tawan-Tawan	M/H	1	874.21	cacao	84,555	109.00	9,216,742	12.47%	156	544	156	Yes	1.49	-	Yes	2	2	Low
Wines	M/H	1	855.76	coconut	39,098	73.90	2,889,221	8.64%	80	355	80	Yes	8.25	-	Yes	2	2	Low
Calinan District																		
Biao Joaquin	M/H	1	513.94	coconut	35,291	133.13	4,698,446	25.90%	60	16	60	Yes	-	0.52	Yes	1	1	Low
Calinan	M/H	3	611.68	rice	81,940	29.51	2,418,371	4.83%	70	10	70	Yes	6533.33	-	Yes	1	4	Low

Table NR – 31. Natural Resource Production Area Risk to Landslide, Davao City

Hazard			Exposure						Sensitivity							Severity of Consequence Score	Risk	
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Total Area Allocation (Has.)	Dominant Crop/ Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure %	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to early warning systems		Risk Score	Risk Category
Cawayan	H	1	777.62	pineapple	574,200	27.24	15,641,951	3.50%	35	5	35	Yes	1.53	-	Yes	2	2	Low
Dacudao	M/H	1	1,123.77	coconut	38,065	209.49	7,974,275	18.64%	40	-	40	Yes	-	-	Yes	2	2	Low
Dalagdag	M/H	1	317.69	coconut	32,540	236.65	7,700,661	74.49%	30	4	30	Yes	4.38	-	Yes	3	3	Low
Dominga	M/H	1	498.35	coconut	34,043	365.55	12,444,522	73.35%	45	10	45	No	-	-	Yes	3	3	Low
Inayangan	M/H	5	1,138.27	coconut	34,045	1,062.21	36,163,086	93.32%	45	10	45	Yes	-	-	Yes	4	18	High
Lacson	M/H	1	764.19	coconut	38,039	218.29	8,303,717	28.57%	60	10	60	Yes	8.77	-	Yes	1	1	Low
Lamanan	M/H	1	1,427.04	coconut	35,047	888.63	31,143,916	62.27%	56	10	56	Yes	-	-	Yes	2	2	Low
Lampianao	M/H	1	794.41	coconut	32,541	452.97	14,740,253	57.02%	50	10	50	Yes	-	0.97	Yes	3	3	Low
Megkawayan	M/H	1	1,551.55	cacao	69,371	1,470.45	102,006,789	94.77%	36	20	36	Yes	-	-	Yes	4	4	Low
Pangyan	M/H	1	660.52	coconut	26,517	342.70	9,087,289	51.88%	31	10	31	Yes	-	-	Yes	2	2	Low
Saloy	M/H	1	990.07	coconut	39,071	955.01	37,313,302	96.46%	70	10	70	Yes	-	-	Yes	3	3	Low
Sirib	M/H	1	2,120.12	banana cav.	407,720	633.36	258,234,375	29.87%	60	15	60	Yes	-	-	Yes	3	3	Low
Talomo River	M/H	1	707.69	coconut	37,113	73.17	2,715,562	10.34%	65	20	65	Yes	-	1.48	Yes	1	1	Low
Tamayong	M/H	1	1,356.14	banana cav.	554,376	901.06	499,524,728	66.44%	75	15	75	Yes	-	-	Yes	3	3	Low
Marilog District																		
Baganihan	M/H	5	168.75	corn	48,000	1.55	74,450	0.92%	30	15	113	Yes	-	-	Yes	3	15	High
Bantol	M/H	1	408.76	coconut	36,174	349.17	12,630,595	85.42%	150	200	150	Yes	-	-	Yes	3	3	Low
Buda	M/H	6	1,422.90	vegetables	75,600	673.94	50,949,549	47.36%	20	10	20	Yes	1.05	-	Yes	3	16	High
Dalag Lumot	M/H	1	140.76	cacao		137.85	-	97.93%	100	200	100	Yes	-	-	Yes	3	3	Low
Datu Salumay	M/H	5	681.46	vegetables		447.75	-	65.70%	150	150	150	Yes	-	-	Yes	3	15	High
Gumitan	M/H	5	814.50	rice	31,556	785.82	24,796,986	96.48%	25	25	25	Yes	-	-	Yes	4	18	High

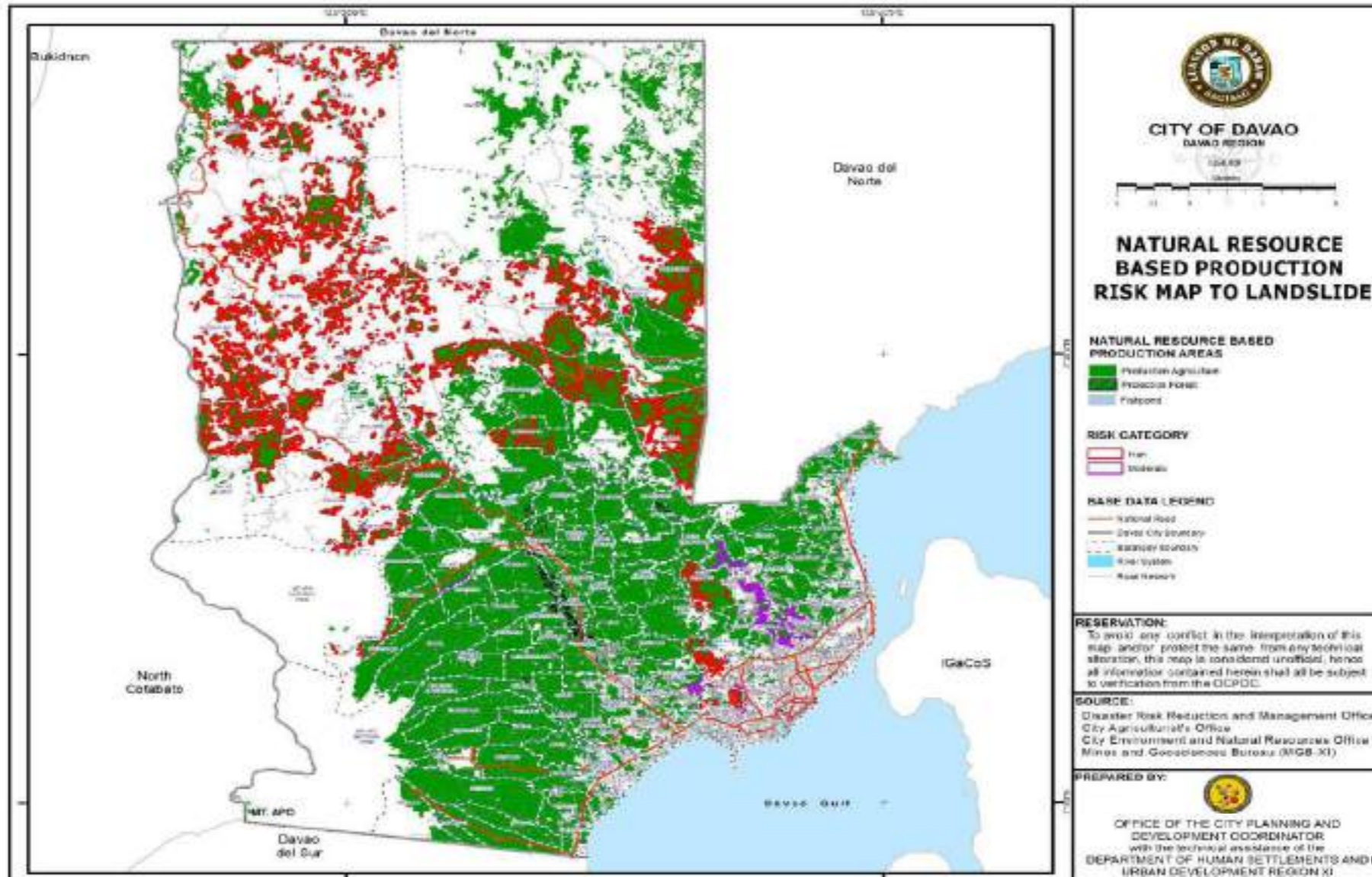
Table NR – 31. Natural Resource Production Area Risk to Landslide, Davao City

Hazard			Exposure						Sensitivity							Severity of Consequence Score	Risk	
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Total Area Allocation (Has.)	Dominant Crop/ Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure %	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to early warning systems		Risk Score	Risk Category
Magsaysay	M/H	4	1,580.09	corn	60,000	1,416.06	84,963,457	89.62%	100	75	212	Yes	-	-	Yes	3	13	High
Malamba	M/H	5	1,729.27	coconut	35,087	1,535.40	53,872,656	88.79%	60	200	60	Yes	-	-	Yes	3	15	High
Marilog	M/H	5	3,936.82	coconut	34,207	3,803.93	130,120,980	96.62%	500	375	860	Yes	0.30	-	Yes	3	17	High
Salaysay	M/H	5	1,854.46	banana cav.	36	1,845.25	67,108	99.50%	150	300	150	Yes	0.42	-	Yes	3	15	High
Suawan	M/H	6	1,684.68	coconut	34,192	1,127.29	38,544,405	66.91%	100	100	620	Yes	1.11	-	Yes	3	16	High
Tamugan	M/H	5	946.09	coconut	39,214	157.57	6,179,096	16.66%	200	100	200	Yes	-	-	Yes	3	13	High
Toril District																		
Alambre	H	1	280.59	coconut	44,000	26.82	1,180,082	9.56%	25	20	25	Yes	3.79	-	Yes	2	2	Low
Atan-Awe	M/H	1	319.38	coconut	42,500	308.12	13,095,091	96.47%	25	30	25	No	-	-	Yes	3	3	Low
Baracatan	M/H	1	1,085.56	coconut	41,000	637.55	26,139,546	58.73%	30	30	30	No	-	-	Yes	2	2	Low
Bato	M/H	1	745.05	coconut	35,000	273.05	9,556,586	36.65%	25	25	25	No	2.55	-	Yes	2	2	Low
Bayabas	M/H	1	1,183.42	coconut	37,500	423.56	15,883,424	35.79%	5	20	5	No	-	-	Yes	2	2	Low
Binugao	M/H	1	290.68	coconut	38,000	159.30	6,053,483	54.80%	25	25	25	Yes	-	-	Yes	1	1	Low
Camansi	M/H	1	349.76	coconut	37,500	216.16	8,106,078	61.80%	35	30	35	Yes	-	-	Yes	2	2	Low
Catigan	M/H	1	2,329.75	coconut	40,000	1,196.79	47,871,756	51.37%	50	60	50	Yes	-	-	Yes	2	2	Low
Daliaon Plantation	M/H	1	971.65	banana	640,000	644.98	412,790,380	66.38%	30	25	30	Yes	-	-	Yes	3	3	Low
Eden	M/H	1	464.93	durian	150,000	420.64	63,095,335	90.47%	25	30	25	No	-	-	Yes	3	3	Low
Kilate	H	1	633.71	-	-	174.02	-	27.46%	-	15	-	No	-	-	Yes	3	3	Low
Marapangi	M/H	1	526.81	-	-	155.29	-	29.48%	20	30	20	Yes	-	-	Yes	2	2	Low
Mulig	H	1	980.43	coconut	44,500	16.79	747,042	1.71%	55	30	55	No	-	-	Yes	2	2	Low
Sibulan	M/H	1	501.15	abaca	90,000	498.92	44,902,920	99.56%	120	80	120	Yes	-	-	Yes	3	3	Low

Table NR – 31. Natural Resource Production Area Risk to Landslide, Davao City

Hazard			Exposure						Sensitivity							Severity of Consequence Score	Risk	
Barangay	Landslide Susceptibility	Likelihood of Occurrence	Total Area Allocation (Has.)	Dominant Crop/ Variety of Produce	Average output per hectare (PHP)	Affected Area (Has.)	Affected Value	Exposure %	Number of farming families who attended climate field school	Proportion of farming families using sustainable production techniques	Number of farmers with access to hazard information	Number of production areas with infrastructure coverage	% Areas with irrigation coverage	% Areas with water impoundment	Number of farming families with access to early warning systems		Risk Score	Risk Category
Sirawan	M	1	730.75	mango	200,000	191.32	38,263,745	26.18%	25	20	25	Yes	-	-	Yes	2	2	Low
Tagluno	H	1	551.66	coconut	40,000	65.11	2,604,366	11.80%	75	25	75	Yes	-	-	Yes	3	3	Low
Tagurano	M/H	1	498.36	coconut	39,500	308.57	12,188,707	61.92%	-	20	-	No	-	-	Yes	3	3	Low
Tibuloy	M/H	1	804.03	coconut	40,000	643.98	25,759,216	80.09%	-	10	-	Yes	-	-	Yes	2	2	Low
Tungkalan	M/H	1	1,755.69	coconut	40,500	868.30	35,166,168	49.46%	50	75	50	Yes	0.85	-	Yes	3	3	Low
Tugbok District																		
Biao Escuela	H	1	1,284.53	coconut	34,250	9.62	329,363	0.75%	-	8	-	Yes	-	0.50	Yes	1	1	Low
Matina Biao	H	1	1,000.81	coconut	34,098	92.57	3,156,503	9.25%	-	5	-	Yes	-	-	Yes	2	2	Low
Manambulan	H	1	751.58	coconut	36,100	21.21	765,858	2.82%	-	-	-	Yes	-	-	Yes	2	2	Low
Manuel Guianga	H	1	874.55	coconut	36,503	65.98	2,408,559	7.54%	-	10	-	Yes	-	-	Yes	2	2	Low
New Carmen	M/H	5	956.39	coconut	72,543	688.77	49,965,436	72.02%	-	-	-	No	-	-	Yes	3	15	High
New Valencia	M/H	1	880.77	coconut	36,524	386.02	14,099,012	43.83%	52	10	52	Yes	-	0.19	Yes	2	2	Low
Talandang	M/H	1	1,220.69	coconut	34,014	683.09	23,234,568	55.96%	-	10	-	Yes	1.36	-	Yes	2	2	Low

Map 6.9 Natural Resource-Based Production Risk Map to Landslide, Davao City



Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate			
Baguio	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 858; 3. Total Agricultural Area (Has): 638.56; 4. Exposed Area (Has):147.87; 5. Value Affected(PhP): 5,646,770.71; 6. Farming families attended field school: 47; 7. Proportion of families using sustainable techniques : 215; 8. Families with access to hazard information:47; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 65; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 48; 16. Government Resources: Yes; 17. Risk Category : Moderate	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.
Baliok	1. Susceptibility: M//; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 120.58; 4. Exposed Area (Has):35.26; 5. Value Affected(PhP): 2,153,448.53; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: Yes;	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	<p>10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>		<ul style="list-style-type: none"> Encourage crop insurance.
Bantol	<p>1. Susceptibility: /H/VH; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 570; 3. Total Agricultural Area (Has): 408.75; 4. Exposed Area (Has):34.94; 5. Value Affected(PHP): 1,264,108.47; 6. Farming families attended field school: 150; 7. Proportion of families using sustainable techniques : 200; 8. Families with access to hazard information:150; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 75; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 399; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>	<ul style="list-style-type: none"> Damage to crops is expected due to floods given current production practices. Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. Lack of flood control measures, may affect production yield overtime. Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> Extension services for climate sensitive crop production. Establishment of rainwater catchment. Improve forest cover in watershed areas using indigenous forest species. Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. No cutting of trees in the watershed areas. Provision of alternative livelihood. Adapt soil and water conservation practices recommended and appropriate in sloping lands. Encourage crop insurance.
Binugao	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 1996; 3. Total Agricultural Area (Has): 290.68; 4. Exposed Area (Has):129.36;</p>	<ul style="list-style-type: none"> Damage to crops is expected due to floods given current production practices. Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> Extension services for climate sensitive crop production. Establishment of rainwater catchment. Improve forest cover in watershed areas using indigenous forest species. Encourage planting of high value fruit

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	5. Value Affected(Php): 4,915,946.62; 6. Farming families attended field school: 25; 7. Proportion of families using sustainable techniques : 25; 8. Families with access to hazard information:25; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 35; 16. Government Resources: Yes; 17. Risk Category : Moderate	<ul style="list-style-type: none"> • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. • Significant losses in the inland fishery sector is expected. • Increased poverty among inland fishing dependent families also expected. 	tree crops. <ul style="list-style-type: none"> • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices. • Climate proofing of fishpond areas. • Encourage crop insurance.
Cabantian	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 30; 3. Total Agricultural Area (Has): 231.75; 4. Exposed Area (Has):0.05; 5. Value Affected(Php): 0; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: x; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Encourage planting of high value fruit tree. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.
Camansi	1. Susceptibility: /H/;	<ul style="list-style-type: none"> • Damage to crops is expected due to floods 	<ul style="list-style-type: none"> • Extension services for climate sensitive

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	<p>1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Low; 2. No of Farming Dependent Households: 372; 3. Total Agricultural Area (Has): 349.75; 4. Exposed Area (Has):27.74; 5. Value Affected(PhP): 1040385.90; 6. Farming families attended field school: 35; 7. Proportion of families using sustainable techniques : 30; 8. Families with access to hazard information:35; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 2; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 20; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>	<p>given current production practices.</p> <ul style="list-style-type: none"> • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. • Significant losses in the inland fishery sector is expected. • Increased poverty among inland fishing dependent families also expected. 	<p>crop production.</p> <ul style="list-style-type: none"> • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. Climate proofing of fishpond areas. • Encourage crop insurance.
Catalunan Grande	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 862.73; 4. Exposed Area (Has):172.78; 5. Value Affected(PhP): 12,806,285.25; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes;</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	<p>14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>		
Communal	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Low; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 277.17; 4. Exposed Area (Has):15.77; 5. Value Affected(PhP): 0; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information;; 9. Infra Coverage: x; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: 0; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices. • Encourage crop insurance.
Crossing Bayabas	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 78.78; 4. Exposed Area (Has):14.44; 5. Value Affected(PhP): 0; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information;; 9. Infra Coverage: x;</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: 0; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate		practices. <ul style="list-style-type: none"> • Encourage crop insurance.
Dominga	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 378; 3. Total Agricultural Area (Has): 498.35; 4. Exposed Area (Has):172.89; 5. Value Affected(Php): 5,885,865.16; 6. Farming families attended field school: 45; 7. Proportion of families using sustainable techniques : 10; 8. Families with access to hazard information:45; 9. Infra Coverage: x; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 43; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.
Dumoy	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Low; 2. No of Farming Dependent Households: 538; 3. Total Agricultural Area (Has): 195.06; 4. Exposed Area (Has):19.58;	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Encourage planting of high value fruit tree. • No cutting of trees in the watershed areas.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	5. Value Affected(PhP): 1,228,600.44; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information;; 9. Infra Coverage: x; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate	<ul style="list-style-type: none"> Lack of flood control measures, may affect production yield overtime. Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> Provision of alternative livelihood. Encourage crop insurance.
Gumalang	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 819; 3. Total Agricultural Area (Has): 1394.99; 4. Exposed Area (Has):302.40; 5. Value Affected(PhP): 11,869,227.88; 6. Farming families attended field school: 110; 7. Proportion of families using sustainable techniques : 680; 8. Families with access to hazard information:110; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 3.78; 11. Water Impoundment: 0%; 12. Access to Insurance: 45; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 59; 16. Government Resources: Yes; 17. Risk Category : Moderate	<ul style="list-style-type: none"> Damage to crops is expected due to floods given current production practices. Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. Lack of flood control measures, may affect production yield overtime. Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> Extension services for climate sensitive crop production. Establishment of rainwater catchment. Improve forest cover in watershed areas using indigenous forest species. Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. No cutting of trees in the watershed areas. Provision of alternative livelihood. Adapt soil and water conservation practices recommended and appropriate in sloping lands. Encourage crop insurance.
Ilang	1. Susceptibility: M/H/VH;	<ul style="list-style-type: none"> Damage to crops is expected due to floods 	<ul style="list-style-type: none"> Extension services for climate sensitive

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	<p>1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 4305; 3. Total Agricultural Area (Has): 228.31; 4. Exposed Area (Has):5.80; 5. Value Affected(PhP): 0; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: x; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: 0; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>	<p>given current production practices.</p> <ul style="list-style-type: none"> • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<p>crop production.</p> <ul style="list-style-type: none"> • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation. • Encourage crop insurance.
Lubogan	<p>1. Susceptibility: /H/; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 72.90; 4. Exposed Area (Has):20.39; 5. Value Affected(PhP): 0; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0 13. Extension Services: 0; 14. EWS: Yes;</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate		
Mahayag	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 465; 3. Total Agricultural Area (Has): 407.79; 4. Exposed Area (Has):0.99; 5. Value Affected(PhP): 29,981.62; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: x; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.
Malagos	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 976; 3. Total Agricultural Area (Has): 826.54; 4. Exposed Area (Has):290.25; 5. Value Affected(PhP): 11,133,818.75; 6. Farming families attended field school: 160; 7. Proportion of families using sustainable techniques : 571; 8. Families with access to hazard information:160; 9. Infra Coverage: Yes;	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	<p>10. Irrigation Coverage: 2.25; 11. Water Impoundment: 0%; 12. Access to Insurance: 25; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 15; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>		<p>practices recommended and appropriate in sloping lands.</p> <ul style="list-style-type: none"> • Encourage crop insurance.
Malamba	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 1318; 3. Total Agricultural Area (Has): 1729.26; 4. Exposed Area (Has):95.49; 5. Value Affected(PhP): 3,350,807.48; 6. Farming families attended field school: 60; 7. Proportion of families using sustainable techniques : 200; 8. Families with access to hazard information:60; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 27; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 132; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.
Marilog	<p>1. Susceptibility: /H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: Low; 2. No of Farming Dependent Households: 4300; 3. Total Agricultural Area (Has): 3936.82; 4. Exposed Area (Has):17.81;</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	5. Value Affected(PhP): 609,484.38; 6. Farming families attended field school: 500; 7. Proportion of families using sustainable techniques : 375; 8. Families with access to hazard information:860; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0.29; 11. Water Impoundment: 0%; 12. Access to Insurance: 88; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 2802; 16. Government Resources: Yes; 17. Risk Category : Moderate	<ul style="list-style-type: none"> • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	tree crops and flood protection trees along riverbanks. <ul style="list-style-type: none"> • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.
Mintal	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 435.07; 4. Exposed Area (Has):65.66; 5. Value Affected(PhP): 3,214,614.15; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information;; 9. Infra Coverage: x; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 8; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Encourage crop insurance.
PA -Aalum	1. Susceptibility: /H/;	<ul style="list-style-type: none"> • Damage to crops is expected due to floods 	<ul style="list-style-type: none"> • Extension services for climate sensitive

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	<p>1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 560; 3. Total Agricultural Area (Has): 609.22; 4. Exposed Area (Has):5.03; 5. Value Affected(PhP): 262,517.30; 6. Farming families attended field school: 120; 7. Proportion of families using sustainable techniques : 40; 8. Families with access to hazard information:120; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 35; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 20; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>	<p>given current production practices.</p> <ul style="list-style-type: none"> • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<p>crop production.</p> <ul style="list-style-type: none"> • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.
Paquibato	<p>1. Susceptibility: /H/; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 788; 3. Total Agricultural Area (Has): 1375.53; 4. Exposed Area (Has):1.31; 5. Value Affected(PhP): 22,064.74; 6. Farming families attended field school: 160; 7. Proportion of families using sustainable techniques : 70; 8. Families with access to hazard information:160; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 2;</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 200; 16. Government Resources: Yes; 17. Risk Category : Moderate		
Saloy	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Low; 2. No of Farming Dependent Households: 459; 3. Total Agricultural Area (Has): 990.07; 4. Exposed Area (Has):95.47; 5. Value Affected(Php): 3,730,481.56; 6. Farming families attended field school: 70; 7. Proportion of families using sustainable techniques : 10; 8. Families with access to hazard information:70; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 45; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.
Sirawan	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Low; 2. No of Farming Dependent Households: 1430; 3. Total Agricultural Area (Has): 730.74; 4. Exposed Area (Has):121.18; 5. Value Affected(Php): 24,236,399.51; 6. Farming families attended field school: 25; 7. Proportion of families using sustainable techniques :	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	<p>20; 8. Families with access to hazard information:25; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 50; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>	<p>flooding and river overflow in flat lands near river easements.</p> <ul style="list-style-type: none"> • Significant losses in the inland fishery sector is expected. • Increased poverty among inland fishing dependent families also expected 	<ul style="list-style-type: none"> • Provision of alternative livelihood. Climate proofing of fishpond areas. • Encourage crop insurance.
Suawan	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 1240; 3. Total Agricultural Area (Has): 1684.67; 4. Exposed Area (Has):342.67; 5. Value Affected(Php): 11,716,754.614; 6. Farming families attended field school: 100; 7. Proportion of families using sustainable techniques : 100; 8. Families with access to hazard information:620; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 1.11; 11. Water Impoundment: 0%; 12. Access to Insurance: 95; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 868; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.
Tibungco	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: High;</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Improve forest cover in watershed

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	2. No of Farming Dependent Households: 9255; 3. Total Agricultural Area (Has): 450.59; 4. Exposed Area (Has):4.73; 5. Value Affected(PhP): 0; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: x; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: 0; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate	dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. <ul style="list-style-type: none"> • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	areas using indigenous forest species. <ul style="list-style-type: none"> • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Encourage crop insurance.
Tapak	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 1428; 3. Total Agricultural Area (Has): 1269.48; 4. Exposed Area (Has):56.29; 5. Value Affected(PhP): 908,154.82; 6. Farming families attended field school: 140; 7. Proportion of families using sustainable techniques : 40; 8. Families with access to hazard information:140; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 100;	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.

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Decision Areas	Technical Findings	Implications	Interventions
	<p>16. Government Resources: Yes; 17. Risk Category : Moderate</p>		
Ula	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 160; 3. Total Agricultural Area (Has): 856.08; 4. Exposed Area (Has):527.44; 5. Value Affected(PhP): 18,477,370.35; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques : 6; 8. Families with access to hazard information;; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0.297778571853969; 12. Access to Insurance: 110; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 60; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.
Wangan	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 1746; 3. Total Agricultural Area (Has): 1147.82; 4. Exposed Area (Has):555.43; 5. Value Affected(PhP): 21,716,563.12; 6. Farming families attended field school: 65; 7. Proportion of families using sustainable techniques : 12; 8. Families with access to hazard information:65; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 4.28;</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. • Significant losses in the inland fishery sector is expected. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	11. Water Impoundment: 0.05; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate	<ul style="list-style-type: none"> Increased poverty among inland fishing dependent families also expected. 	appropriate in sloping lands. Climate proofing of fishpond areas. <ul style="list-style-type: none"> Encourage crop insurance.
High			
19-B	1. Susceptibility: /H/VH; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 8.08; 4. Exposed Area (Has):8.00; 5. Value Affected(PhP): 0; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information:0; 9. Infra Coverage: 0; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: 0; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High	<ul style="list-style-type: none"> Damage to crops is expected to be high due to floods give current production practices. A portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. Lack of flood control measures, may affect production yield overtime. Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> Extension services for climate sensitive crop production. Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. No cutting of trees in the watershed areas. Provision of alternative livelihood. Encourage crop insurance.
8-A	1. Susceptibility: VH; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 8.60; 4. Exposed Area (Has):8.55; 5. Value Affected(PhP): 0;	<ul style="list-style-type: none"> Damage to crops is expected to be high due to floods give current production practices. A portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. Lack of flood control measures, may affect 	<ul style="list-style-type: none"> Extension services for climate sensitive crop production. Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. No cutting of trees in the watershed areas.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	6. Farming families attended field school: 0 ; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: 0; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: 0; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High	production yield overtime. <ul style="list-style-type: none"> • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Provision of alternative livelihood. • Encourage crop insurance.
Bago Aplaya	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 550; 3. Total Agricultural Area (Has): 14.19; 4. Exposed Area (Has):2.13; 5. Value Affected(Php): 63,308.06; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods give current production practices. • A portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Encourage crop insurance.
Bago Gallera	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Moderate;	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods give current production practices. • Significant portion of the population are 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Encourage planting of high value fruit

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 335.90; 4. Exposed Area (Has):69.56; 5. Value Affected(PhP): 4,311,014.50; 6. Farming families attended field school:0 ; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information;; 9. Infra Coverage: ; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate	dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. <ul style="list-style-type: none"> • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	tree crops. <ul style="list-style-type: none"> • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Encourage crop insurance.
Bucana	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Very High; 2. No of Farming Dependent Households: 23624; 3. Total Agricultural Area (Has): 3.153; 4. Exposed Area (Has):1.85; 5. Value Affected(PhP): 0; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: ; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: ; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes;	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods given current production practices. • A portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Encourage crop insurance.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Bunawan	<p>17. Risk Category : High</p> <p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 200; 3. Total Agricultural Area (Has): 380.57; 4. Exposed Area (Has):86.20; 5. Value Affected(PhP): 0; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information;; 9. Infra Coverage: x; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: ; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods give current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Encourage crop insurance.
Calinan	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 2661; 3. Total Agricultural Area (Has): 611.67; 4. Exposed Area (Has):571.41; 5. Value Affected(PhP): 46,821,452.02; 6. Farming families attended field school: 70; 7. Proportion of families using sustainable techniques : 10; 8. Families with access to hazard information:70; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 6533.33; 11. Water Impoundment: 0%;</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. Climate proofing of fishpond areas. • Encourage crop insurance.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	12. Access to Insurance: 112; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High		
Gumitan	1. Susceptibility: /H/; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 550; 3. Total Agricultural Area (Has): 814.49; 4. Exposed Area (Has):8.75; 5. Value Affected(PhP): 276,301.81; 6. Farming families attended field school: 25; 7. Proportion of families using sustainable techniques : 25; 8. Families with access to hazard information:25; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 398; 16. Government Resources: Yes; 17. Risk Category : High	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. • Significant losses in the inland fishery sector is expected. • Increased poverty among inland fishing dependent families also expected. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.
Lasang	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: Very High; 2. No of Farming Dependent Households: 300; 3. Total Agricultural Area (Has): 455.51; 4. Exposed Area (Has):119.86; 5. Value Affected(PhP): 0; 6. Farming families attended field school: 0;	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods give current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information:0; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: ; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High	<ul style="list-style-type: none"> Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	Climate proofing of fishpond areas. <ul style="list-style-type: none"> Encourage crop insurance.
Lizada	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 4147; 3. Total Agricultural Area (Has): 251.714; 4. Exposed Area (Has):77.83; 5. Value Affected(Php): 0; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : 10; 8. Families with access to hazard information: 0; 9. Infra Coverage: x; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: ; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High	<ul style="list-style-type: none"> Damage to crops is expected to be high due to floods given current production practices. Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. Lack of flood control measures, may affect production yield overtime. Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> Extension services for climate sensitive crop production. Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. No cutting of trees in the watershed areas. Provision of alternative livelihood. Encourage crop insurance.
Los Amigos	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: Very High;	<ul style="list-style-type: none"> Damage to crops is expected to be high due to floods given current production practices. Significant portion of the population are 	<ul style="list-style-type: none"> Extension services for climate sensitive crop production. Establishment of rainwater catchment.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	<p>2. No of Farming Dependent Households: 272; 3. Total Agricultural Area (Has): 27.5; 4. Exposed Area (Has):27.5; 5. Value Affected(PhP): 46,961,384.33; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques : 5; 8. Families with access to hazard information: 0; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 1987.57; 11. Water Impoundment: 15.52; 12. Access to Insurance: 42; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 75; 16. Government Resources: Yes; 17. Risk Category : High</p>	<p>dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers.</p> <ul style="list-style-type: none"> • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. • Significant losses in the inland fishery sector is expected. • Increased poverty among inland fishing dependent families also expected. 	<ul style="list-style-type: none"> • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. Climate proofing of fishpond areas. • Encourage crop insurance.
Ma-A	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: Very High; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 76.7989535257829; 4. Exposed Area (Has):30.56; 5. Value Affected(PhP): 2,107,343.27; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes;</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Encourage crop insurance.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	17. Risk Category : High		
Mandug	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 180; 3. Total Agricultural Area (Has): 603.44; 4. Exposed Area (Has):83.25; 5. Value Affected(PhP): 2,497,785.20; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods given current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.
Marapangi	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 142; 3. Total Agricultural Area (Has): 526.81; 4. Exposed Area (Has):122.51; 5. Value Affected(PhP): 0; 6. Farming families attended field school: 20; 7. Proportion of families using sustainable techniques : 30; 8. Families with access to hazard information:20; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%;</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods give current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Encourage crop insurance.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	12. Access to Insurance: 5; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 60; 16. Government Resources: Yes; 17. Risk Category : High		
Matina Aplaya	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 266; 3. Total Agricultural Area (Has): 5.16; 4. Exposed Area (Has):4.29; 5. Value Affected(Php): 721,762,044.07; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: ; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: ; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods give current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Encourage crop insurance.
Matina Crossing	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 7.94; 4. Exposed Area (Has):1.11; 5. Value Affected(Php): 0; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques: 0;	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods give current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Encourage crop insurance.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	8. Families with access to hazard information;; 9. Infra Coverage: ; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: 0; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High	flooding and river overflow in flat lands near river easements.	
Matina Pangí	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 213.59; 4. Exposed Area (Has):45.62; 5. Value Affected(Php): 2,500,193.84; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods give current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.
Panacan	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 2000; 3. Total Agricultural Area (Has): 201.63;	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods give current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	<p>4. Exposed Area (Has):9.48; 5. Value Affected(PhP): 0; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: ; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High</p>	<p>adaptive capacities of farmers.</p> <ul style="list-style-type: none"> • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Encourage crop insurance.
Riverside	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 1883; 3. Total Agricultural Area (Has): 421.368420053523; 4. Exposed Area (Has):267.59; 5. Value Affected(PhP): 10,195,435.43; 6. Farming families attended field school: 36; 7. Proportion of families using sustainable techniques : 10; 8. Families with access to hazard information:36; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 41.85; 11. Water Impoundment: 0%; 12. Access to Insurance: 11; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods give current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. • Significant losses in the inland fishery sector is expected. • Increased poverty among inland fishing dependent families also expected. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. Climate proofing of fishpond areas. • Encourage crop insurance.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Talomo	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 72538; 3. Total Agricultural Area (Has): 89.143; 4. Exposed Area (Has):45.70; 5. Value Affected(PhP): 0; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: ; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods give current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Encourage crop insurance.
Tamugan	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 2123; 3. Total Agricultural Area (Has): 946.091; 4. Exposed Area (Has):215.59; 5. Value Affected(PhP): 8,454,434.40; 6. Farming families attended field school: 200; 7. Proportion of families using sustainable techniques : 100; 8. Families with access to hazard information:200; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 80;</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods give current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.

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Decision Areas	Technical Findings	Implications	Interventions
	13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 1910; 16. Government Resources: Yes; 17. Risk Category : High		
Tigatto	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: Very High; 2. No of Farming Dependent Households: 80; 3. Total Agricultural Area (Has): 354.503; 4. Exposed Area (Has):127.62; 5. Value Affected(PhP): 12,889,877.39; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 8.81; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods give current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.
Tugbok	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 356; 3. Total Agricultural Area (Has): 716.55; 4. Exposed Area (Has):610.77; 5. Value Affected(PhP): 24,106,520.37; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0;	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods give current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas.

Table NR – 32. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Flood, Davao City

Decision Areas	Technical Findings	Implications	Interventions
	9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 64; 16. Government Resources: Yes; 17. Risk Category : High	river easements. <ul style="list-style-type: none"> • Significant losses in the inland fishery sector is expected. • Increased poverty among inland fishing dependent families also expected. 	<ul style="list-style-type: none"> • Provision of alternative livelihood. Climate proofing of fishpond areas. • Encourage crop insurance.
Waan	1. Susceptibility: M//VH; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Very High; 2. No of Farming Dependent Households: 275; 3. Total Agricultural Area (Has): 352.744466463551; 4. Exposed Area (Has):127.57; 5. Value Affected(PhP): 1,289,701.84; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0%; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to floods give current production practices. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. • Lack of flood control measures, may affect production yield overtime. • Lack of forest cover may contribute to low land flooding and river overflow in flat lands near river easements. 	<ul style="list-style-type: none"> • Extension services for climate sensitive crop production. • Establishment of rainwater catchment. • Improve forest cover in watershed areas using indigenous forest species. • Encourage planting of high value fruit tree crops and flood protection trees along riverbanks. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance.

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate			
Baguio	<p>1. Susceptibility: H; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 858; 3. Total Agricultural Area (Has): 638.56; 4. Exposed Area (Has):48.53; 5. Value Affected(PHP): 1,853,328.62; 6. Farming families attended field school: 47; 7. Proportion of families using sustainable techniques : 215; 8. Families with access to hazard information:47; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 65; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 48; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to landslide in sloping areas. • Significant portion of the population are dependent on crop production. The minimal access to livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance. Introduction of more livelihood options.
Buhangin	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 123.37; 4. Exposed Area (Has):116.25; 5. Value Affected(PHP): 0; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0;</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to landslide in sloping areas. • Significant portion of the population are dependent on crop production. The minimal access to livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate	<p>8. Families with access to hazard information: 0; 9. Infra Coverage: x; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 0; 13. Extension Services: 0; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>		<p>appropriate in sloping lands.</p> <ul style="list-style-type: none"> Encourage crop insurance. Introduction of more livelihood options.
Cabantian	<p>1. Susceptibility: M/H; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 30; 3. Total Agricultural Area (Has): 231.75; 4. Exposed Area (Has):120.13; 5. Value Affected(PhP): 0; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques: 0 ; 8. Families with access to hazard information: 0; 9. Infra Coverage: x; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>	<ul style="list-style-type: none"> Damage to crops is expected due to landslide in sloping areas. Significant portion of the population are dependent on crop production. The minimal access to livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> Improve forest cover in watershed areas by planting of indigenous forest species. Encourage planting of high value fruit tree crops. No cutting of trees in the watershed areas. Provision of alternative livelihood. Adapt soil and water conservation practices recommended and appropriate in sloping lands. Encourage crop insurance Introduction of more livelihood options.

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate			
Catalunan Grande	<p>1. Susceptibility: M/H/;</p> <p>1.1 Likelihood of Occurrence: Improbable;</p> <p>1.2 Severity of Consequence: High;</p> <p>2. No of Farming Dependent Households: 0;</p> <p>3. Total Agricultural Area (Has): 862.73;</p> <p>4. Exposed Area (Has):47.40;</p> <p>5. Value Affected(Php): 3,513,303.03;</p> <p>6. Farming families attended field school: 0;</p> <p>7. Proportion of families using sustainable techniques : 0;</p> <p>8. Families with access to hazard information: 0;</p> <p>9. Infra Coverage: Yes;</p> <p>10. Irrigation Coverage: 0;</p> <p>11. Water Impoundment: 0;</p> <p>12. Access to Insurance: 0;</p> <p>13. Extension Services: Yes;</p> <p>14. EWS: Yes;</p> <p>15. Alternative Livelihood: 0;</p> <p>16. Government Resources: Yes;</p> <p>17. Risk Category : Moderate</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to landslide in sloping areas. • Significant portion of the population are dependent on crop production. The minimal access to livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance. Introduction of more livelihood options.
Ma-A	<p>1. Susceptibility: M/H/VH;</p> <p>1.1 Likelihood of Occurrence: Moderate;</p> <p>1.2 Severity of Consequence: Moderate;</p> <p>2. No of Farming Dependent Households: 0;</p> <p>3. Total Agricultural Area (Has): 76.79;</p> <p>4. Exposed Area (Has):32.05;</p> <p>5. Value Affected(Php): 2,209,823.45;</p> <p>6. Farming families attended field school: 0;</p> <p>7. Proportion of families using sustainable techniques : 0;</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to landslide in sloping areas. • Significant portion of the population are dependent on crop production. The minimal access to livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate	<p>8. Families with access to hazard information: 0; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>		<p>appropriate in sloping lands.</p> <ul style="list-style-type: none"> Encourage crop insurance. Introduction of more livelihood options.
Mandug	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 180; 3. Total Agricultural Area (Has): 603.44; 4. Exposed Area (Has):343.04; 5. Value Affected(Php): 10,291,272.66; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques : 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>	<ul style="list-style-type: none"> Damage to crops is expected due to landslide in sloping areas. Significant portion of the population are dependent on crop production. The minimal access to livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> Improve forest cover in watershed areas by planting of indigenous forest species. Encourage planting of high value fruit tree crops. No cutting of trees in the watershed areas. Provision of alternative livelihood. Adapt soil and water conservation practices recommended and appropriate in sloping lands. Encourage crop insurance. Introduction of more livelihood options.

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate			
Matina Crossing	<p>1. Susceptibility: /H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 7.94; 4. Exposed Area (Has):6.81; 5. Value Affected(Php): 0; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques : 0; 8. Families with access to hazard information: 0; 9. Infra Coverage: 0; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 0; 13. Extension Services: 0; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to landslide in sloping areas. • Significant portion of the population are dependent on crop production. The minimal access to livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance. Introduction of more livelihood options.
Tigatto	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 80; 3. Total Agricultural Area (Has): 354.50; 4. Exposed Area (Has):123.65; 5. Value Affected(Php): 12,489,429.49; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques : 0;</p>	<ul style="list-style-type: none"> • Damage to crops is expected due to landslide in sloping areas. • Significant portion of the population are dependent on crop production. The minimal access to livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate			
	8. Families with access to hazard information; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 8.81; 11. Water Impoundment: 0; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : Moderate		appropriate in sloping lands. <ul style="list-style-type: none"> Encourage crop insurance. Introduction of more livelihood options.
High			
Baganihan	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 375; 3. Total Agricultural Area (Has): 168.75; 4. Exposed Area (Has):1.55; 5. Value Affected(Php): 74,450.20; 6. Farming families attended field school: 30; 7. Proportion of families using sustainable techniques : 15; 8. Families with access to hazard information:112.5; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 80; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 262; 16. Government Resources: Yes;	<ul style="list-style-type: none"> Damage to crops is expected due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. 	<ul style="list-style-type: none"> Improve forest cover in watershed areas by planting of indigenous forest species. Encourage planting of high value fruit tree crops. No cutting of trees in the watershed areas. Provision of alternative livelihood. Adapt soil and water conservation practices recommended and appropriate in sloping lands. Encourage crop insurance. Introduced more livelihood options compatible to the present condition of the area..

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate			
	17. Risk Category : High		
Buda	<p>1. Susceptibility: M/H/;</p> <p>1.1 Likelihood of Occurrence: Frequent;</p> <p>1.2 Severity of Consequence: High;</p> <p>2. No of Farming Dependent Households: 554;</p> <p>3. Total Agricultural Area (Has): 1,422.89;</p> <p>4. Exposed Area (Has):673.93;</p> <p>5. Value Affected(Php): 50,949,549.00;</p> <p>6. Farming families attended field school: 20;</p> <p>7. Proportion of families using sustainable techniques : 10;</p> <p>8. Families with access to hazard information:20;</p> <p>9. Infra Coverage: Yes;</p> <p>10. Irrigation Coverage: 1.05;</p> <p>11. Water Impoundment: 0;</p> <p>12. Access to Insurance: 0;</p> <p>13. Extension Services: Yes;</p> <p>14. EWS: Yes;</p> <p>15. Alternative Livelihood: 388;</p> <p>16. Government Resources: Yes;</p> <p>17. Risk Category : High</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance. • Introduced more livelihood options compatible to the present condition of the area.
Carmen	<p>1. Susceptibility: M/H/;</p> <p>1.1 Likelihood of Occurrence: Occasional;</p> <p>1.2 Severity of Consequence: High;</p> <p>2. No of Farming Dependent Households: 441;</p> <p>3. Total Agricultural Area (Has): 340.02;</p> <p>4. Exposed Area (Has):108.82;</p> <p>5. Value Affected(Php): 8,553,252.15;</p> <p>6. Farming families attended field school: 55;</p> <p>7. Proportion of families using sustainable</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood.

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate	<p>techniques : 348; 8. Families with access to hazard information:55; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 24; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 68; 16. Government Resources: Yes; 17. Risk Category : High</p>		<ul style="list-style-type: none"> Adapt soil and water conservation practices recommended and appropriate in sloping lands. Encourage crop insurance. Introduce more livelihood options compatible to the present condition of the area.
Datu Salumay	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 578; 3. Total Agricultural Area (Has): 681.46; 4. Exposed Area (Has):447.74; 5. Value Affected(PHP): 0; 6. Farming families attended field school: 150; 7. Proportion of families using sustainable techniques : 150; 8. Families with access to hazard information:150; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 404; 16. Government Resources: Yes;</p>	<ul style="list-style-type: none"> Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> Improve forest cover in watershed areas by planting of indigenous forest species. Encourage planting of high value fruit tree crops. No cutting of trees in the watershed areas. Provision of alternative livelihood. Adapt soil and water conservation practices recommended and appropriate in sloping lands. Encourage crop insurance. Introduce more livelihood options compatible to the present condition of the area.

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate			
	17. Risk Category : High		
Fatima	<p>1. Susceptibility: M/H/;</p> <p>1.1 Likelihood of Occurrence: Moderate;</p> <p>1.2 Severity of Consequence: Very High;</p> <p>2. No of Farming Dependent Households: 992;</p> <p>3. Total Agricultural Area (Has): 2473.50;</p> <p>4. Exposed Area (Has):2186.57;</p> <p>5. Value Affected(Php): 12,500,672.71;</p> <p>6. Farming families attended field school: 180;</p> <p>7. Proportion of families using sustainable techniques : 47;</p> <p>8. Families with access to hazard information:180;</p> <p>9. Infra Coverage: Yes;</p> <p>10. Irrigation Coverage: 0;</p> <p>11. Water Impoundment: 0;</p> <p>12. Access to Insurance: 50;</p> <p>13. Extension Services: Yes;</p> <p>14. EWS: Yes;</p> <p>15. Alternative Livelihood: 70;</p> <p>16. Government Resources: Yes;</p> <p>17. Risk Category : High</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance. • Introduce more livelihood options compatible to the present condition of the area.
Gumitan	<p>1. Susceptibility: M/H/;</p> <p>1.1 Likelihood of Occurrence: Moderate;</p> <p>1.2 Severity of Consequence: Very High;</p> <p>2. No of Farming Dependent Households: 550;</p> <p>3. Total Agricultural Area (Has): 814.49;</p> <p>4. Exposed Area (Has):785.81;</p> <p>5. Value Affected(Php): 24,796,985.70;</p> <p>6. Farming families attended field school: 25;</p> <p>7. Proportion of families using sustainable</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood.

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate	techniques : 25; 8. Families with access to hazard information:25; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 398; 16. Government Resources: Yes; 17. Risk Category : High		<ul style="list-style-type: none"> Adapt soil and water conservation practices recommended and appropriate in sloping lands. Encourage crop insurance. Introduce more livelihood options compatible to the present condition of the area.
Inayangan	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: Very High; 2. No of Farming Dependent Households: 1401; 3. Total Agricultural Area (Has): 1138.26; 4. Exposed Area (Has):1062.21; 5. Value Affected(PHP): 36,163,086.09; 6. Farming families attended field school: 45; 7. Proportion of families using sustainable techniques : 10; 8. Families with access to hazard information:45; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 60; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes;	<ul style="list-style-type: none"> Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> Improve forest cover in watershed areas by planting of indigenous forest species. Encourage planting of high value fruit tree crops. No cutting of trees in the watershed areas. Provision of alternative livelihood. Adapt soil and water conservation practices recommended and appropriate in sloping lands. Encourage crop insurance. Introduce more livelihood options compatible to the present condition of the area.

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Decision Areas	Technical Findings	Implications	Interventions
Moderate			
	17. Risk Category : High		
Langub	<p>1. Susceptibility: M/H/;</p> <p>1.1 Likelihood of Occurrence: Moderate;</p> <p>1.2 Severity of Consequence: High;</p> <p>2. No of Farming Dependent Households: 0;</p> <p>3. Total Agricultural Area (Has): 502.36;</p> <p>4. Exposed Area (Has):357.50;</p> <p>5. Value Affected(Php): 26,186,532.63;</p> <p>6. Farming families attended field school: 0;</p> <p>7. Proportion of families using sustainable techniques : 0;</p> <p>8. Families with access to hazard information;;</p> <p>9. Infra Coverage: Yes;</p> <p>10. Irrigation Coverage: 0;</p> <p>11. Water Impoundment: 1.10;</p> <p>12. Access to Insurance: 0;</p> <p>13. Extension Services: Yes;</p> <p>14. EWS: Yes;</p> <p>15. Alternative Livelihood: 0;</p> <p>16. Government Resources: Yes;</p> <p>17. Risk Category : High</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance. • Introduce more livelihood options compatible to the present condition of the area.
Lumiad	<p>1. Susceptibility: M/H/;</p> <p>1.1 Likelihood of Occurrence: Moderate;</p> <p>1.2 Severity of Consequence: High;</p> <p>2. No of Farming Dependent Households: 488;</p> <p>3. Total Agricultural Area (Has): 885.86;</p> <p>4. Exposed Area (Has):869.45;</p> <p>5. Value Affected(Php): 62,549,542.73;</p> <p>6. Farming families attended field school: 110;</p> <p>7. Proportion of families using sustainable</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood.

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate	techniques : 60; 8. Families with access to hazard information:110; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 90; 16. Government Resources: Yes; 17. Risk Category : High		<ul style="list-style-type: none"> Adapt soil and water conservation practices recommended and appropriate in sloping lands. Encourage crop insurance. Introduce more livelihood options compatible to the present condition of the area.
Magsaysay	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 705; 3. Total Agricultural Area (Has): 1580.08; 4. Exposed Area (Has):1416.05; 5. Value Affected(PHP): 84,963,456.74; 6. Farming families attended field school: 100; 7. Proportion of families using sustainable techniques : 75; 8. Families with access to hazard information:211.5; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 15; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 493; 16. Government Resources: Yes;	<ul style="list-style-type: none"> Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> Improve forest cover in watershed areas by planting of indigenous forest species. Encourage planting of high value fruit tree crops. No cutting of trees in the watershed areas. Provision of alternative livelihood. Adapt soil and water conservation practices recommended and appropriate in sloping lands. Encourage crop insurance. Introduce more livelihood options compatible to the present condition of the area.

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Decision Areas	Technical Findings	Implications	Interventions
Moderate			
	17. Risk Category : High		
Malabog	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: Very High; 2. No of Farming Dependent Households: 3030; 3. Total Agricultural Area (Has): 3527.92; 4. Exposed Area (Has):3498.42; 5. Value Affected(Php): 41,396,820.68; 6. Farming families attended field school: 300; 7. Proportion of families using sustainable techniques : 100; 8. Families with access to hazard information:300; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 50; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 500; 16. Government Resources: Yes; 17. Risk Category : High</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance. • Introduce more livelihood options compatible to the present condition of the area.
Malamba	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 1318; 3. Total Agricultural Area (Has): 1729.26768474106; 4. Exposed Area (Has):1535.40; 5. Value Affected(Php): 53,872,656.15; 6. Farming families attended field school: 60; 7. Proportion of families using sustainable</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood.

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate	techniques : 200; 8. Families with access to hazard information:60; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 27; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 132; 16. Government Resources: Yes; 17. Risk Category : High		<ul style="list-style-type: none"> Adapt soil and water conservation practices recommended and appropriate in sloping lands. Encourage crop insurance. Introduce more livelihood options compatible to the present condition of the area.
Marilog	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 4300; 3. Total Agricultural Area (Has): 3936.82; 4. Exposed Area (Has):3803.92; 5. Value Affected(Php): 130,120,979.76; 6. Farming families attended field school: 500; 7. Proportion of families using sustainable techniques : 375; 8. Families with access to hazard information:860; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0.29; 11. Water Impoundment: 0; 12. Access to Insurance: 88; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 2802; 16. Government Resources: Yes;	<ul style="list-style-type: none"> Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. 	<ul style="list-style-type: none"> Improve forest cover in watershed areas by planting of indigenous forest species. Encourage planting of high value fruit tree crops. No cutting of trees in the watershed areas. Provision of alternative livelihood. Adapt soil and water conservation practices recommended and appropriate in sloping lands. Encourage crop insurance. Introduce more livelihood options compatible to the present condition of the area.

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate			
	17. Risk Category : High		
Matina Pangi	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 0; 3. Total Agricultural Area (Has): 213.59; 4. Exposed Area (Has):150.44; 5. Value Affected(PhP): 8,243,207.93; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information;; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 0; 16. Government Resources: Yes; 17. Risk Category : High</p>	<ul style="list-style-type: none"> • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	
New Carmen	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 234; 3. Total Agricultural Area (Has): 956.39; 4. Exposed Area (Has):688.76; 5. Value Affected(PhP): 49,965,435.62; 6. Farming families attended field school: 0; 7. Proportion of families using sustainable</p>	Lack of forest cover may contribute in heavy run off causing landslide in sloping areas.	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood.

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate	techniques : 0; 8. Families with access to hazard information:0; 9. Infra Coverage: x; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 76; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 102; 16. Government Resources: Yes; 17. Risk Category : High		<ul style="list-style-type: none"> Adapt soil and water conservation practices recommended and appropriate in sloping lands. Encourage crop insurance. Introduce more livelihood options compatible to the present condition of the area.
Pandaitan	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: Very High; 2. No of Farming Dependent Households: 1045; 3. Total Agricultural Area (Has): 2036.11; 4. Exposed Area (Has):1951.06; 5. Value Affected(PHP): 25,635,054.87; 6. Farming families attended field school: 240; 7. Proportion of families using sustainable techniques : 80; 8. Families with access to hazard information:240; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 1; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 40; 16. Government Resources: Yes;	<ul style="list-style-type: none"> Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> Improve forest cover in watershed areas by planting of indigenous forest species. Encourage planting of high value fruit tree crops. No cutting of trees in the watershed areas. Provision of alternative livelihood. Adapt soil and water conservation practices recommended and appropriate in sloping lands. Encourage crop insurance. Introduce more livelihood options compatible to the present condition of the area.

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate			
	17. Risk Category : High		
Paquibato	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Very High; 2. No of Farming Dependent Households: 788; 3. Total Agricultural Area (Has): 1375.53; 4. Exposed Area (Has):1196.30; 5. Value Affected(Php): 19,997,383.31; 6. Farming families attended field school: 160; 7. Proportion of families using sustainable techniques : 70; 8. Families with access to hazard information:160; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 2; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 200; 16. Government Resources: Yes; 17. Risk Category : High</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance. • Introduce more livelihood options compatible to the present condition of the area.
Salaysay	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 904; 3. Total Agricultural Area (Has): 1854.45; 4. Exposed Area (Has):1845.24; 5. Value Affected(Php): 67,108.33; 6. Farming families attended field school: 150; 7. Proportion of families using sustainable</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood.

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate	techniques : 300; 8. Families with access to hazard information:150; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0.42; 11. Water Impoundment: 0; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 632; 16. Government Resources: Yes; 17. Risk Category : High		<ul style="list-style-type: none"> • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance. • Introduce more livelihood options compatible to the present condition of the area.
Suawan	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 1240; 3. Total Agricultural Area (Has): 1684.67; 4. Exposed Area (Has):1127.29; 5. Value Affected(PHP): 38,544,404.61; 6. Farming families attended field school: 100; 7. Proportion of families using sustainable techniques : 100; 8. Families with access to hazard information:620; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 1.11; 11. Water Impoundment: 0; 12. Access to Insurance: 95; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 868; 16. Government Resources: Yes;	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance. • Introduce more livelihood options

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate			
	17. Risk Category : High		
Tambobong	<p>1. Susceptibility: M/H/;</p> <p>1.1 Likelihood of Occurrence: Moderate;</p> <p>1.2 Severity of Consequence: High;</p> <p>2. No of Farming Dependent Households: 1082;</p> <p>3. Total Agricultural Area (Has): 349.39;</p> <p>4. Exposed Area (Has):326.52;</p> <p>5. Value Affected(Php): 10,477,788.48;</p> <p>6. Farming families attended field school: 75;</p> <p>7. Proportion of families using sustainable techniques : 150;</p> <p>8. Families with access to hazard information:75;</p> <p>9. Infra Coverage: Yes;</p> <p>10. Irrigation Coverage: 0;</p> <p>11. Water Impoundment: 0;</p> <p>12. Access to Insurance: 1151;</p> <p>13. Extension Services: Yes;</p> <p>14. EWS: Yes;</p> <p>15. Alternative Livelihood: 45;</p> <p>16. Government Resources: Yes;</p> <p>17. Risk Category : High</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood. • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance. • Introduce more livelihood options compatible to the present condition of the area.
Tamugan	<p>1. Susceptibility: M/H/;</p> <p>1.1 Likelihood of Occurrence: Moderate;</p> <p>1.2 Severity of Consequence: High;</p> <p>2. No of Farming Dependent Households: 2123;</p> <p>3. Total Agricultural Area (Has): 946.09;</p> <p>4. Exposed Area (Has):157.57;</p> <p>5. Value Affected(Php): 6,179,095.88;</p> <p>6. Farming families attended field school: 200;</p> <p>7. Proportion of families using sustainable</p>	<ul style="list-style-type: none"> • Damage to crops is expected to be high due to absence of soil and water conservation practices resulting to landslide in sloping and steep areas. • Significant portion of the population are dependent on crop production. The lack of livelihood contributed to sensitivity and adaptive capacities of farmers. 	<ul style="list-style-type: none"> • Improve forest cover in watershed areas by planting of indigenous forest species. • Encourage planting of high value fruit tree crops. • No cutting of trees in the watershed areas. • Provision of alternative livelihood.

Table NR – 33. Disaster Risk Assessment Summary Matrix for Natural Resource-Based Production Areas to Landslide, Davao City

Decision Areas	Technical Findings	Implications	Interventions
Moderate	techniques : 100; 8. Families with access to hazard information:200; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0; 11. Water Impoundment: 0; 12. Access to Insurance: 80; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 1910; 16. Government Resources: Yes; 17. Risk Category : High		<ul style="list-style-type: none"> • Adapt soil and water conservation practices recommended and appropriate in sloping lands. • Encourage crop insurance. • Introduce more livelihood options compatible to the present condition of the area.

Summary of Risk Management Options for Natural Resource-Based Production Areas

The following tables consist the Major Decision Areas for Natural Resource-Based Production Areas (NRBPAs). These areas shall be given with utmost priority to prevent from having massive extent of damages to natural resources, including the agricultural crops, poultry, livestock, and fishes that are crucial for ensuring food security for the entire populace.

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas

Major Decision Areas	Description	Area Allocation	Risk Management Options
I			
Marilog District			
Buda	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 554; 3. Total Agricultural Area (Has): 1,422.89; 4. Exposed Area (Has):673.93; 5. Value Affected(PhP): 50,949,549.00; 6. Farming families attended field school: 20; 7. Proportion of families using sustainable techniques : 10; 8. Families with access to hazard information:20; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 1.05; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 388; 16. Government Resources: Yes; 17. Risk Category : High	1,422.90	Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 1,422.90 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)
Suawan	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: High;	1,684.68	Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 1,684.68 hectares of

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
Suawan	<p>2. No of Farming Dependent Households: 1240; 3. Total Agricultural Area (Has): 1684.67; 4. Exposed Area (Has):1127.29; 5. Value Affected(PhP): 38,544,404.61; 6. Farming families attended field school: 100; 7. Proportion of families using sustainable techniques : 100; 8. Families with access to hazard information:620; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 1.11; 11. Water Impoundment: ; 12. Access to Insurance: 95; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 868; 16. Government Resources: Yes; 17. Risk Category : High</p>		<p>high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)</p>
Paquibato District			
Pandaitan	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Frequent; 1.2 Severity of Consequence: Very High; 2. No of Farming Dependent Households: 1045; 3. Total Agricultural Area (Has): 2036.11; 4. Exposed Area (Has):1951.06; 5. Value Affected(PhP): 25,635,054.87; 6. Farming families attended field school: 240; 7. Proportion of families using sustainable techniques : 80; 8. Families with access to hazard information:240; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 1;</p>	2,036.11	<p>Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 2,036.11 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)</p>

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
Paquibato District			
	13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 40; 16. Government Resources: Yes; 17. Risk Category : High		
Talomo District			
Catalunan Grande	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 862.73; 4. Exposed Area (Has):47.40; 5. Value Affected(PhP): 3,513,303.03; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information;; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Risk Category : Moderate	862.74	Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 862.74 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan) Establishment of warehouses for temporary storage
II			
Marilog District			
Baganihan	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 375; 3. Total Agricultural Area (Has): 168.75;	168.75	Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 168.75 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance)

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
	<p>4. Exposed Area (Has):1.55; 5. Value Affected(PhP): 74,450.20; 6. Farming families attended field school: 30; 7. Proportion of families using sustainable techniques : 15; 8. Families with access to hazard information:112.5; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 80; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 262; 16. Government Resources: Yes; 17. Risk Category : High</p>		<p>Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)</p>
Datu Salumay	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 578; 3. Total Agricultural Area (Has): 681.46; 4. Exposed Area (Has):447.74; 5. Value Affected(PhP): 0; 6. Farming families attended field school: 150; 7. Proportion of families using sustainable techniques : 150; 8. Families with access to hazard information:150; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 404; 16. Government Resources: Yes;</p>	681.46	<p>Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 681.46 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)</p>

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
Malamba	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 1318; 3. Total Agricultural Area (Has): 1729.26768474106; 4. Exposed Area (Has):1535.40; 5. Value Affected(PhP): 53,872,656.15; 6. Farming families attended field school: 60; 7. Proportion of families using sustainable techniques : 200; 8. Families with access to hazard information:60; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 27; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 132; 16. Government Resources: Yes; 17. Risk Category : High</p>	1,729.27	<p>Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 1,729.27 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)</p>
Marilog	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 4300; 3. Total Agricultural Area (Has): 3936.82; 4. Exposed Area (Has):3803.92; 5. Value Affected(PhP): 130,120,979.76; 6. Farming families attended field school: 500; 7. Proportion of families using sustainable techniques : 375; 8. Families with access to hazard information:860; 9. Infra Coverage: Yes;</p>	3,936.82	<p>Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 3,936.82 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)</p>

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
	<p>10. Irrigation Coverage: 0.29; 11. Water Impoundment: ; 12. Access to Insurance: 88; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 2802; 16. Government Resources: Yes; 17. Risk Category : High</p>		
Salaysay	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 904; 3. Total Agricultural Area (Has): 1854.45; 4. Exposed Area (Has):1845.24; 5. Value Affected(PhP): 67,108.33; 6. Farming families attended field school: 150; 7. Proportion of families using sustainable techniques : 300; 8. Families with access to hazard information:150; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 0.42; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 632; 16. Government Resources: Yes; 17. Risk Category : High</p>	1,854.46	<p>Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 1,854.46 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)</p>
Tamugan	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 2123; 3. Total Agricultural Area (Has): 946.09; 4. Exposed Area (Has):157.57;</p>	946.09	<p>Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 946.09 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification</p>

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
	5. Value Affected(PhP): 6,179,095.88; 6. Farming families attended field school: 200; 7. Proportion of families using sustainable techniques : 100; 8. Families with access to hazard information:200; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 80; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 1910; 16. Government Resources: Yes; 17. Risk Category : High		Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)
Paquibato District			
Fatima	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: Very High; 2. No of Farming Dependent Households: 992; 3. Total Agricultural Area (Has): 2473.50; 4. Exposed Area (Has):2186.57; 5. Value Affected(PhP): 12,500,672.71; 6. Farming families attended field school: 180; 7. Proportion of families using sustainable techniques : 47; 8. Families with access to hazard information:180; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 50; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 70;	2,473.51	Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 2,473.51 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
	16. Government Resources: Yes; 17. Risk Category : High		
Lumiad	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 488; 3. Total Agricultural Area (Has): 885.86; 4. Exposed Area (Has):869.45; 5. Value Affected(PhP): 62,549,542.73; 6. Farming families attended field school: 110; 7. Proportion of families using sustainable techniques : 60; 8. Families with access to hazard information:110; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 0; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 90; 16. Government Resources: Yes; 17. Risk Category : High	885.86	Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 885.86 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)
Malabog	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: Very High; 2. No of Farming Dependent Households: 3030; 3. Total Agricultural Area (Has): 3527.92; 4. Exposed Area (Has):3498.42; 5. Value Affected(PhP): 41,396,820.68; 6. Farming families attended field school: 300; 7. Proportion of families using sustainable techniques : 100; 8. Families with access to hazard information:300; 9. Infra Coverage: Yes;	3,527.92	Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 3,527.92 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
	10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 50; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 500; 16. Government Resources: Yes; 17. Risk Category : High		
Baguio District			
Baguio	1. Susceptibility: /H/; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 858; 3. Total Agricultural Area (Has): 638.56; 4. Exposed Area (Has):48.53; 5. Value Affected(PhP): 1,853,328.62; 6. Farming families attended field school: 47; 7. Proportion of families using sustainable techniques : 215; 8. Families with access to hazard information:47; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 65; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 48; 16. Government Resources: Yes; 17. Risk Category : Moderate	638.57	Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 638.57 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan) Establishment of warehouses for temporary storage
Carmen	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 441;	340.03	Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 340.03 hectares of high value fruit tree production.

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
	<p>3. Total Agricultural Area (Has): 340.02; 4. Exposed Area (Has):108.82; 5. Value Affected(PhP): 8,553,252.15; 6. Farming families attended field school: 55; 7. Proportion of families using sustainable techniques : 348; 8. Families with access to hazard information:55; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 24; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 68; 16. Government Resources: Yes; 17. Risk Category : High</p>		<p>Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)</p>
Tambobong	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 1082; 3. Total Agricultural Area (Has): 349.39; 4. Exposed Area (Has):326.52; 5. Value Affected(PhP): 10,477,788.48; 6. Farming families attended field school: 75; 7. Proportion of families using sustainable techniques : 150; 8. Families with access to hazard information:75; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 1151; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 45;</p>	349.39	<p>Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 349.39 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)</p>

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
	16. Government Resources: Yes; 17. Risk Category : High		
Calinan District			
Inayangan	1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: Very High; 2. No of Farming Dependent Households: 1401; 3. Total Agricultural Area (Has): 1138.26; 4. Exposed Area (Has):1062.21; 5. Value Affected(PhP): 36,163,086.09; 6. Farming families attended field school: 45; 7. Proportion of families using sustainable techniques : 10; 8. Families with access to hazard information:45; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 60; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Risk Category : High	1,138.27	Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 1,138.27 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)
Buhangin District			
Buhangin	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 123.37; 4. Exposed Area (Has):116.25; 5. Value Affected(PhP): 0; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : ;	123.37	Improve extension services with emphasis on climate and hazard resilient production techniques. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Provision of forestry based alternative and/or non-agriculture based livelihood opportunities

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
	<p>8. Families with access to hazard information;; 9. Infra Coverage: x; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: ; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>		
Tigatto	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 80; 3. Total Agricultural Area (Has): 354.50; 4. Exposed Area (Has):123.65; 5. Value Affected(PhP): 12,489,429.49; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information;; 9. Infra Coverage: Yes; 10. Irrigation Coverage: 8.81; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>	354.51	<p>Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 354.51 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)</p>
Talomo District			
Ma-a	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: Moderate</p>	76.80	<p>Improve extension services with emphasis on climate and hazard resilient production techniques. Encourage the use of risk transfer instrument (i.e. crop insurance)</p>

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
	2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 76.79; 4. Exposed Area (Has):32.05; 5. Value Affected(PhP): 2,209,823.45; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information;; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Risk Category : Moderate		Improve extension services with emphasis on climate and hazard resilient production techniques. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)
Langub	1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 502.36; 4. Exposed Area (Has):357.50; 5. Value Affected(PhP): 26,186,532.63; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information;; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: 1.10; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes;	502.37	Improve extension services with emphasis on climate and hazard resilient production Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
Langub	17. Risk Category : High	502.37	
III			
Marilog District			
Gumitan	<p>1. Susceptibility: M/H/;</p> <p>1.1 Likelihood of Occurrence: Moderate;</p> <p>1.2 Severity of Consequence: Very High;</p> <p>2. No of Farming Dependent Households: 550;</p> <p>3. Total Agricultural Area (Has): 814.49;</p> <p>4. Exposed Area (Has):785.81;</p> <p>5. Value Affected(PhP): 24,796,985.70;</p> <p>6. Farming families attended field school: 25;</p> <p>7. Proportion of families using sustainable techniques : 25;</p> <p>8. Families with access to hazard information:25;</p> <p>9. Infra Coverage: Yes;</p> <p>10. Irrigation Coverage: ;</p> <p>11. Water Impoundment: ;</p> <p>12. Access to Insurance: ;</p> <p>13. Extension Services: Yes;</p> <p>14. EWS: Yes;</p> <p>15. Alternative Livelihood: 398;</p> <p>16. Government Resources: Yes;</p> <p>17. Risk Category : High</p>	814.50	<p>Improve extension services with emphasis on climate and hazard resilient production techniques.</p> <p>Establishment of irrigation and/or rainwater harvesting facilities to sustain 814.50 hectares of high value fruit tree production.</p> <p>Encourage the use of risk transfer instrument (i.e. crop insurance)</p> <p>Crop diversification</p> <p>Changing crop and/or those crops with reduced water requirements</p> <p>Establishment of early warning system for agricultural crop production</p> <p>Provision of forestry based alternative and/or non-agriculture based livelihood opportunities</p> <p>Reduced run-off through watershed reforestation or agro-forestry production</p> <p>Establishment of warehouses for temporary storage</p> <p>Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)</p>
Magsaysay	<p>1. Susceptibility: M/H/VH;</p> <p>1.1 Likelihood of Occurrence: Occasional;</p> <p>1.2 Severity of Consequence: High;</p> <p>2. No of Farming Dependent Households: 705;</p> <p>3. Total Agricultural Area (Has): 1580.08;</p> <p>4. Exposed Area (Has):1416.05;</p> <p>5. Value Affected(PhP): 84,963,456.74;</p> <p>6. Farming families attended field school: 100;</p> <p>7. Proportion of families using sustainable techniques : 75;</p>	1,580.09	<p>Improve extension services with emphasis on climate and hazard resilient production techniques.</p> <p>Establishment of irrigation and/or rainwater harvesting facilities to sustain 1,580.09 hectares of high value fruit tree production.</p> <p>Encourage the use of risk transfer instrument (i.e. crop insurance)</p> <p>Crop diversification</p> <p>Changing crop and/or those crops with reduced water requirements</p> <p>Establishment of early warning system for agricultural crop production</p> <p>Provision of forestry based alternative and/or non-agriculture based livelihood opportunities</p> <p>Reduced run-off through watershed reforestation or agro-forestry production</p>

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
	<p>8. Families with access to hazard information:211.5; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 15; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 493; 16. Government Resources: Yes; 17. Risk Category : High</p>	1,580.09	<p>Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)</p>
Paquibato District			
Paquibato	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Very High; 2. No of Farming Dependent Households: 788; 3. Total Agricultural Area (Has): 1375.53; 4. Exposed Area (Has):1196.30; 5. Value Affected(PhP): 19,997,383.31; 6. Farming families attended field school: 160; 7. Proportion of families using sustainable techniques : 70; 8. Families with access to hazard information:160; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 2; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 200; 16. Government Resources: Yes; 17. Risk Category : High</p>	1,375.53	<p>Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 1,375.53 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)</p>
Tugbok District			
New Carmen	<p>1. Susceptibility: M/H/;</p>	956.39	<p>Improve extension services with emphasis on climate and hazard resilient production</p>

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
	<p>1.1 Likelihood of Occurrence: Moderate; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: 234; 3. Total Agricultural Area (Has): 956.39; 4. Exposed Area (Has):688.76; 5. Value Affected(PHP): 49,965,435.62; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information;; 9. Infra Coverage: x; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: 76; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: 102; 16. Government Resources: Yes; 17. Risk Category : High</p>		<p>techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 956.39 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)</p>
Buhangin District			
Cabantian	<p>1. Susceptibility: M/H/; 1.1 Likelihood of Occurrence: Improbable; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 30; 3. Total Agricultural Area (Has): 231.75; 4. Exposed Area (Has):120.13; 5. Value Affected(PHP): 0; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information;; 9. Infra Coverage: x; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ;</p>	231.75	<p>Improve extension services with emphasis on climate and hazard resilient production techniques. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production</p>

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
	<p>13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>		
Mandug	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: Moderate; 2. No of Farming Dependent Households: 180; 3. Total Agricultural Area (Has): 603.44; 4. Exposed Area (Has):343.04; 5. Value Affected(PhP): 10,291,272.66; 6. Farming families attended field school: ; 7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information;; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Risk Category : Moderate</p>	603.45	<p>Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 603.45 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)</p>
Talomo District			
Matina Pangi	<p>1. Susceptibility: M/H/VH; 1.1 Likelihood of Occurrence: Occasional; 1.2 Severity of Consequence: High; 2. No of Farming Dependent Households: ; 3. Total Agricultural Area (Has): 213.59; 4. Exposed Area (Has):150.44; 5. Value Affected(PhP): 8,243,207.93; 6. Farming families attended field school: ;</p>	213.60	<p>Improve extension services with emphasis on climate and hazard resilient production techniques. Establishment of irrigation and/or rainwater harvesting facilities to sustain 213.60 hectares of high value fruit tree production. Encourage the use of risk transfer instrument (i.e. crop insurance) Crop diversification Changing crop and/or those crops with reduced water requirements Establishment of early warning system for agricultural crop production</p>

Table NR – 1. Summary of Risk Management Options for Natural Resource-Based Production Areas,Cont...

Major Decision Areas	Description	Area Allocation	Risk Management Options
	7. Proportion of families using sustainable techniques : ; 8. Families with access to hazard information;; 9. Infra Coverage: Yes; 10. Irrigation Coverage: ; 11. Water Impoundment: ; 12. Access to Insurance: ; 13. Extension Services: Yes; 14. EWS: Yes; 15. Alternative Livelihood: ; 16. Government Resources: Yes; 17. Risk Category : High		Provision of forestry based alternative and/or non-agriculture based livelihood opportunities Reduced run-off through watershed reforestation or agro-forestry production Establishment of warehouses for temporary storage Establish riverbank easement (i.e. planting of malibago and fruit trees and kawayan)

Map 6.10. Natural Resource Based Production Decision Areas Map

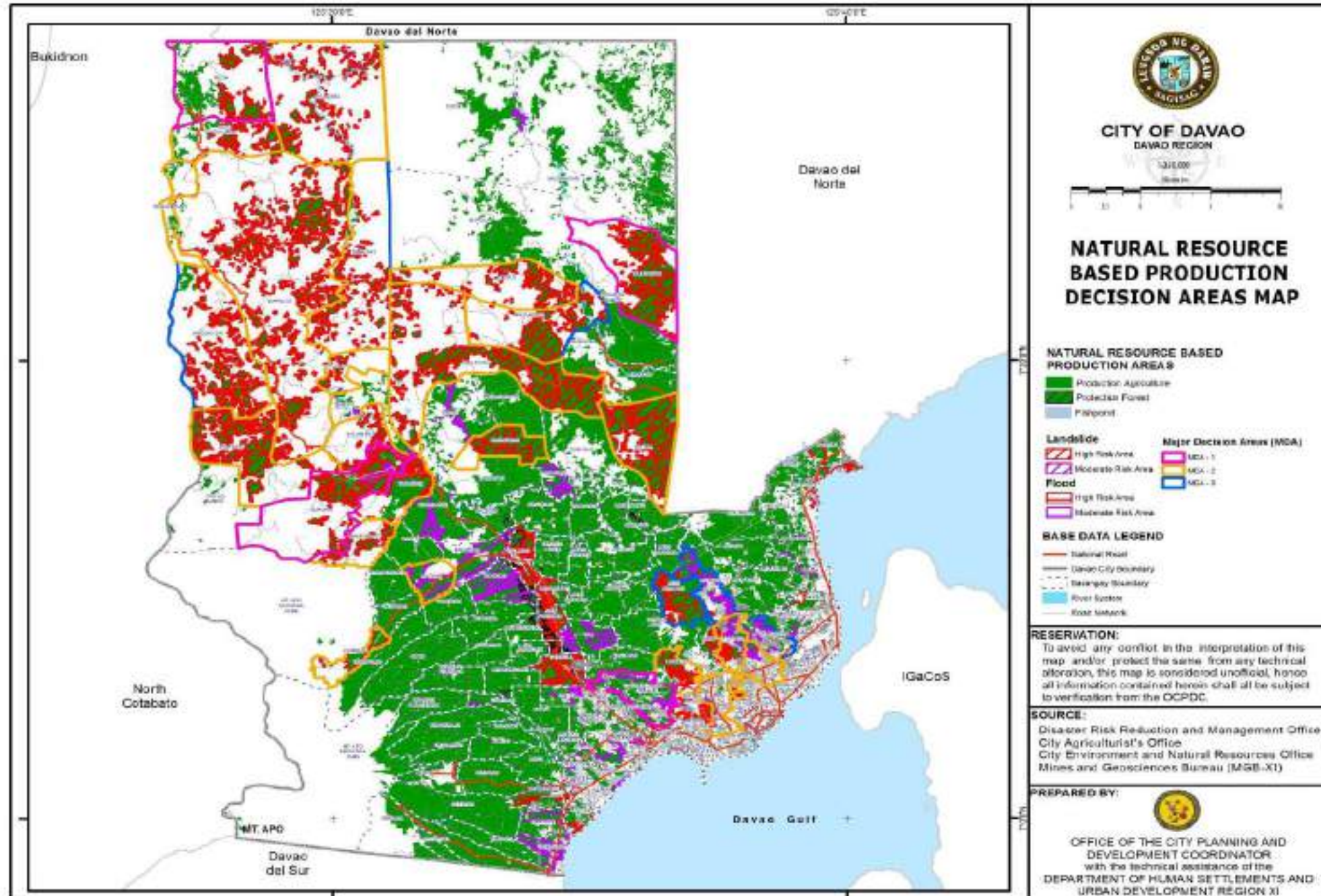


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Climate Change Vulnerability Assessment to Population

Population is among the identified exposure units which are vulnerable to different hazards such as liquefaction, storm surge, floods, landslides, and earthquake within fault line. This section intends to identify the hazard-impact areas and determine interventions especially for the vulnerable and marginalized sectors who face higher exposure to such threats.

Population Exposure Database

The succeeding tables (see beginning next page) include data on population's exposure, vulnerability, and adaptive capacity. Below are the summary of the population exposure database per hazard:

Flood – This hazard can potentially affect 1,625,154 persons, who occupy parcels of residential areas that total to 8,600.07 hectares, in 178 barangays in Davao City (Table PO – 1A to Table PO – 1H). Floods can greatly affect the informal settlers, both the young and old, persons with disabilities, people living in dwelling units with walls made from light to salvageable materials, malnourished individuals, and households living below poverty threshold. Barangay Bucana, which is the most populous barangay with 83,964 persons, has the largest presence of informal settlers that total to 7,405. Talomo Proper also has the highest number of households living in dwelling units with walls made from light to salvageable materials that total to 22,776. Of the total population in Davao City, 40.3% are dependent population or those who are either young (ages 0-14 years old) or old (65 years old and above). On the other hand, the percentage of households living below the poverty threshold is 12%*. The Philippine Statistics Authority (PSA) cites that the Davaoño families consisting of five members, the average family size, shall have a regular monthly income of ₱9,481 to stay out of poverty and meet their basic food and non-food needs. In terms of adaptive capacity, there are approximately 60% of the families in Davao City who have access to post disaster financing and benefits from government agencies like Government Service Insurance System (GSIS) and Social Security System (SSS). A total of 892,578 members and 1,055,525 dependents of Philippine Health Insurance Corp. (PhilHealth) were also identified. Families may also have difficulty to relocate or retrofit given current capacities within short to medium plans. They are only willing to pursue relocation/retrofitting if provided with external assistance from the local and national governments. On another note, the city government has the capacity to generate jobs and provide employment opportunity. The city government, through Public Employment Service Office (PESO), pursues job fairs, special recruitment activities, emergency employment program, Special Program for Employment of Students (SPES), and other programs to provide employment even after disasters. The government also has resources and sufficient budget allocation for disaster-related programs and projects.

* Twelve percent (12%) reflects the poverty incidence or the proportion of families whose income is below the poverty line to the total number of families. This is the poverty incidence rate in Davao del Sur, which includes Davao City in 2015.

Table PO – 1A. Population Exposure Database to Flood, Davao City

Exposure				Vulnerability					Adaptive Capacity								
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Poblacio																	
1-A	7.19	3,103	431.64	11.44	11.18%	40.3%	12%	0.08%	0.70	6.32	-	60% of the families have access	3,296	2,548	-	Yes	Yes
2-A	1.65	3,589	2,170.81	11.90	10.00%				0.84	1.68	-		2,279	2,129	-	Yes	Yes
3-A	0.55	370	671.38	0.27	0.00%				25.00	-	-		543	385	-	Yes	Yes
4-A	2.93	1,683	573.66	20.38	14.56%				5.28	8.54	3.66		1,177	884	-	Yes	Yes
5-A	21.80	11,436	524.70	1.64	11.92%				5.84	10.65	0.81		6,501	6,906	-	Yes	Yes
6-A	4.39	2,084	474.62	16.27	16.70%				4.48	7.46	0.37		1,194	1,342	-	Yes	Yes
7-A	10.56	3,984	377.39	2.28	6.93%				5.44	6.49	0.18		2,018	1,883	-	Yes	Yes
8-A	86.07	11,075	128.68	4.41	5.64%				4.98	7.07	0.98		3,635	4,250	-	Yes	Yes
9-A	14.10	5,698	404.09	0.97	4.41%				3.70	4.97	0.77		3,034	2,942	-	Yes	Yes
10-A	5.84	6,764	1,159.14	4.95	2.96%				4.26	6.68	0.00		2,178	2,263	-	Yes	Yes
11-B	2.56	1,901	742.37	11.31	10.36%				0.66	3.29	1.97		1,109	1,008	-	Yes	Yes
12-B	1.20	840	701.81	19.17	74.17%				4.84	9.60	0.80		528	509	-	Yes	Yes
13-B	0.57	427	743.68	8.43	6.56%				11.63	18.18	15.91		6,785	6,834	-	Yes	Yes
14-B	3.10	1,175	379.49	8.85	3.57%				3.67	2.75	11.01		613	647	-	Yes	Yes
15-B	1.47	2,891	1,973.02	12.90	9.34%				0.59	0.30	3.26		1,395	1,261	-	Yes	Yes
16-B	0.44	840	1,901.91	-	0.00%				4.00	2.40	0.80		320	284	-	Yes	Yes
17-B	0.54	810	1,509.12	-	0.86%				3.88	5.83	4.85		489	463	-	Yes	Yes
18-B	0.42	1,832	4,346.06	0.16	15.72%				3.19	9.57	2.13		1,277	1,265	-	Yes	Yes
19-B	190.47	31,766	166.78	2.06	3.56%				3.36	3.80	2.54		15,128	15,784	-	Yes	Yes
20-B	14.69	4,581	311.90	0.59	4.26%				1.61	5.38	1.61		2,412	2,022	-	Yes	Yes

Table PO – 1B. Population Exposure Database to Flood, Davao City

Exposure				Vulnerability					Adaptive Capacity								
Barangay	Residential Area	Barangay Population	Population Density Per	Percentage of Informal	Percentage of Population Living	Percentage of Young and	Percentage of House-	Percentage of Persons	Percentage of Malnourished			Access to Post Disaster	PhilHealth Coverage		Household Financial	Government Capacity	Government Resources
									Weight for	Heigh	Length		Mem-	Depend-			
21-C	7.15	7,478	1,046.30	6.33	9.08%	40.3%	12%	0.08%	2.04	3.80	0.00	60% of the families have access	4,803	5,199	-	Yes	Yes
22-C	6.65	6,634	998.29	1.37	8.83%				1.30	0.91	0.00		4,165	4,465	-	Yes	Yes
23-C	14.60	16,489	1,129.15	17.28	13.42%				3.12	2.52	0.15		9,201	9,147	-	Yes	Yes
24-C	2.52	2,602	1,034.44	2.15	3.88%				0.45	-	-		1,221	1,142	-	Yes	Yes
25-C	1.73	1,967	1,137.04	0.05	6.61%				0.00	0.00	0.00		749	688	-	Yes	Yes
26-C	2.26	2,510	1,111.51	-	3.98%				0.54	0.81	0.00		1,305	1,248	-	Yes	Yes
27-C	0.66	2,152	3,241.36	15.43	12.27%				2.70	2.70	0.00		1,443	1,294	-	Yes	Yes
28-C	1.65	2,270	1,375.96	0.31	8.72%				1.05	1.75	0.00		1,214	1,253	-	Yes	Yes
29-C	1.07	1,557	1,460.89	6.10	5.59%				2.13	0.00	0.00		705	618	-	Yes	Yes
30-D	1.38	1,608	1,166.94	3.54	3.67%				0.00	0.00	0.00		695	616	-	Yes	Yes
31-D	17.40	8,321	478.08	5.70	4.98%				3.78	4.98	0.46		4,196	4,455	-	Yes	Yes
32-D	2.77	1,985	717.19	4.23	3.88%				3.75	4.58	0.42		1,253	1,140	-	Yes	Yes
33-D	3.86	2,033	526.19	2.80	9.05%				5.30	6.23	3.43		1,210	1,073	-	Yes	Yes
34-D	2.48	1,682	677.94	22.41	0.89%				0.47	0.00	1.40		1,847	886	-	Yes	Yes
35-D	0.35	578	1,666.45	0.35	18.69%				0.00	4.35	1.45		463	288	-	Yes	Yes
36-D	2.39	1,581	661.51	2.53	4.68%				0.00	1.43	0.00		912	837	-	Yes	Yes
37-D	4.59	6,740	1,469.41	2.55	7.82%				0.78	0.49	0.29		3,932	4,092	-	Yes	Yes
38-D	1.84	1,505	816.67	19.00	15.48%				2.21	1.10	0.00		895	823	-	Yes	Yes
39-D	3.62	5,143	1,419.48	6.79	3.25%				1.26	2.81	1.26		2,477	2,566	-	Yes	Yes
40-D	1.38	2,437	1,763.80	11.98	11.78%				1.21	4.53	0.91		1,248	1,314	-	Yes	Yes

Table PO – 1C. Population Exposure Database to Flood, Davao City

Exposure				Vulnerability					Adaptive Capacity								
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Talomo District																	
Bago Aplaya	100.52	15,918	158.35	0.37	0.00%	40.3%	12%	0.07%	5.57	11.79	3.31	-DO-	9,399	11,284	-	Yes	Yes
Bago Gallera	140.21	17,378	123.94	1.59	4.25%				1.78	1.82	0.08		7,636	9,068	-	Yes	Yes
Baliok	84.28	16,140	191.51	0.05	0.00%				1.80	1.93	0.41		5,760	6,882	-	Yes	Yes
Bucana	237.30	83,964	353.83	9.05	14.46%				2.11	2.57	2.14		15,137	13,389	-	Yes	Yes
Catalunan Grande	324.06	32,461	100.17	2.22	6.65%				0.44	0.38	0.12		19,488	23,415	-	Yes	Yes
Catalunan Pequeño	211.61	22,809	107.79	0.89	3.73%				1.57	4.23	0.00		13,381	17,066	-	Yes	Yes
Dumoy	171.70	18,622	108.45	1.75	0.00%				3.46	4.24	0.09		9,920	12,762	-	Yes	Yes
Langub	14.46	2,883	199.42	0.21	11.48%				0.26	0.67	0.09		1,285	1,516	-	Yes	Yes
Ma-a	452.85	59,803	132.06	5.01	6.25%				5.78	20.87	2.40		32,669	37,525	-	Yes	Yes
Magtuod	56.05	5,058	90.24	5.24	10.28%				0.04	0.10	0.00		2,062	2,709	-	Yes	Yes
Matina Aplaya	166.75	33,384	200.20	7.58	8.37%				1.22	1.59	2.05		20,862	24,144	-	Yes	Yes
Matina Crossing	261.39	32,436	124.09	6.17	0.00%				2.69	2.64	0.88		12,355	13,798	-	Yes	Yes
Matina Pangí	162.30	18,081	111.41	3.03	9.49%				1.10	0.20	0.24		8,740	10,911	-	Yes	Yes
Talomo	311.47	59,678	191.60	7.09	38.16%	2.44	6.92	2.20	37,014	42,322	-	Yes	Yes				

Table PO – 1D. Population Exposure Database to Flood, Davao City

Exposure				Vulnerability						Adaptive Capacity							
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Agdao District																	
Agdao Proper	7.86	8,897	1,132.13	21.30	19.13%	40.3%	12%	0.07%	1.82	2.78	0.19	-DO-	39,982	47,028	-	Yes	Yes
Centro	24.77	13,652	551.21	1.05	7.27%				2.98	6.84	0.15		1,747	1,923	-	Yes	Yes
Gov. Paciano Bangoy	22.55	8,904	394.89	5.35	8.77%				4.14	7.89	1.87		1,985	2,240	-	Yes	Yes
Gov. Vicente Duterte	21.81	8,816	404.24	16.16	11.74%				7.40	13.31	1.50		1,114	1,193	-	Yes	Yes
Tomas Monteverde	2.36	5,716	2,427.02	13.59	10.29%				3.74	3.87	0.13		1,134	1,478	-	Yes	Yes
Lapu - Lapu	25.12	10,306	410.22	8.06	3.83%				3.38	3.09	0.35		3,206	3,565	-	Yes	Yes
Leon Garcia Sr.	12.47	5,783	463.86	0.64	0.00%				6.67	5.44	2.40		4,127	4,384	-	Yes	Yes
Rafael Castillo	13.18	11,738	890.76	2.26	5.20%				3.42	5.38	0.49		1,927	1,577	-	Yes	Yes
San Antonio	27.41	2,966	108.23	5.90	12.98%				3.66	3.24	0.00		2,737	2,768	-	Yes	Yes
Ubalde	6.37	9,903	1,553.58	1.51	1.40%				4.29	7.08	3.86		1,435	1,421	-	Yes	Yes
Wilfredo Aquino	27.58	15,586	565.04	3.46	1.02%				1.26	3.05	1.41		2,313	2,333	-	Yes	Yes

Table PO – 1E. Population Exposure Database to Flood, Davao City

Exposure				Vulnerability						Adaptive Capacity							
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Buhangin District																	
A. Anglongto	167.48	13,539	80.84	29.03	3.84%	40.3%	12%	0.06%	1.29	0.91	0.76	-DO-	-	-	-	Yes	Yes
Acacia	15.40	3,262	211.77	29.80	11.56%				3.21	6.04	2.64		4,382	5,328	-	Yes	Yes
Buhangin	355.82	65,461	183.97	23.82	6.67%				1.03	0.92	0.69		60,804	70,959	-	Yes	Yes
Cabantian	332.16	43,758	131.74	19.33	2.13%				0.39	0.14	0.00		19,720	22,834	-	Yes	Yes
Callawa	8.34	3,553	425.85	25.33	9.85%				3.31	3.31	0.74		1,134	1,395	-	Yes	Yes
Communal	171.91	16,740	97.38	5.30	0.00%				1.54	1.77	0.23		3,556	3,801	-	Yes	Yes
Indangan	258.09	14,867	57.60	0.06	0.00%				4.29	6.68	0.54		5,801	6,533	-	Yes	Yes
Mandug	175.55	13,594	77.44	22.62	6.14%				5.81	14.53	2.14		8,673	10,635	-	Yes	Yes
Pampangga	54.09	14,381	265.89	0.01	0.00%				3.57	8.38	6.12		18,212	20,626	-	Yes	Yes
Sasa	237.68	52,386	220.40	24.37	6.49%				4.43	8.24	1.03		35,744	42,127	-	Yes	Yes
Tigatto	273.57	36,387	133.01	14.36	2.75%				3.30	2.67	0.72		9,143	10,354	-	Yes	Yes
V. Hizon	124.53	11,265	90.46	22.86	3.83%				0.85	0.85	0.00		-	-	-	Yes	Yes
Waan	39.30	3,925	99.87	24.61	12.51%				3.19	4.13	1.50		1,524	1,763	-	Yes	Yes

Table PO – 1F. Population Exposure Database to Flood, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Bunawan District																	
Lasang	53.31	10,223	191.76	9.33	14.60%	40.3%	12%	0.05%	10.69	17.30	1.02	-DO-	3,894	3,970	-	Yes	Yes
Bunawan	128.46	23,495	182.89	0.45	10.75%				5.26	9.29	0.82		19,877	23,810	-	Yes	Yes
Gatungan	2.22	1,190	535.81	-	10.84%				4.53	6.78	0.58		441	624	-	Yes	Yes
Ilang	134.12	24,947	186.00	0.87	8.09%				3.86	4.61	0.22		11,419	13,918	-	Yes	Yes
Mahayag	59.43	6,307	106.12	0.02	8.58%				3.95	5.41	0.00		1,491	1,942	-	Yes	Yes
Mudiang	71.06	2,937	41.33	0.03	7.08%				2.56	1.40	0.93		1,175	1,364	-	Yes	Yes
Panacan	274.98	35,806	130.22	4.92	6.28%				12.05	22.89	4.22		24,476	28,076	-	Yes	Yes
San Isidro	28.72	5,333	185.66	-	3.21%				5.18	5.76	0.33		1,094	1,485	-	Yes	Yes
Tibungco	141.33	41,864	296.22	5.83	14.08%				4.48	6.96	0.07		25,271	29,843	-	Yes	Yes

Table PO – 1G. Population Exposure Database to Flood, Davao City

Exposure				Vulnerability						Adaptive Capacity							
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Paquibato District																	
Colosas	9.80	4,731	482.82	-	20.42%	40.3%	12%	0.09%	10.53	18.17	2.38	-DO-	1,229	741	-	Yes	Yes
Fatima	10.80	3,502	324.18	3.51	23.99%				12.28	10.02	0.00		627	517	-	Yes	Yes
Lumiad	9.12	1,553	170.29	-	20.35%				20.29	10.36	0.84		487	555	-	Yes	Yes
Mabuhay	7.57	1,062	140.29	-	14.69%				5.03	15.82	2.63		244	310	-	Yes	Yes
Malabog	19.18	10,816	564.03	-	0.00%				9.08	19.45	0.00		3,770	2,794	-	Yes	Yes
Mapula	15.55	2,876	184.93	-	0.00%				15.57	20.75	0.21		1,005	397	-	Yes	Yes
Pañalum	2.12	1,831	864.98	-	-				16.56	13.87	0.76		810	1,120	-	Yes	Yes
Pandaitan	9.86	4,037	409.26	-	13.57%				8.20	2.83	2.23		1,365	891	-	Yes	Yes
Paquibato	13.38	2,495	186.53	2.69	18.16%				9.09	8.70	0.92		5,247	7,433	-	Yes	Yes
Paradise Embac	2.07	2,654	1,285.20	-	18.09%				7.92	2.99	0.00		978	1,635	-	Yes	Yes
Salapawan	3.26	2,282	700.67	-	0.00%				0.00	0.00	0.00		609	304	-	Yes	Yes
Sumimao	1.84	1,666	906.88	3.06	21.19%				4.86	15.41	0.00		482	559	-	Yes	Yes
Tapak	18.76	5,258	280.26	-	20.88%	17.11	12.29	0.00	1,508	334	-	Yes	Yes				

Table PO – 1H. Population Exposure Database to Flood, Davao City

Exposure				Vulnerability					Adaptive Capacity								
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Baguio District																	
Baguio	12.60	4,655	369.56	19.40	6.68%	40.3%	12%	0.05%	2.03	4.21	2.34	-DO-	8,836	13,452	-	Yes	Yes
Cadalian	3.22	2,446	758.49	23.55	12.22%				6.90	11.03	2.07		849	1,095			
Carmen	1.52	2,156	1,419.19	23.42	19.02%				11.72	13.67	1.17		566	683	-	Yes	Yes
Gumalang	4.62	5,081	1,099.75	22.61	12.04%				4.50	6.33	0.42		1,697	2,077	-	Yes	Yes
Malagos	4.34	6,524	1,503.48	21.06	9.03%				4.20	7.97	2.91		1,886	2,443	-	Yes	Yes
Tambobong	4.85	5,993	1,234.41	22.41	18.42%				6.79	19.72	0.26		1,952	2,163	-	Yes	Yes
Tawan-Tawan	2.84	3,889	1,367.00	23.27	11.70%				5.04	5.22	0.00		1,283	1,548	-	Yes	Yes
Wines	2.17	3,129	1,443.91	24.80	8.92%				2.74	5.22	0.50		1,147	1,382	-	Yes	Yes

Table PO – 1I. Population Exposure Database to Flood, Davao City

Exposure				Vulnerability						Adaptive Capacity							
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Calinan District																	
Biao Joaquin	3.25	2,289	704.29	0.70	10.31%	40.3%	12%	0.16%	2.90	5.81	0.00	-DO-	907	1,327	-	Yes	Yes
Calinan	111.68	23,052	206.41	0.38	4.95%				2.71	2.71	0.31		37,809	55,479	-	Yes	Yes
Cawayan	1.90	2,295	1,209.48	1.44	10.68%				2.05	4.45	0.68		566	591	-	Yes	Yes
Dacudao	7.27	4,418	608.07	0.68	14.19%				5.93	7.99	0.78		1,245	1,485	-	Yes	Yes
Dalagdag	2.76	934	338.32	2.78	20.99%				2.68	5.22	0.00		325	346	-	Yes	Yes
Dominga	1.77	1,607	908.58	-	16.55%				6.23	11.57	0.00		307	363	-	Yes	Yes
Inayangan	3.33	4,832	1,449.75	-	17.40%				4.25	8.33	0.00		1,454	1,994	-	Yes	Yes
Lacson	5.22	5,873	1,125.29	0.58	10.52%				8.95	16.53	0.83		1,089	1,294	-	Yes	Yes
Lamanan	4.70	4,538	966.12	3.75	14.43%				5.17	12.50	0.00		1,191	1,390	-	Yes	Yes
Lampianao	2.41	845	350.01	-	13.25%				4.85	8.65	0.00		270	283	-	Yes	Yes
Megkawayan	5.99	3,015	503.12	-	16.85%				12.57	14.66	0.00		604	588	-	Yes	Yes
Pangyan	5.65	2,035	360.38	-	9.24%				1.98	7.14	0.00		427	709	-	Yes	Yes
Riverside	22.28	5,450	244.64	16.07	8.31%				3.41	5.56	2.14		780	973	-	Yes	Yes
Saloy	2.03	2,112	1,039.57	-	18.56%				5.06	5.45	0.00		418	689	-	Yes	Yes
Sirib	7.86	5,199	661.77	-	15.87%				4.87	9.43	0.44		1,789	2,273	-	Yes	Yes
Subasta	10.24	3,641	355.62	0.66	21.15%				6.79	14.97	1.80		759	1,069	-	Yes	Yes
Talomo River	20.66	6,846	331.29	0.72	5.24%				2.44	5.96	0.36		1,398	1,901	-	Yes	Yes
Tamayong	4.85	7,273	1,498.10	2.45	14.82%	10.93	25.18	1.29	1,847	2,419	-	Yes	Yes				
Wangan	3.45	5,821	1,686.18	0.12	10.62%	0.86	0.74	0.12	1,459	1,673	-	Yes	Yes				

Table PO – 1J. Population Exposure Database to Flood, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Marilog District																	
Bantol	2.73	2,324	852.01	0.04	18.93%	40.3%	12%	0.09%	0.66	18.21	0.00	-DO-	763	376	-	Yes	Yes
Dalag Lumot	10.73	1,864	173.68	0.32	17.06%				10.62	6.59	0.00		571	301	-	Yes	Yes
Gumitan	8.53	1,756	205.98	-	0.00%				17.97	59.91	8.29		644	202	-	Yes	Yes
Malamba	13.27	4,864	366.62	1.05	10.90%				9.13	17.97	0.14		1,407	747	-	Yes	Yes
Marilog	95.55	16,188	169.42	-	0.00%				11.04	16.60	0.09		13,227	16,556	-	Yes	Yes
Salaysay	10.44	4,431	424.37	-	0.00%				9.49	18.31	1.19		1,877	2,970	-	Yes	Yes
Suawan	7.71	4,586	594.94	2.73	20.15%				9.90	14.65	0.40		933	1,076	-	Yes	Yes
Tamugan	10.47	8,351	797.42	0.02	0.00%				1.64	8.11	0.00		2,704	2,814	-	Yes	Yes

Table PO – 1K. Population Exposure Database to Flood, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Toril District																	
Alambre	8.01	2,010	250.92	-	10.75%	40.3%	12%	0.07%	5.32	4.61	0.71	-DO-	1,297	1,421	-	Yes	Yes
Atan-Awe	0.91	1,119	1,228.39	-	20.82%				6.33	2.53	1.27		830	854	-	Yes	Yes
Bankas Heights	32.04	7,671	239.43	-	0.00%				1.39	1.47	0.17		2,890	3,479	-	Yes	Yes
Baracatan	4.31	2,895	671.19	2.25	17.55%				4.18	5.13	5.84		1,571	2,006	-	Yes	Yes
Bato	46.16	10,007	216.79	-	0.00%				4.07	3.35	1.53		2,958	3,636	-	Yes	Yes
Bayabas	3.35	2,989	893.06	0.23	13.72%				2.43	6.68	0.00		1,304	1,726	-	Yes	Yes
Binugao	54.54	6,934	127.14	0.06	11.93%				3.02	2.17	0.00		2,803	3,748	-	Yes	Yes
Camansi	2.46	1,189	483.17	0.84	10.01%				1.32	0.00	0.63		295	356	-	Yes	Yes
Catigan	6.36	3,044	478.56	-	19.45%				6.56	26.47	8.14		1,338	1,407	-	Yes	Yes
Crossing Bayabas	96.18	11,490	119.47	2.21	7.30%				2.99	2.18	1.00		3,436	4,445	-	Yes	Yes
Daliao	113.90	21,124	185.46	0.33	5.52%				1.34	4.43	0.21		7,644	10,032	-	Yes	Yes
Daliaon Plantation	5.75	3,214	559.38	12.41	22.96%				0.62	6.02	0.00		1,120	1,371	-	Yes	Yes
Eden	53.21	2,385	44.82	0.25	14.93%				9.97	19.14	1.86		668	826	-	Yes	Yes

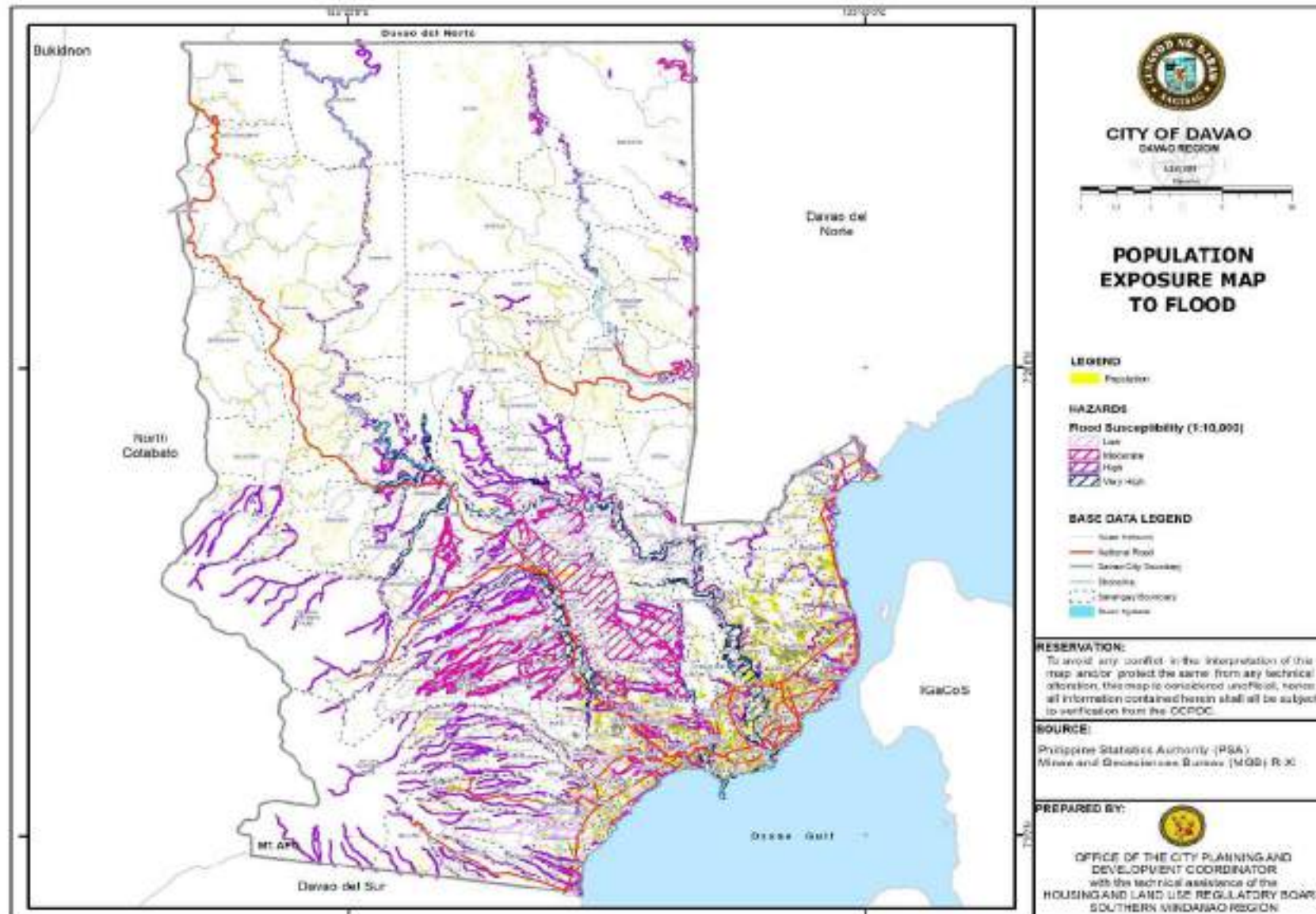
Table PO – 1L. Population Exposure Database to Flood, Davao City

Exposure				Vulnerability						Adaptive Capacity							
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Kilate	2.66	1,309	491.50	0.92	12.99%	40.3%	12%	0.07%	3.11	5.63	2.48	-DO-	395	634	-	Yes	Yes
Lizada	109.55	20,112	183.59	6.96	7.58%				2.19	1.83	0.16		5,810	7,472	-	Yes	Yes
Lubogan	93.41	12,156	130.14	0.32	0.00%				0.57	0.06	0.00		4,164	5,074	-	Yes	Yes
Marapan gi	80.99	6,889	85.06	-	9.06%				6.20	9.60	2.60		2,109	2,890	-	Yes	Yes
Mulig	1.75	2,477	1,418.33	1.13	0.00%				5.86	12.05	3.91		1,007	1,158	-	Yes	Yes
Sibulan	2.31	2,479	1,071.67	-	0.00%				13.36	13.92	0.00		630	886	-	Yes	Yes
Sirawan	88.24	7,140	80.91	4.30	9.87%				4.36	3.82	2.36		2,414	3,208	-	Yes	Yes
Tagluno	2.27	1,391	612.29	22.07	8.91%				1.61	7.69	0.00		592	636	-	Yes	Yes
Tagurano	1.70	1,230	722.17	-	16.83%				5.63	10.00	0.00		428	540	-	Yes	Yes
Tibuloy	3.79	2,218	584.71	-	16.14%				7.96	14.84	5.07		733	958	-	Yes	Yes
Toril	72.35	12,140	167.78	0.30	6.58%				7.13	8.50	0.39		49,031	69,310	-	Yes	Yes
Tungkalan	4.24	2,910	685.98	-	0.00%				0.72	0.72	0.00		738	753	-	Yes	Yes

Table PO – 1M. Population Exposure Database to Flood, Davao City

Exposure				Vulnerability						Adaptive Capacity							
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Tugbok District																	
Angalan	12.64	2,475	195.83	1.45	13.17%	40.3%	12%	0.04%	5.90	22.05	8.48	-DO-	1,562	1,626	-	Yes	Yes
Bago Oshiro	142.40	11,932	83.79	11.41	6.55%				1.53	2.94	0.19		2,807	3,522	-	Yes	Yes
Balengae ng	2.33	2,086	896.13	-	8.82%				7.09	7.46	1.12		856	1,013	-	Yes	Yes
Biao Escuela	9.18	3,294	358.91	-	10.02%				3.06	3.71	0.00		1,384	1,643	-	Yes	Yes
Biao Guianga	3.94	3,664	929.01	-	3.03%				7.04	7.96	2.22		1,709	2,271	-	Yes	Yes
Los Amigos	43.65	9,722	222.74	1.43	7.25%				5.89	11.10	0.00		2,401	2,910	-	Yes	Yes
Manambulan	10.04	2,661	264.92	0.04	8.08%				5.56	8.61	0.00		1,069	1,410	-	Yes	Yes
Manuel Guianga	8.17	6,436	787.48	0.02	14.70%				0.80	1.14	0.00		2,786	3,829	-	Yes	Yes
Matina Biao	2.78	1,811	652.38	1.82	3.87%				0.42	0.42	0.00		1,015	1,578	-	Yes	Yes
Mintal	156.42	13,227	84.56	1.93	7.39%				4.17	3.53	0.53		15,905	20,994	-	Yes	Yes
New Carmen	16.15	2,626	162.64	4.34	15.35%				21.24	30.83	3.63		598	692	-	Yes	Yes
New Valencia	5.41	1,679	310.53	0.12	16.26%				3.32	15.77	0.00		248	311	-	Yes	Yes
Sto. Niño	88.71	20,103	226.61	0.06	7.78%				1.85	2.34	0.19		4,931	5,621	-	Yes	Yes
Tacunan	57.42	12,773	222.45	0.40	4.31%				2.36	6.30	2.18		4,017	4,987	-	Yes	Yes
Tagakpan	10.85	4,208	387.69	0.19	12.69%				3.34	2.97	0.37		1,694	1,771	-	Yes	Yes
Talandang	8.31	3,392	408.07	0.06	15.45%				8.89	11.93	4.56		1,009	1,181	-	Yes	Yes
Tugbok	125.40	15,115	120.53	1.42	4.13%				2.71	4.20	0.92		22,762	28,718	-	Yes	Yes
Ula	14.75	4,130	279.97	0.29	7.48%				9.61	27.96	0.69		1,182	1,460	-	Yes	Yes

Map 2.1. Population Exposure Map to Flood, Davao City



Landslide – This hazard can potentially affect 1,632,911 persons, who occupy parcels of residential areas that total to 8,655.14 hectares in all barangays in Davao City (Table PO – 2A to Table PO – 2K). Landslides can greatly affect especially the informal settlers, young and old population, persons with disabilities, population living in dwelling units with walls made from light to salvageable materials, malnourished individuals, and households living below poverty threshold. Barangay Bucana, which is the most populous barangay with 83,964 persons, has the largest presence of informal settlers that total to 7,405. Talomo Proper has also the highest number of households living in dwelling units with walls made from light to salvageable materials that total to 22,776. Of the total population in Davao City, 40.3% are dependent population or those who are either young or old. On the other hand, the percentage of households living below the poverty threshold is 12%. In terms of adaptive capacity, there are approximately 60% of the families in Davao City who have access to post disaster financing and benefits from government agencies like GSIS and SSS. A total of 894,340 members and 1,057,773 dependents of PhilHealth were also identified. With regards on their capacity to pursue relocation, families bare that they may only pursue relocation/retrofitting if provided with external assistance from the local and national governments. The city government also has the capacity to generate jobs and provide resources through disaster-related programs and projects.

Table PO – 2A. Population Exposure Database to Landslide, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Poblacion District																	
1-A	7.19	3,103	431.64	11.44	11.18%	40.3%	12%	0.08%	0.70	6.32	-	60% of the families have access	3,296	2,548	-	Yes	Yes
2-A	1.65	3,589	2,170.81	11.90	10.00%				0.84	1.68	-		2,279	2,129	-	Yes	Yes
3-A	0.55	370	671.38	0.27	0.00%				25.00	-	-		543	385	-	Yes	Yes
4-A	2.93	1,683	573.66	20.38	14.56%				5.28	8.54	3.66		1,177	884	-	Yes	Yes
5-A	21.80	11,436	524.70	1.64	11.92%				5.84	10.65	0.81		6,501	6,906	-	Yes	Yes
6-A	4.39	2,084	474.62	16.27	16.70%				4.48	7.46	0.37		1,194	1,342	-	Yes	Yes
7-A	10.56	3,984	377.39	2.28	6.93%				5.44	6.49	0.18		2,018	1,883	-	Yes	Yes
8-A	86.07	11,075	128.68	4.41	5.64%				4.98	7.07	0.98		3,635	4,250	-	Yes	Yes
9-A	14.10	5,698	404.09	0.97	4.41%				3.70	4.97	0.77		3,034	2,942	-	Yes	Yes
10-A	5.84	6,764	1,159.14	4.95	2.96%				4.26	6.68	0.00		2,178	2,263	-	Yes	Yes
11-B	2.56	1,901	742.37	11.31	10.36%				0.66	3.29	1.97		1,109	1,008	-	Yes	Yes
12-B	1.20	840	701.81	19.17	74.17%				4.84	9.60	0.80		528	509	-	Yes	Yes
13-B	0.57	427	743.68	8.43	6.56%				11.63	18.18	15.91		6,785	6,834	-	Yes	Yes
14-B	3.10	1,175	379.49	8.85	3.57%				3.67	2.75	11.01		613	647	-	Yes	Yes
15-B	1.47	2,891	1,973.02	12.90	9.34%				0.59	0.30	3.26		1,395	1,261	-	Yes	Yes
16-B	0.44	840	1,901.91	-	0.00%				4.00	2.40	0.80		320	284	-	Yes	Yes
17-B	0.54	810	1,509.12	-	0.86%				3.88	5.83	4.85		489	463	-	Yes	Yes
18-B	0.42	1,832	4,346.06	0.16	15.72%				3.19	9.57	2.13		1,277	1,265	-	Yes	Yes
19-B	190.47	31,766	166.78	2.06	3.56%				3.36	3.80	2.54		15,128	15,784	-	Yes	Yes
20-B	14.69	4,581	311.90	0.59	4.26%				1.61	5.38	1.61		2,412	2,022	-	Yes	Yes
21-C	7.15	7,478	1,046.30	6.33	9.08%				2.04	3.80	0.00		4,803	5,199	-	Yes	Yes
22-C	6.65	6,634	998.29	1.37	8.83%				1.30	0.91	0.00		4,165	4,465	-	Yes	Yes
23-C	14.60	16,489	1,129.15	17.28	13.42%				3.12	2.52	0.15		9,201	9,147	-	Yes	Yes
24-C	2.52	2,602	1,034.44	2.15	3.88%				0.45	-	-		1,221	1,142	-	Yes	Yes
25-C	1.73	1,967	1,137.04	0.05	6.61%				0.00	0.00	0.00		749	688	-	Yes	Yes

Table PO – 2B. Population Exposure Database to Landslide, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
26-C	2.26	2,510	1,111.51	-	3.98%	40.3%	12%	0.08%	0.54	0.81	0.00	-DO-	1,305	1,248	-	Yes	Yes
27-C	0.66	2,152	3,241.36	15.43	12.27%				2.70	2.70	0.00		1,443	1,294	-	Yes	Yes
28-C	1.65	2,270	1,375.96	0.31	8.72%				1.05	1.75	0.00		1,214	1,253	-	Yes	Yes
29-C	1.07	1,557	1,460.89	6.10	5.59%				2.13	0.00	0.00		705	618	-	Yes	Yes
30-D	1.38	1,608	1,166.94	3.54	3.67%				0.00	0.00	0.00		695	616	-	Yes	Yes
31-D	17.40	8,321	478.08	5.70	4.98%				3.78	4.98	0.46		4,196	4,455	-	Yes	Yes
32-D	2.77	1,985	717.19	4.23	3.88%				3.75	4.58	0.42		1,253	1,140	-	Yes	Yes
33-D	3.86	2,033	526.19	2.80	9.05%				5.30	6.23	3.43		1,210	1,073	-	Yes	Yes
34-D	2.48	1,682	677.94	22.41	0.89%				0.47	0.00	1.40		1,847	886	-	Yes	Yes
35-D	0.35	578	1,666.45	0.35	18.69%				0.00	4.35	1.45		463	288	-	Yes	Yes
36-D	2.39	1,581	661.51	2.53	4.68%				0.00	1.43	0.00		912	837	-	Yes	Yes
37-D	4.59	6,740	1,469.41	2.55	7.82%				0.78	0.49	0.29		3,932	4,092	-	Yes	Yes
38-D	1.84	1,505	816.67	19.00	15.48%				2.21	1.10	0.00		895	823	-	Yes	Yes
39-D	3.62	5,143	1,419.48	6.79	3.25%				1.26	2.81	1.26		2,477	2,566	-	Yes	Yes
40-D	1.38	2,437	1,763.80	11.98	11.78%				1.21	4.53	0.91		1,248	1,314	-	Yes	Yes

Table PO – 2C. Population Exposure Database to Landslide, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Talomo District																	
Bago Aplaya	100.52	15,918	158.35	0.37	0.00%	40.3%	12%	0.07%	5.57	11.79	3.31	-DO-	9,399	11,284	-	Yes	Yes
Bago Gallera	140.21	17,378	123.94	1.59	4.25%				1.78	1.82	0.08		7,636	9,068	-	Yes	Yes
Baliok	84.28	16,140	191.51	0.05	0.00%				1.80	1.93	0.41		5,760	6,882	-	Yes	Yes
Bucana	237.30	83,964	353.83	9.05	14.46%				2.11	2.57	2.14		15,137	13,389	-	Yes	Yes
Catalunan Grande	324.06	32,461	100.17	2.22	6.65%				0.44	0.38	0.12		19,488	23,415	-	Yes	Yes
Catalunan Pequeño	211.61	22,809	107.79	0.89	3.73%				1.57	4.23	0.00		13,381	17,066	-	Yes	Yes
Dumoy	171.70	18,622	108.45	1.75	0.00%				3.46	4.24	0.09		9,920	12,762	-	Yes	Yes
Langub	14.46	2,883	199.42	0.21	11.48%				0.26	0.67	0.09		1,285	1,516	-	Yes	Yes
Ma-a	452.85	59,803	132.06	5.01	6.25%				5.78	20.87	2.40		32,669	37,525	-	Yes	Yes
Magtuod	56.05	5,058	90.24	5.24	10.28%				0.04	0.10	0.00		2,062	2,709	-	Yes	Yes
Matina Aplaya	166.75	33,384	200.20	7.58	8.37%				1.22	1.59	2.05		20,862	24,144	-	Yes	Yes
Matina Crossing	261.39	32,436	124.09	6.17	0.00%				2.69	2.64	0.88		12,355	13,798	-	Yes	Yes
Matina Pangi	162.30	18,081	111.41	3.03	9.49%				1.10	0.20	0.24		8,740	10,911	-	Yes	Yes
Talomo	311.47	59,678	191.60	7.09	38.16%				2.44	6.92	2.20		37,014	42,322	-	Yes	Yes

Table PO – 2D. Population Exposure Database to Landslide, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Agdao District																	
Agdao Proper	7.86	8,897	1,132.13	21.30	19.13%	40.3%	12%	0.07%	1.82	2.78	0.19	-DO-	39,982	47,028	-	Yes	Yes
Centro	24.77	13,652	551.21	1.05	7.27%				2.98	6.84	0.15		1,747	1,923	-	Yes	Yes
Gov. Paciano Bangoy	22.55	8,904	394.89	5.35	8.77%				4.14	7.89	1.87		1,985	2,240	-	Yes	Yes
Gov. Vicente Duterte	21.81	8,816	404.24	16.16	11.74%				7.40	13.31	1.50		1,114	1,193	-	Yes	Yes
Tomas Monteverde	2.36	5,716	2,427.02	13.59	10.29%				3.74	3.87	0.13		1,134	1,478	-	Yes	Yes
Lapu - Lapu	25.12	10,306	410.22	8.06	3.83%				3.38	3.09	0.35		3,206	3,565	-	Yes	Yes
Leon Garcia Sr.	12.47	5,783	463.86	0.64	0.00%				6.67	5.44	2.40		4,127	4,384	-	Yes	Yes
Rafael Castillo	13.18	11,738	890.76	2.26	5.20%				3.42	5.38	0.49		1,927	1,577	-	Yes	Yes
San Antonio	27.41	2,966	108.23	5.90	12.98%				3.66	3.24	0.00		2,737	2,768	-	Yes	Yes
Ubalde	6.37	9,903	1,553.58	1.51	1.40%				4.29	7.08	3.86		1,435	1,421	-	Yes	Yes
Wilfredo Aquino	27.58	15,586	565.04	3.46	1.02%				1.26	3.05	1.41		2,313	2,333	-	Yes	Yes

Table PO – 2E. Population Exposure Database to Landslide, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Buhangin District																	
A. Angli-ongto	167.48	13,539	80.84	29.03	3.84%	40.3%	12%	0.06%	1.29	0.91	0.76	-DO-	-	-	-	Yes	Yes
Acacia	15.40	3,262	211.77	29.80	11.56%				3.21	6.04	2.64		4,382	5,328	-	Yes	Yes
Buhangin	355.82	65,461	183.97	23.82	6.67%				1.03	0.92	0.69		60,804	70,959	-	Yes	Yes
Cabantian	332.16	43,758	131.74	19.33	2.13%				0.39	0.14	0.00		19,720	22,834	-	Yes	Yes
Callawa	8.34	3,553	425.85	25.33	9.85%				3.31	3.31	0.74		1,134	1,395	-	Yes	Yes
Communal	171.91	16,740	97.38	5.30	0.00%				1.54	1.77	0.23		3,556	3,801	-	Yes	Yes
Indangan	258.09	14,867	57.60	0.06	0.00%				4.29	6.68	0.54		5,801	6,533	-	Yes	Yes
Mandug	175.55	13,594	77.44	22.62	6.14%				5.81	14.53	2.14		8,673	10,635	-	Yes	Yes
Pampanganga	54.09	14,381	265.89	0.01	0.00%				3.57	8.38	6.12		18,212	20,626	-	Yes	Yes
Sasa	237.68	52,386	220.40	24.37	6.49%				4.43	8.24	1.03		35,744	42,127	-	Yes	Yes
Tigatto	273.57	36,387	133.01	14.36	2.75%				3.30	2.67	0.72		9,143	10,354	-	Yes	Yes
V. Hizon	124.53	11,265	90.46	22.86	3.83%				0.85	0.85	0.00		-	-	-	Yes	Yes
Waan	39.30	3,925	99.87	24.61	12.51%				3.19	4.13	1.50		1,524	1,763	-	Yes	Yes

Table PO – 2F. Population Exposure Database to Landslide, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Bunawan District																	
Lasang	53.31	10,223	191.76	9.33	14.60%	40.3%	12%	0.05%	10.69	17.30	1.02	-DO-	3,894	3,970	-	Yes	Yes
Bunawan	128.46	23,495	182.89	0.45	10.75%				5.26	9.29	0.82		19,877	23,810	-	Yes	Yes
Gatungan	2.22	1,190	535.81	-	10.84%				4.53	6.78	0.58		441	624	-	Yes	Yes
Ilang	134.12	24,947	186.00	0.87	8.09%				3.86	4.61	0.22		11,419	13,918	-	Yes	Yes
Mahayag	59.43	6,307	106.12	0.02	8.58%				3.95	5.41	0.00		1,491	1,942	-	Yes	Yes
Mudiang	71.06	2,937	41.33	0.03	7.08%				2.56	1.40	0.93		1,175	1,364	-	Yes	Yes
Panacan	274.98	35,806	130.22	4.92	6.28%				12.05	22.89	4.22		24,476	28,076	-	Yes	Yes
San Isidro	28.72	5,333	185.66	-	3.21%				5.18	5.76	0.33		1,094	1,485	-	Yes	Yes
Tibungco	141.33	41,864	296.22	5.83	14.08%				4.48	6.96	0.07		25,271	29,843	-	Yes	Yes

Table PO – 2G. Population Exposure Database to Landslide, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Paquibato District																	
Colosas	9.80	4,731	482.82	-	20.42%	40.3%	12%	0.09%	10.53	18.17	2.38	-DO-	1,229	741	-	Yes	Yes
Fatima	10.80	3,502	324.18	3.51	23.99%				12.28	10.02	0.00		627	517	-	Yes	Yes
Lumiad	9.12	1,553	170.29	-	20.35%				20.29	10.36	0.84		487	555	-	Yes	Yes
Mabuhay	7.57	1,062	140.29	-	14.69%				5.03	15.82	2.63		244	310	-	Yes	Yes
Malabog	19.18	10,816	564.03	-	0.00%				9.08	19.45	0.00		3,770	2,794	-	Yes	Yes
Mapula	15.55	2,876	184.93	-	0.00%				15.57	20.75	0.21		1,005	397	-	Yes	Yes
Pañalum	2.12	1,831	864.98	-	-				16.56	13.87	0.76		810	1,120	-	Yes	Yes
Pandaitan	9.86	4,037	409.26	-	13.57%				8.20	2.83	2.23		1,365	891	-	Yes	Yes
Paquibato	13.38	2,495	186.53	2.69	18.16%				9.09	8.70	0.92		5,247	7,433	-	Yes	Yes
Paradise Embac	2.07	2,654	1,285.20	-	18.09%				7.92	2.99	0.00		978	1,635	-	Yes	Yes
Salapawan	3.26	2,282	700.67	-	0.00%				0.00	0.00	0.00		609	304	-	Yes	Yes
Sumimao	1.84	1,666	906.88	3.06	21.19%				4.86	15.41	0.00		482	559	-	Yes	Yes
Tapak	18.76	5,258	280.26	-	20.88%				17.11	12.29	0.00		1,508	334	-	Yes	Yes
Baguio District																	
Baguio	12.60	4,655	369.56	19.40	6.68%	40.3%	12%	0.05%	2.03	4.21	2.34	-DO-	8,836	13,452	-	Yes	Yes
Cadalian	3.22	2,446	758.49	23.55	12.22%				6.90	11.03	2.07		849	1,095	-		
Carmen	1.52	2,156	1,419.19	23.42	19.02%				11.72	13.67	1.17		566	683	-	Yes	Yes
Gumalang	4.62	5,081	1,099.75	22.61	12.04%				4.50	6.33	0.42		1,697	2,077	-	Yes	Yes
Malagos	4.34	6,524	1,503.48	21.06	9.03%				4.20	7.97	2.91		1,886	2,443	-	Yes	Yes
Tambobong	4.85	5,993	1,234.41	22.41	18.42%				6.79	19.72	0.26		1,952	2,163	-	Yes	Yes
Tawan-Tawan	2.84	3,889	1,367.00	23.27	11.70%				5.04	5.22	0.00		1,283	1,548	-	Yes	Yes
Wines	2.17	3,129	1,443.91	24.80	8.92%				2.74	5.22	0.50		1,147	1,382	-	Yes	Yes

Table PO – 2H. Population Exposure Database to Landslide, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Calinan District																	
Biao Joaquin	3.25	2,289	704.29	0.70	10.31%	40.3%	12%	0.16%	2.90	5.81	0.00	-DO-	907	1,327	-	Yes	Yes
Calinan	111.68	23,052	206.41	0.38	4.95%				2.71	2.71	0.31		37,809	55,479	-	Yes	Yes
Cawayan	1.90	2,295	1,209.48	1.44	10.68%				2.05	4.45	0.68		566	591	-	Yes	Yes
Dacudao	7.27	4,418	608.07	0.68	14.19%				5.93	7.99	0.78		1,245	1,485	-	Yes	Yes
Dalagdag	2.76	934	338.32	2.78	20.99%				2.68	5.22	0.00		325	346	-	Yes	Yes
Dominga	1.77	1,607	908.58	-	16.55%				6.23	11.57	0.00		307	363	-	Yes	Yes
Inayangan	3.33	4,832	1,449.75	-	17.40%				4.25	8.33	0.00		1,454	1,994	-	Yes	Yes
Lacson	5.22	5,873	1,125.29	0.58	10.52%				8.95	16.53	0.83		1,089	1,294	-	Yes	Yes
Lamanan	4.70	4,538	966.12	3.75	14.43%				5.17	12.50	0.00		1,191	1,390	-	Yes	Yes
Lampianao	2.41	845	350.01	-	13.25%				4.85	8.65	0.00		270	283	-	Yes	Yes
Megkawayan	5.99	3,015	503.12	-	16.85%				12.57	14.66	0.00		604	588	-	Yes	Yes
Pangyan	5.65	2,035	360.38	-	9.24%				1.98	7.14	0.00		427	709	-	Yes	Yes
Riverside	22.28	5,450	244.64	16.07	8.31%				3.41	5.56	2.14		780	973	-	Yes	Yes
Saloy	2.03	2,112	1,039.57	-	18.56%				5.06	5.45	0.00		418	689	-	Yes	Yes
Sirib	7.86	5,199	661.77	-	15.87%				4.87	9.43	0.44		1,789	2,273	-	Yes	Yes
Subasta	10.24	3,641	355.62	0.66	21.15%				6.79	14.97	1.80		759	1,069	-	Yes	Yes
Talomo River	20.66	6,846	331.29	0.72	5.24%				2.44	5.96	0.36		1,398	1,901	-	Yes	Yes
Tamayong	4.85	7,273	1,498.10	2.45	14.82%				10.93	25.18	1.29		1,847	2,419	-	Yes	Yes
Wangan	3.45	5,821	1,686.18	0.12	10.62%				0.86	0.74	0.12		1,459	1,673	-	Yes	Yes

Table PO – 21. Population Exposure Database to Landslide, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Marilog District																	
Baganihan	3.21	1,295	403.57	0.77	20.77%	40.3%	12%	0.09%	10.78	12.08	0.98	-DO-	813	624	-	Yes	Yes
Bantol	2.73	2,324	852.01	0.04	18.93%				0.66	18.21	0.00		763	376	-	Yes	Yes
Buda	20.59	1,885	91.56	5.25	14.16%				7.97	10.51	0.00		498	506	-	Yes	Yes
Dalag Lumot	10.73	1,864	173.68	0.32	17.06%				10.62	6.59	0.00		571	301	-	Yes	Yes
Datu Salumay	21.74	2,232	102.67	1.43	13.44%				4.10	0.82	0.00		681	570	-	Yes	Yes
Gumitan	8.53	1,756	205.98	-	0.00%				17.97	59.91	8.29		644	202	-	Yes	Yes
Magsaysay	9.53	2,425	254.40	-	19.84%				2.45	9.17	0.31		1,074	548	-	Yes	Yes
Malamba	13.27	4,864	366.62	1.05	10.90%				9.13	17.97	0.14		1,407	747	-	Yes	Yes
Marilog	95.55	16,188	169.42	-	0.00%				11.04	16.60	0.09		13,227	16,556	-	Yes	Yes
Salaysay	10.44	4,431	424.37	-	0.00%				9.49	18.31	1.19		1,877	2,970	-	Yes	Yes
Suawan	7.71	4,586	594.94	2.73	20.15%				9.90	14.65	0.40		933	1,076	-	Yes	Yes
Tamugan	10.47	8,351	797.42	0.02	0.00%				1.64	8.11	0.00		2,704	2,814	-	Yes	Yes

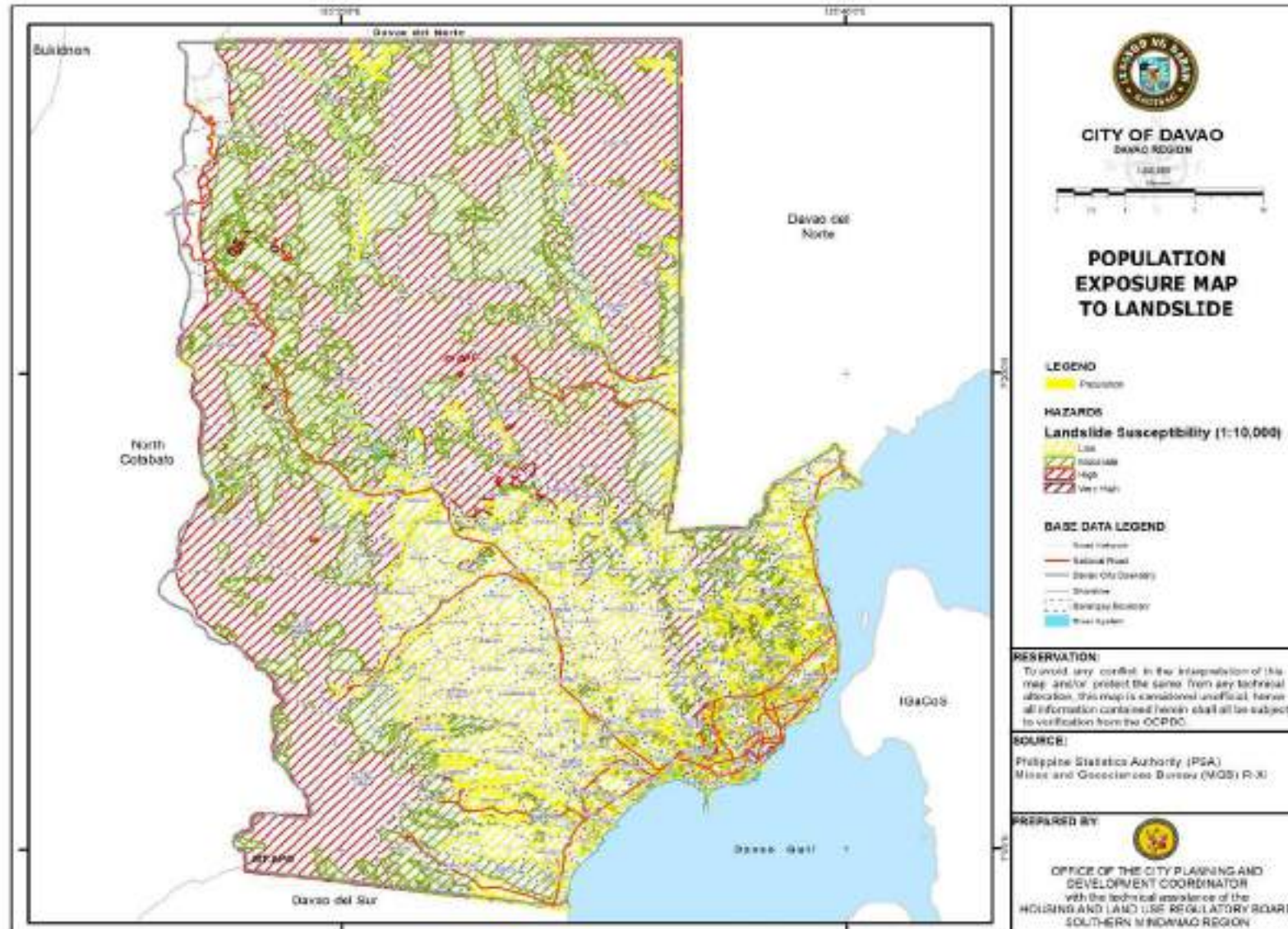
Table PO – 2J. Population Exposure Database to Landslide, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Toril District																	
Alambre	8.01	2,010	250.92	-	10.75%	40.3%	12%	0.07%	5.32	4.61	0.71	-DO-	1,297	1,421	-	Yes	Yes
Atan-Awe	0.91	1,119	1,228.39	-	20.82%				6.33	2.53	1.27		830	854	-	Yes	Yes
Bankas Heights	32.04	7,671	239.43	-	0.00%				1.39	1.47	0.17		2,890	3,479	-	Yes	Yes
Baracatan	4.31	2,895	671.19	2.25	17.55%				4.18	5.13	5.84		1,571	2,006	-	Yes	Yes
Bato	46.16	10,007	216.79	-	0.00%				4.07	3.35	1.53		2,958	3,636	-	Yes	Yes
Bayabas	3.35	2,989	893.06	0.23	13.72%				2.43	6.68	0.00		1,304	1,726	-	Yes	Yes
Binugao	54.54	6,934	127.14	0.06	11.93%				3.02	2.17	0.00		2,803	3,748	-	Yes	Yes
Camansi	2.46	1,189	483.17	0.84	10.01%				1.32	0.00	0.63		295	356	-	Yes	Yes
Catigan	6.36	3,044	478.56	-	19.45%				6.56	26.47	8.14		1,338	1,407	-	Yes	Yes
Crossing Bayabas	96.18	11,490	119.47	2.21	7.30%				2.99	2.18	1.00		3,436	4,445	-	Yes	Yes
Daliao	113.90	21,124	185.46	0.33	5.52%				1.34	4.43	0.21		7,644	10,032	-	Yes	Yes
Daliaon Plantation	5.75	3,214	559.38	12.41	22.96%				0.62	6.02	0.00		1,120	1,371	-	Yes	Yes
Eden	53.21	2,385	44.82	0.25	14.93%				9.97	19.14	1.86		668	826	-	Yes	Yes
Kilate	2.66	1,309	491.50	0.92	12.99%				3.11	5.63	2.48		395	634	-	Yes	Yes
Lizada	109.55	20,112	183.59	6.96	7.58%				2.19	1.83	0.16		5,810	7,472	-	Yes	Yes
Lubogan	93.41	12,156	130.14	0.32	0.00%				0.57	0.06	0.00		4,164	5,074	-	Yes	Yes
Marapangi	80.99	6,889	85.06	-	9.06%				6.20	9.60	2.60		2,109	2,890	-	Yes	Yes
Mulig	1.75	2,477	1,418.33	1.13	0.00%				5.86	12.05	3.91		1,007	1,158	-	Yes	Yes
Sibulan	2.31	2,479	1,071.67	-	0.00%				13.36	13.92	0.00		630	886	-	Yes	Yes
Sirawan	88.24	7,140	80.91	4.30	9.87%				4.36	3.82	2.36		2,414	3,208	-	Yes	Yes
Tagluno	2.27	1,391	612.29	22.07	8.91%	1.61	7.69	0.00	592	636	-	Yes	Yes				
Tagurano	1.70	1,230	722.17	-	16.83%	5.63	10.00	0.00	428	540	-	Yes	Yes				
Tibuloy	3.79	2,218	584.71	-	16.14%	7.96	14.84	5.07	733	958	-	Yes	Yes				
Toril	72.35	12,140	167.78	0.30	6.58%	7.13	8.50	0.39	49,031	69,310	-	Yes	Yes				
Tungkalan	4.24	2,910	685.98	-	0.00%	0.72	0.72	0.00	738	753	-	Yes	Yes				

Table PO – 2K. Population Exposure Database to Landslide, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Tugbok District																	
Angalan	12.64	2,475	195.83	1.45	13.17%	40.3%	12%	0.04%	5.90	22.05	8.48	-DO-	1,562	1,626	-	Yes	Yes
Bago Oshiro	142.40	11,932	83.79	11.41	6.55%				1.53	2.94	0.19		2,807	3,522	-	Yes	Yes
Balengaeng	2.33	2,086	896.13	-	8.82%				7.09	7.46	1.12		856	1,013	-	Yes	Yes
Biao Escuela	9.18	3,294	358.91	-	10.02%				3.06	3.71	0.00		1,384	1,643	-	Yes	Yes
Biao Guianga	3.94	3,664	929.01	-	3.03%				7.04	7.96	2.22		1,709	2,271	-	Yes	Yes
Los Amigos	43.65	9,722	222.74	1.43	7.25%				5.89	11.10	0.00		2,401	2,910	-	Yes	Yes
Manambulan	10.04	2,661	264.92	0.04	8.08%				5.56	8.61	0.00		1,069	1,410	-	Yes	Yes
Manuel Guianga	8.17	6,436	787.48	0.02	14.70%				0.80	1.14	0.00		2,786	3,829	-	Yes	Yes
Matina Biao	2.78	1,811	652.38	1.82	3.87%				0.42	0.42	0.00		1,015	1,578	-	Yes	Yes
Mintal	156.42	13,227	84.56	1.93	7.39%				4.17	3.53	0.53		15,905	20,994	-	Yes	Yes
New Carmen	16.15	2,626	162.64	4.34	15.35%				21.24	30.83	3.63		598	692	-	Yes	Yes
New Valencia	5.41	1,679	310.53	0.12	16.26%				3.32	15.77	0.00		248	311	-	Yes	Yes
Sto. Niño	88.71	20,103	226.61	0.06	7.78%				1.85	2.34	0.19		4,931	5,621	-	Yes	Yes
Tacunan	57.42	12,773	222.45	0.40	4.31%				2.36	6.30	2.18		4,017	4,987	-	Yes	Yes
Tagakpan	10.85	4,208	387.69	0.19	12.69%				3.34	2.97	0.37		1,694	1,771	-	Yes	Yes
Talandang	8.31	3,392	408.07	0.06	15.45%				8.89	11.93	4.56		1,009	1,181	-	Yes	Yes
Tugbok	125.40	15,115	120.53	1.42	4.13%				2.71	4.20	0.92		22,762	28,718	-	Yes	Yes
Ula	14.75	4,130	279.97	0.29	7.48%	9.61	27.96	0.69	1,182	1,460	-	Yes	Yes				

Map 2.2. Population Exposure Map to Landslide, Davao City



Liquefaction - This hazard can potentially affect 1,250,363 persons, who occupy parcels of residential areas that total to 6,646.45 hectares, in 103 barangays in Davao City (Table PO – 3A to Table PO – 3G). Liquefaction can greatly affect especially the informal settlers, young and old population, persons with disabilities, population living in dwelling units with walls made from light to salvageable materials, malnourished individuals, and households living below poverty threshold. Barangay Bucana, which is the most populous barangay with 83,964 persons, has the largest presence of informal settlers that total to 7,405. Talomo Proper has also the highest number of households living in dwelling units with walls made from light to salvageable materials that total to 22,776. Of the total population in Davao City, 40.3% are dependent population or those who are either young or old. On the other hand, the percentage of households living below the poverty threshold is 12%. In terms of adaptive capacity, there are approximately 60% of the families in Davao City who have access to post disaster financing and benefits from government agencies like GSIS and SSS. There are also 670,016 members and 866,764 dependents of PhilHealth. With regard to relocation options, families within areas that are susceptible to liquefaction bare that they may have difficulty to relocate or retrofit given their current capacity. The city government has also the capacity to generate jobs and resources to pursue disaster-related programs and projects.

Table PO – 3A. Population Exposure Database to Liquefaction, Davao City

Exposure				Vulnerability						Adaptive Capacity							
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Poblacion District																	
1-A	7.19	3,103	431.64	11.44	11.18%	40.3%	12%	0.08%	0.70	6.32	-	60% of the families have access	3,296	2,548	-	Yes	Yes
2-A	1.65	3,589	2,170.81	11.90	10.00%				0.84	1.68	-		2,279	2,129	-	Yes	Yes
3-A	0.55	370	671.38	0.27	0.00%				25.00	-	-		543	385	-	Yes	Yes
4-A	2.93	1,683	573.66	20.38	14.56%				5.28	8.54	3.66		1,177	884	-	Yes	Yes
5-A	21.80	11,436	524.70	1.64	11.92%				5.84	10.65	0.81		6,501	6,906	-	Yes	Yes
6-A	4.39	2,084	474.62	16.27	16.70%				4.48	7.46	0.37		1,194	1,342	-	Yes	Yes
7-A	10.56	3,984	377.39	2.28	6.93%				5.44	6.49	0.18		2,018	1,883	-	Yes	Yes
8-A	86.07	11,075	128.68	4.41	5.64%				4.98	7.07	0.98		3,635	4,250	-	Yes	Yes
9-A	14.10	5,698	404.09	0.97	4.41%				3.70	4.97	0.77		3,034	2,942	-	Yes	Yes
10-A	5.84	6,764	1,159.14	4.95	2.96%				4.26	6.68	0.00		2,178	2,263	-	Yes	Yes
11-B	2.56	1,901	742.37	11.31	10.36%				0.66	3.29	1.97		1,109	1,008	-	Yes	Yes
12-B	1.20	840	701.81	19.17	74.17%				4.84	9.60	0.80		528	509	-	Yes	Yes
13-B	0.57	427	743.68	8.43	6.56%				11.63	18.18	15.91		6,785	6,834	-	Yes	Yes
14-B	3.10	1,175	379.49	8.85	3.57%				3.67	2.75	11.01		613	647	-	Yes	Yes
15-B	1.47	2,891	1,973.02	12.90	9.34%				0.59	0.30	3.26		1,395	1,261	-	Yes	Yes

Table PO – 3B. Population Exposure Database to Liquefaction, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
16-B	0.44	840	1,901.91	-	0.00%	40.3%	12%	0.08%	4.00	2.40	0.80	60% of the families have access	320	284	-	Yes	Yes
17-B	0.54	810	1,509.12	-	0.86%				3.88	5.83	4.85		489	463	-	Yes	Yes
18-B	0.42	1,832	4,346.06	0.16	15.72%				3.19	9.57	2.13		1,277	1,265	-	Yes	Yes
19-B	190.47	31,766	166.78	2.06	3.56%				3.36	3.80	2.54		15,128	15,784	-	Yes	Yes
20-B	14.69	4,581	311.90	0.59	4.26%				1.61	5.38	1.61		2,412	2,022	-	Yes	Yes
21-C	7.15	7,478	1,046.30	6.33	9.08%				2.04	3.80	0.00		4,803	5,199	-	Yes	Yes
22-C	6.65	6,634	998.29	1.37	8.83%				1.30	0.91	0.00		4,165	4,465	-	Yes	Yes
23-C	14.60	16,489	1,129.15	17.28	13.42%				3.12	2.52	0.15		9,201	9,147	-	Yes	Yes
24-C	2.52	2,602	1,034.44	2.15	3.88%				0.45	-	-		1,221	1,142	-	Yes	Yes
25-C	1.73	1,967	1,137.04	0.05	6.61%				0.00	0.00	0.00		749	688	-	Yes	Yes
26-C	2.26	2,510	1,111.51	-	3.98%				0.54	0.81	0.00		1,305	1,248	-	Yes	Yes
27-C	0.66	2,152	3,241.36	15.43	12.27%				2.70	2.70	0.00		1,443	1,294	-	Yes	Yes
28-C	1.65	2,270	1,375.96	0.31	8.72%				1.05	1.75	0.00		1,214	1,253	-	Yes	Yes
29-C	1.07	1,557	1,460.89	6.10	5.59%				2.13	0.00	0.00		705	618	-	Yes	Yes
30-D	1.38	1,608	1,166.94	3.54	3.67%				0.00	0.00	0.00		695	616	-	Yes	Yes
31-D	17.40	8,321	478.08	5.70	4.98%				3.78	4.98	0.46		4,196	4,455	-	Yes	Yes
32-D	2.77	1,985	717.19	4.23	3.88%				3.75	4.58	0.42		1,253	1,140	-	Yes	Yes
33-D	3.86	2,033	526.19	2.80	9.05%				5.30	6.23	3.43		1,210	1,073	-	Yes	Yes
34-D	2.48	1,682	677.94	22.41	0.89%				0.47	0.00	1.40		1,847	886	-	Yes	Yes
35-D	0.35	578	1,666.45	0.35	18.69%				0.00	4.35	1.45		463	288	-	Yes	Yes
36-D	2.39	1,581	661.51	2.53	4.68%	0.00	1.43	0.00	912	837	-	Yes	Yes				
37-D	4.59	6,740	1,469.41	2.55	7.82%	0.78	0.49	0.29	3,932	4,092	-	Yes	Yes				
38-D	1.84	1,505	816.67	19.00	15.48%	2.21	1.10	0.00	895	823	-	Yes	Yes				
39-D	3.62	5,143	1,419.48	6.79	3.25%	1.26	2.81	1.26	2,477	2,566	-	Yes	Yes				
40-D	1.38	2,437	1,763.80	11.98	11.78%	1.21	4.53	0.91	1,248	1,314	-	Yes	Yes				

Table PO – 3C. Population Exposure Database to Liquefaction, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Talomo District																	
Bago Aplaya	100.52	15,918	158.35	0.37	0.00%	40.3%	12%	0.07%	5.57	11.79	3.31	-DO-	9,399	11,284	-	Yes	Yes
Bago Gallera	140.21	17,378	123.94	1.59	4.25%				1.78	1.82	0.08		7,636	9,068	-	Yes	Yes
Baliok	84.28	16,140	191.51	0.05	0.00%				1.80	1.93	0.41		5,760	6,882	-	Yes	Yes
Bucana	237.30	83,964	353.83	9.05	14.46%				2.11	2.57	2.14		15,137	13,389	-	Yes	Yes
Catalunan Grande	324.06	32,461	100.17	2.22	6.65%				0.44	0.38	0.12		19,488	23,415	-	Yes	Yes
Catalunan Pequeño	211.61	22,809	107.79	0.89	3.73%				1.57	4.23	0.00		13,381	17,066	-	Yes	Yes
Dumoy	171.70	18,622	108.45	1.75	0.00%				3.46	4.24	0.09		9,920	12,762	-	Yes	Yes
Ma-a	452.85	59,803	132.06	5.01	6.25%				5.78	20.87	2.40		32,669	37,525	-	Yes	Yes
Matina Aplaya	166.75	33,384	200.20	7.58	8.37%				1.22	1.59	2.05		20,862	24,144	-	Yes	Yes
Matina Crossing	261.39	32,436	124.09	6.17	0.00%				2.69	2.64	0.88		12,355	13,798	-	Yes	Yes
Matina Pangi	162.30	18,081	111.41	3.03	9.49%				1.10	0.20	0.24		8,740	10,911	-	Yes	Yes
Talomo	311.47	59,678	191.60	7.09	38.16%				2.44	6.92	2.20		37,014	42,322	-	Yes	Yes

Table PO – 3D. Population Exposure Database to Liquefaction, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Agdao District																	
Agdao Proper	7.86	8,897	1,132.13	21.30	19.13%	40.3%	12%	0.07%	1.82	2.78	0.19	-DO-	39,982	47,028	-	Yes	Yes
Centro	24.77	13,652	551.21	1.05	7.27%				2.98	6.84	0.15		1,747	1,923	-	Yes	Yes
Gov. Paciano Bangoy	22.55	8,904	394.89	5.35	8.77%				4.14	7.89	1.87		1,985	2,240	-	Yes	Yes
Gov. Vicente Duterte	21.81	8,816	404.24	16.16	11.74%				7.40	13.31	1.50		1,114	1,193	-	Yes	Yes
Tomas Monteverde	2.36	5,716	2,427.02	13.59	10.29%				3.74	3.87	0.13		1,134	1,478	-	Yes	Yes
Lapu - Lapu	25.12	10,306	410.22	8.06	3.83%				3.38	3.09	0.35		3,206	3,565	-	Yes	Yes
Leon Garcia Sr.	12.47	5,783	463.86	0.64	0.00%				6.67	5.44	2.40		4,127	4,384	-	Yes	Yes
Rafael Castillo	13.18	11,738	890.76	2.26	5.20%				3.42	5.38	0.49		1,927	1,577	-	Yes	Yes
San Antonio	27.41	2,966	108.23	5.90	12.98%				3.66	3.24	0.00		2,737	2,768	-	Yes	Yes
Ubalde	6.37	9,903	1,553.58	1.51	1.40%				4.29	7.08	3.86		1,435	1,421	-	Yes	Yes
Wilfredo Aquino	27.58	15,586	565.04	3.46	1.02%				1.26	3.05	1.41		2,313	2,333	-	Yes	Yes

Table PO – 3E. Population Exposure Database to Liquefaction, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Buhangin District																	
A. Anglongto	167.48	13,539	80.84	29.03	3.84%	40.3%	12%	0.06%	1.29	0.91	0.76	-DO-	-	-	-	Yes	Yes
Buhangin	355.82	65,461	183.97	23.82	6.67%				1.03	0.92	0.69		60,804	70,959	-	Yes	Yes
Callawa	8.34	3,553	425.85	25.33	9.85%				3.31	3.31	0.74		1,134	1,395	-	Yes	Yes
Mandug	175.55	13,594	77.44	22.62	6.14%				5.81	14.53	2.14		8,673	10,635	-	Yes	Yes
Pampanga	54.09	14,381	265.89	0.01	0.00%				3.57	8.38	6.12		18,212	20,626	-	Yes	Yes
Sasa	237.68	52,386	220.40	24.37	6.49%				4.43	8.24	1.03		35,744	42,127	-	Yes	Yes
Tigatto	273.57	36,387	133.01	14.36	2.75%				3.30	2.67	0.72		9,143	10,354	-	Yes	Yes
V. Hizon	124.53	11,265	90.46	22.86	3.83%				0.85	0.85	0.00		-	-	-	Yes	Yes
Waan	39.30	3,925	99.87	24.61	12.51%				3.19	4.13	1.50		1,524	1,763	-	Yes	Yes

Table PO – 3F. Population Exposure Database to Liquefaction, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Bunawan District																	
Lasang	53.31	10,223	191.76	9.33	14.60%	40.3%	12%	0.05%	10.69	17.30	1.02	-DO-	3,894	3,970	-	Yes	Yes
Bunawan	128.46	23,495	182.89	0.45	10.75%				5.26	9.29	0.82		19,877	23,810	-	Yes	Yes
Ilang	134.12	24,947	186.00	0.87	8.09%				3.86	4.61	0.22		11,419	13,918	-	Yes	Yes
Mahayag	59.43	6,307	106.12	0.02	8.58%				3.95	5.41	0.00		1,491	1,942	-	Yes	Yes
Panacan	274.98	35,806	130.22	4.92	6.28%				12.05	22.89	4.22		24,476	28,076	-	Yes	Yes
San Isidro	28.72	5,333	185.66	-	3.21%				5.18	5.76	0.33		1,094	1,485	-	Yes	Yes
Tibungco	141.33	41,864	296.22	5.83	14.08%				4.48	6.96	0.07		25,271	29,843	-	Yes	Yes
Baguio District																	
Malagos	4.34	6,524	1,503.48	21.06	9.03%	40.3%	12%	0.09%	4.20	7.97	2.91	-DO-	1,886	2,443	-	Yes	Yes
Calinan District																	
Calinan	111.68	23,052	206.41	0.38	4.95%	40.3%	12%	0.16%	2.71	2.71	0.31	-DO-	37,809	55,479	-	Yes	Yes
Dacudao	7.27	4,418	608.07	0.68	14.19%				5.93	7.99	0.78		1,245	1,485	-	Yes	Yes
Lacson	5.22	5,873	1,125.29	0.58	10.52%				8.95	16.53	0.83		1,089	1,294	-	Yes	Yes
Riverside	22.28	5,450	244.64	16.07	8.31%				3.41	5.56	2.14		780	973	-	Yes	Yes
Subasta	10.24	3,641	355.62	0.66	21.15%				6.79	14.97	1.80		759	1,069	-	Yes	Yes
Talomo River	20.66	6,846	331.29	0.72	5.24%				2.44	5.96	0.36		1,398	1,901	-	Yes	Yes
Wangan	3.45	5,821	1,686.18	0.12	10.62%				0.86	0.74	0.12		1,459	1,673	-	Yes	Yes

Table PO – 3G. Population Exposure Database to Liquefaction, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Toril District																	
Binugao	54.54	6,934	127.14	0.06	11.93%	40.3%	12%	0.07%	3.02	2.17	0.00	-DO-	2,803	3,748	-	Yes	Yes
Crossing Bayabas	96.18	11,490	119.47	2.21	7.30%				2.99	2.18	1.00		3,436	4,445	-	Yes	Yes
Daliao	113.90	21,124	185.46	0.33	5.52%				1.34	4.43	0.21		7,644	10,032	-	Yes	Yes
Lizada	109.55	20,112	183.59	6.96	7.58%				2.19	1.83	0.16		5,810	7,472	-	Yes	Yes
Lubogan	93.41	12,156	130.14	0.32	0.00%				0.57	0.06	0.00		4,164	5,074	-	Yes	Yes
Marapangi	80.99	6,889	85.06	-	9.06%				6.20	9.60	2.60		2,109	2,890	-	Yes	Yes
Sirawan	88.24	7,140	80.91	4.30	9.87%				4.36	3.82	2.36		2,414	3,208	-	Yes	Yes
Toril	72.35	12,140	167.78	0.30	6.58%				7.13	8.50	0.39		49,031	69,310	-	Yes	Yes
Tugbok District																	
Angalan	12.64	2,475	195.83	1.45	13.17%	40.3%	12%	0.04%	5.90	22.05	8.48	-DO-	1,562	1,626	-	Yes	Yes
Balengaeng	2.33	2,086	896.13	-	8.82%				7.09	7.46	1.12		856	1,013	-	Yes	Yes
Los Amigos	43.65	9,722	222.74	1.43	7.25%				5.89	11.10	0.00		2,401	2,910	-	Yes	Yes
New Carmen	16.15	2,626	162.64	4.34	15.35%				21.24	30.83	3.63		598	692	-	Yes	Yes
New Valencia	5.41	1,679	310.53	0.12	16.26%				3.32	15.77	0.00		248	311	-	Yes	Yes
Talandang	8.31	3,392	408.07	0.06	15.45%				8.89	11.93	4.56		1,009	1,181	-	Yes	Yes
Tugbok	125.40	15,115	120.53	1.42	4.13%				2.71	4.20	0.92		22,762	28,718	-	Yes	Yes
Ula	14.75	4,130	279.97	0.29	7.48%				9.61	27.96	0.69		1,182	1,460	-	Yes	Yes

Storm Surge - This hazard can potentially affect 892,427 persons, who occupy parcels of residential areas that total to 4,254.91 hectares, in 74 barangays in Davao City (Table PO – 4A to Table PO – 4C). Storm Surge can greatly affect especially the informal settlers, young and old population, persons with disabilities, population living in dwelling units with walls made from light to salvageable materials, malnourished individuals, and households living below poverty threshold. Barangay Bucana, which is the most populous barangay with 83,964 persons, has the largest presence of informal settlers that total to 7,405. Talomo Proper has also the highest number of households living in dwelling units with walls made from light to salvageable materials that total to 22,776. At least 40.3% are considered as dependent population or those who are either young or old. On the other hand, the percentage of households living below the poverty threshold is 12%. In terms of adaptive capacity, there are approximately 60% of the families in Davao City who have access to post disaster financing and benefits from government agencies like GSIS and SSS. There are as well 466,693 members and 523,212 dependents of PhilHealth. With regards on their capacity to pursue relocation, families bare that they may have difficulty to relocate or retrofit given their current capacities. They are only willing to pursue relocation/retrofitting if provided with external assistance from the local and national governments. The city government has also the capacity to generate jobs and resources disaster-related programs and projects.

Table PO – 4A. Population Exposure Database to Storm Surge, Davao City

Exposure				Vulnerability								Adaptive Capacity					
Barangay	Residential Area	Barangay Population	Population Density Per Hec-	Percentage of Informal Settlers	Percentage of Population Living	Percentage of Young and Old De-	Percentage of Households	Percentage of Persons with	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financial	PhilHealth Coverage		Household Financial Capacity	Government Capacity to Generate	Government Resources
									Weight for Age	Height for	Length or		Members	Dependents			
Poblacion District																	
1-A	7.19	3,103	431.64	11.44	11.18%	40.3%	12%	0.08%	0.70	6.32	-	60% of the families have access	3,296	2,548	-	Yes	Yes
2-A	1.65	3,589	2,170.81	11.90	10.00%				0.84	1.68	-		2,279	2,129	-	Yes	Yes
3-A	0.55	370	671.38	0.27	0.00%				25.00	-	-		543	385	-	Yes	Yes
4-A	2.93	1,683	573.66	20.38	14.56%				5.28	8.54	3.66		1,177	884	-	Yes	Yes
5-A	21.80	11,436	524.70	1.64	11.92%				5.84	10.65	0.81		6,501	6,906	-	Yes	Yes
6-A	4.39	2,084	474.62	16.27	16.70%				4.48	7.46	0.37		1,194	1,342	-	Yes	Yes
7-A	10.56	3,984	377.39	2.28	6.93%				5.44	6.49	0.18		2,018	1,883	-	Yes	Yes
8-A	86.07	11,075	128.68	4.41	5.64%				4.98	7.07	0.98		3,635	4,250	-	Yes	Yes
9-A	14.10	5,698	404.09	0.97	4.41%				3.70	4.97	0.77		3,034	2,942	-	Yes	Yes
10-A	5.84	6,764	1,159.14	4.95	2.96%				4.26	6.68	0.00		2,178	2,263	-	Yes	Yes
11-B	2.56	1,901	742.37	11.31	10.36%				0.66	3.29	1.97		1,109	1,008	-	Yes	Yes
12-B	1.20	840	701.81	19.17	74.17%				4.84	9.60	0.80		528	509	-	Yes	Yes
13-B	0.57	427	743.68	8.43	6.56%				11.63	18.18	15.91		6,785	6,834	-	Yes	Yes
14-B	3.10	1,175	379.49	8.85	3.57%				3.67	2.75	11.01		613	647	-	Yes	Yes
15-B	1.47	2,891	1,973.02	12.90	9.34%				0.59	0.30	3.26		1,395	1,261	-	Yes	Yes
16-B	0.44	840	1,901.91	-	0.00%				4.00	2.40	0.80		320	284	-	Yes	Yes
17-B	0.54	810	1,509.12	-	0.86%				3.88	5.83	4.85		489	463	-	Yes	Yes
18-B	0.42	1,832	4,346.06	0.16	15.72%				3.19	9.57	2.13		1,277	1,265	-	Yes	Yes
19-B	190.47	31,766	166.78	2.06	3.56%				3.36	3.80	2.54		15,128	15,784	-	Yes	Yes
20-B	14.69	4,581	311.90	0.59	4.26%				1.61	5.38	1.61		2,412	2,022	-	Yes	Yes
21-C	7.15	7,478	1,046.30	6.33	9.08%				2.04	3.80	0.00		4,803	5,199	-	Yes	Yes
22-C	6.65	6,634	998.29	1.37	8.83%				1.30	0.91	0.00		4,165	4,465	-	Yes	Yes
23-C	14.60	16,489	1,129.15	17.28	13.42%				3.12	2.52	0.15		9,201	9,147	-	Yes	Yes
24-C	2.52	2,602	1,034.44	2.15	3.88%				0.45	-	-		1,221	1,142	-	Yes	Yes
25-C	1.73	1,967	1,137.04	0.05	6.61%				0.00	0.00	0.00		749	688	-	Yes	Yes
26-C	2.26	2,510	1,111.51	-	3.98%				0.54	0.81	0.00		1,305	1,248	-	Yes	Yes
27-C	0.66	2,152	3,241.36	15.43	12.27%				2.70	2.70	0.00		1,443	1,294	-	Yes	Yes
28-C	1.65	2,270	1,375.96	0.31	8.72%				1.05	1.75	0.00		1,214	1,253	-	Yes	Yes
29-C	1.07	1,557	1,460.89	6.10	5.59%				2.13	0.00	0.00		705	618	-	Yes	Yes
30-D	1.38	1,608	1,166.94	3.54	3.67%				0.00	0.00	0.00		695	616	-	Yes	Yes
31-D	17.40	8,321	478.08	5.70	4.98%				3.78	4.98	0.46		4,196	4,455	-	Yes	Yes
32-D	2.77	1,985	717.19	4.23	3.88%				3.75	4.58	0.42		1,253	1,140	-	Yes	Yes
33-D	3.86	2,033	526.19	2.80	9.05%				5.30	6.23	3.43		1,210	1,073	-	Yes	Yes
34-D	2.48	1,682	677.94	22.41	0.89%				0.47	0.00	1.40		1,847	886	-	Yes	Yes
35-D	0.35	578	1,666.45	0.35	18.69%				0.00	4.35	1.45		463	288	-	Yes	Yes
36-D	2.39	1,581	661.51	2.53	4.68%				0.00	1.43	0.00		912	837	-	Yes	Yes
37-D	4.59	6,740	1,469.41	2.55	7.82%				0.78	0.49	0.29		3,932	4,092	-	Yes	Yes
38-D	1.84	1,505	816.67	19.00	15.48%				2.21	1.10	0.00		895	823	-	Yes	Yes
39-D	3.62	5,143	1,419.48	6.79	3.25%				1.26	2.81	1.26		2,477	2,566	-	Yes	Yes
40-D	1.38	2,437	1,763.80	11.98	11.78%				1.21	4.53	0.91		1,248	1,314	-	Yes	Yes

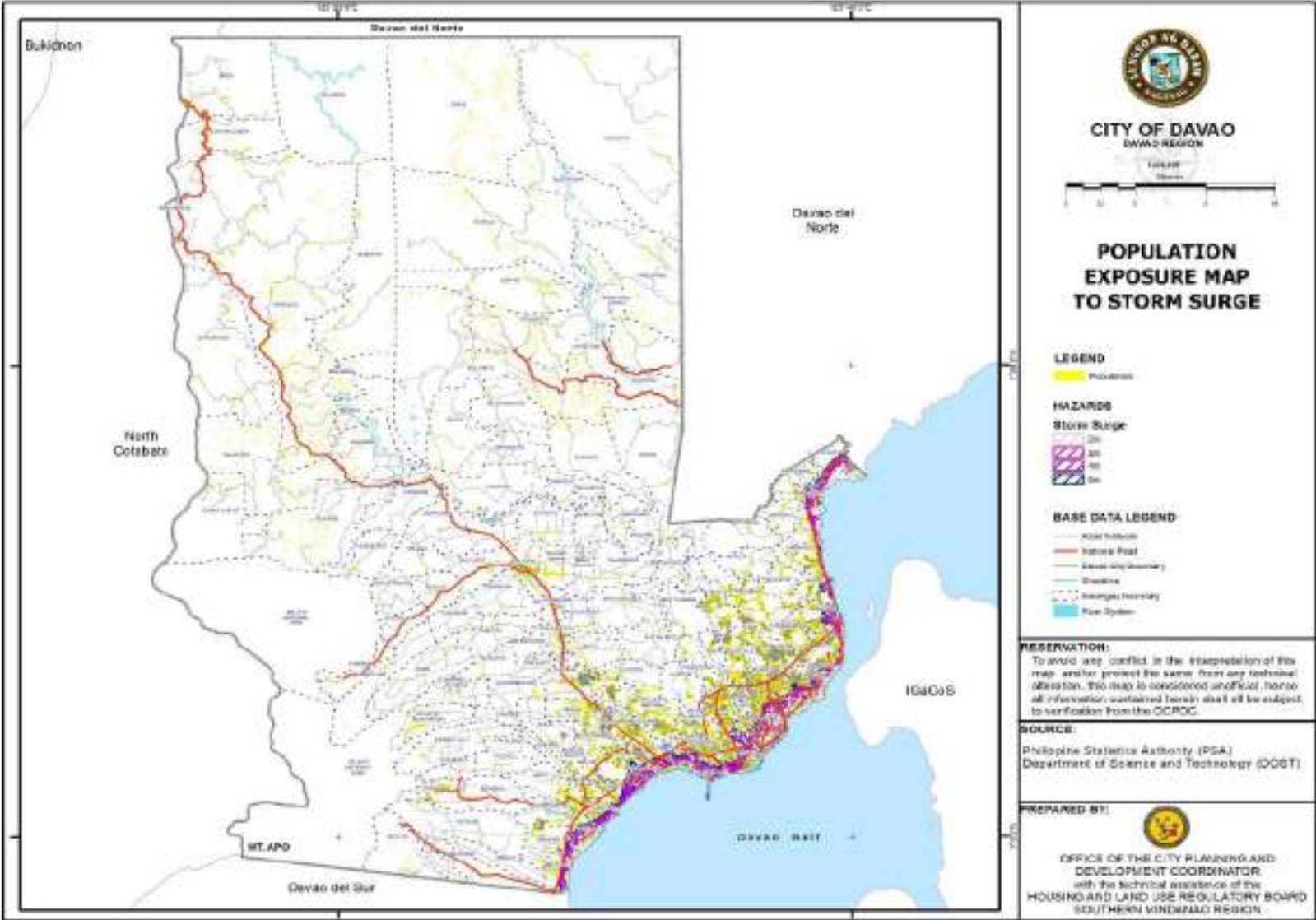
Table PO – 4B. Population Exposure Database to Storm Surge, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Talomo District																	
Bago Aplaya	100.52	15,918	158.35	0.37	0.00%	40.3%	12%	0.07%	5.57	11.79	3.31	-DO-	9,399	11,284	-	Yes	Yes
Bago Gallera	140.21	17,378	123.94	1.59	4.25%				1.78	1.82	0.08		7,636	9,068	-	Yes	Yes
Bucana	237.30	83,964	353.83	9.05	14.46%				2.11	2.57	2.14		15,137	13,389	-	Yes	Yes
Dumoy	171.70	18,622	108.45	1.75	0.00%				3.46	4.24	0.09		9,920	12,762	-	Yes	Yes
Ma-a	452.85	59,803	132.06	5.01	6.25%				5.78	20.87	2.40		32,669	37,525	-	Yes	Yes
Matina Aplaya	166.75	33,384	200.20	7.58	8.37%				1.22	1.59	2.05		20,862	24,144	-	Yes	Yes
Matina Crossing	261.39	32,436	124.09	6.17	0.00%				2.69	2.64	0.88		12,355	13,798	-	Yes	Yes
Talomo	311.47	59,678	191.60	7.09	38.16%				2.44	6.92	2.20		37,014	42,322	-	Yes	Yes
Agdao District																	
Agdao Proper	7.86	8,897	1,132.13	21.30	19.13%	40.3%	12%	0.07%	1.82	2.78	0.19	-DO-	39,982	47,028	-	Yes	Yes
Centro	24.77	13,652	551.21	1.05	7.27%				2.98	6.84	0.15		1,747	1,923	-	Yes	Yes
Gov. Paciano Bangoy	22.55	8,904	394.89	5.35	8.77%				4.14	7.89	1.87		1,985	2,240	-	Yes	Yes
Gov. Vicente Duterte	21.81	8,816	404.24	16.16	11.74%				7.40	13.31	1.50		1,114	1,193	-	Yes	Yes
Tomas Monteverde	2.36	5,716	2,427.02	13.59	10.29%				3.74	3.87	0.13		1,134	1,478	-	Yes	Yes
Lapu - Lapu	25.12	10,306	410.22	8.06	3.83%				3.38	3.09	0.35		3,206	3,565	-	Yes	Yes
Leon Garcia Sr.	12.47	5,783	463.86	0.64	0.00%				6.67	5.44	2.40		4,127	4,384	-	Yes	Yes
Rafael Castillo	13.18	11,738	890.76	2.26	5.20%				3.42	5.38	0.49		1,927	1,577	-	Yes	Yes
San Antonio	27.41	2,966	108.23	5.90	12.98%				3.66	3.24	0.00		2,737	2,768	-	Yes	Yes
Ubalde	6.37	9,903	1,553.58	1.51	1.40%				4.29	7.08	3.86		1,435	1,421	-	Yes	Yes
Wilfredo Aquino	27.58	15,586	565.04	3.46	1.02%				1.26	3.05	1.41		2,313	2,333	-	Yes	Yes

Table PO – 4C. Population Exposure Database to Storm Surge, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Buhangin District																	
A. Angli-ongto	167.48	13,539	80.84	29.03	3.84%	40.3%	12%	0.06%	1.29	0.91	0.76	-DO-	-	-	-	Yes	Yes
Pampanga	54.09	14,381	265.89	0.01	0.00%				3.57	8.38	6.12		18,212	20,626	-	Yes	Yes
Sasa	237.68	52,386	220.40	24.37	6.49%				4.43	8.24	1.03		35,744	42,127	-	Yes	Yes
V. Hizon	124.53	11,265	90.46	22.86	3.83%				0.85	0.85	0.00		-	-	-	Yes	Yes
Bunawan District																	
Lasang	53.31	10,223	191.76	9.33	14.60%	40.3%	12%	0.05%	10.69	17.30	1.02	DO-	3,894	3,970	-	Yes	Yes
Bunawan	128.46	23,495	182.89	0.45	10.75%				5.26	9.29	0.82		19,877	23,810	-	Yes	Yes
Ilang	134.12	24,947	186.00	0.87	8.09%				3.86	4.61	0.22		11,419	13,918	-	Yes	Yes
Mahayag	59.43	6,307	106.12	0.02	8.58%				3.95	5.41	0.00		1,491	1,942	-	Yes	Yes
Panacan	274.98	35,806	130.22	4.92	6.28%				12.05	22.89	4.22		24,476	28,076	-	Yes	Yes
San Isidro	28.72	5,333	185.66	-	3.21%				5.18	5.76	0.33		1,094	1,485	-	Yes	Yes
Tibungco	141.33	41,864	296.22	5.83	14.08%				4.48	6.96	0.07		25,271	29,843	-	Yes	Yes
Toril District																	
Binugao	54.54	6,934	127.14	0.06	11.93%	40.3%	12%	0.07%	3.02	2.17	0.00	-DO-	2,803	3,748	-	Yes	Yes
Daliao	113.90	21,124	185.46	0.33	5.52%				1.34	4.43	0.21		7,644	10,032	-	Yes	Yes
Lizada	109.55	20,112	183.59	6.96	7.58%				2.19	1.83	0.16		5,810	7,472	-	Yes	Yes
Sirawan	88.24	7,140	80.91	4.30	9.87%				4.36	3.82	2.36		2,414	3,208	-	Yes	Yes

Map 2.3. Population Exposure Map to Storm Surge, Davao City



Fault Line – The presence of fault line systems can potentially affect 429,238 persons, who occupy parcels of residential areas that total to 2,532 hectares, in 55 barangays in Davao City (Table PO – 5A to Table PO – 5D). The presence of fault line systems can greatly affect especially the informal settlers, young and old population, persons with disabilities, population living in dwelling units with walls made from light to salvageable materials, malnourished individuals, and households living below poverty threshold. Among the barangays with fault line systems, Talomo Proper has the largest number of informal settlers with 4,331 and the highest number of households living in dwelling units with walls made from light to salvageable materials that total to 22,776. At least 40.3% are considered as dependent population or those who are either young or old. On the other hand, the percentage of households living below the poverty threshold is 12%. In terms of adaptive capacity, there are approximately 60% of the families in Davao City who have access to post disaster financing and benefits from government agencies like GSIS and SSS. There are as well 238,704 members and 301,986 dependents of PhilHealth. Meanwhile, families may have difficulty to relocate or retrofit given their current capacities. They are only willing to pursue relocation/retrofitting if provided with assistance from the local and national governments. The city government has also the capacity to generate jobs and resources disaster-related programs and projects.

Table PO – 5A. Population Exposure Database to Fault Line, Davao City

Exposure				Vulnerability							Adaptive Capacity							
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources	
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents				
Baguio District																		
Baguio	12.60	4,655.00	369.56	19.40	6.68%	40.3%	12%	0.05%	2.03	4.21	2.34	60% of the families have access	8,836	13,452	-	Yes	Yes	
Gumalang	4.62	5,081.00	1,099.75	22.61	12.04%				4.50	6.33	0.42		1,697	2,077	-	Yes	Yes	
Malagos	4.34	6,524.00	1,503.48	21.06	9.03%				4.20	7.97	2.91		1,886	2,443	-	Yes	Yes	
Calinan District																		
Biao Joaquin	3.25	2,289.00	704.29	0.70	10.31%	40.3%	12%	0.16%	2.90	5.81	0.00	-DO-	907	1,327	-	Yes	Yes	
Calinan	111.68	23,052.0	206.41	0.38	4.95%				2.71	2.71	0.31		37,809	55,479	-	Yes	Yes	
Cawayan	1.90	2,295.00	1,209.48	1.44	10.68%				2.05	4.45	0.68		566	591	-	Yes	Yes	
Dacudao	7.27	4,418.00	608.07	0.68	14.19%				5.93	7.99	0.78		1,245	1,485	-	Yes	Yes	
Dominga	1.77	1,607.00	908.58	-	16.55%				6.23	11.57	0.00		307	363	-	Yes	Yes	
Lacson	5.22	5,873.00	1,125.29	0.58	10.52%				8.95	16.53	0.83		1,089	1,294	-	Yes	Yes	
Lamanan	4.70	4,538.00	966.12	3.75	14.43%				5.17	12.50	0.00		1,191	1,390	-	Yes	Yes	
Lampianao	2.41	845.00	350.01	-	13.25%				4.85	8.65	0.00		270	283	-	Yes	Yes	
Pangyan	5.65	2,035.00	360.38	-	9.24%				1.98	7.14	0.00		427	709	-	Yes	Yes	
Riverside	22.28	5,450.00	244.64	16.07	8.31%				3.41	5.56	2.14		780	973	-	Yes	Yes	
Subasta	10.24	3,641.00	355.62	0.66	21.15%				6.79	14.97	1.80		759	1,069	-	Yes	Yes	
Talomo River	20.66	6,846.00	331.29	0.72	5.24%				2.44	5.96	0.36		1,398	1,901	-	Yes	Yes	
Wangan	3.45	5,821.00	1,686.18	0.12	10.62%				0.86	0.74	0.12		1,459	1,673	-	Yes	Yes	
Marilog District																		
Tamugan	10.47	8,351.00	797.42	0.02	0.00%	40.3%	12%	0.09%	1.64	8.11	0.00	-DO-	2,704	2,814	-	Yes	Yes	

Table PO – 5B. Population Exposure Database to Fault Line, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Paquibato District																	
Colosas	9.80	4,731.00	482.82	-	20.42%	40.3%	12%	0.09%	10.53	18.17	2.38	-DO-	1,229	741	-	Yes	Yes
Lumiad	9.12	1,553.00	170.29	-	20.35%				20.29	10.36	0.84		487	555	-	Yes	Yes
Malabog	19.18	10,816.0	564.03	-	0.00%				9.08	19.45	0.00		3,770	2,794	-	Yes	Yes
Mapula	15.55	2,876.00	184.93	-	0.00%				15.57	20.75	0.21		1,005	397	-	Yes	Yes
Pañalum	2.12	1,831.00	864.98	-	-				16.56	13.87	0.76		810	1,120	-	Yes	Yes
Paquibato	13.38	2,495.00	186.53	2.69	18.16%				9.09	8.70	0.92		5,247	7,433	-	Yes	Yes
Sumimao	1.84	1,666.00	906.88	3.06	21.19%				4.86	15.41	0.00		482	559	-	Yes	Yes
Talomo District																	
Baliok	84.28	16,140.0	191.51	0.05	0.00%	40.3%	12%	0.07%	1.80	1.93	0.41	-DO-	5,760	6,882	-	Yes	Yes
Catalunan	324.06	32,461.0	100.17	2.22	6.65%				0.44	0.38	0.12		19,488	23,415	-	Yes	Yes
Catalunan	211.61	22,809.0	107.79	0.89	3.73%				1.57	4.23	0.00		13,381	17,066	-	Yes	Yes
Langub	14.46	2,883.00	199.42	0.21	11.48%				0.26	0.67	0.09		1,285	1,516	-	Yes	Yes
Talomo	311.47	59,678.0	191.60	7.09	38.16%				2.44	6.92	2.20		37,014	42,322	-	Yes	Yes

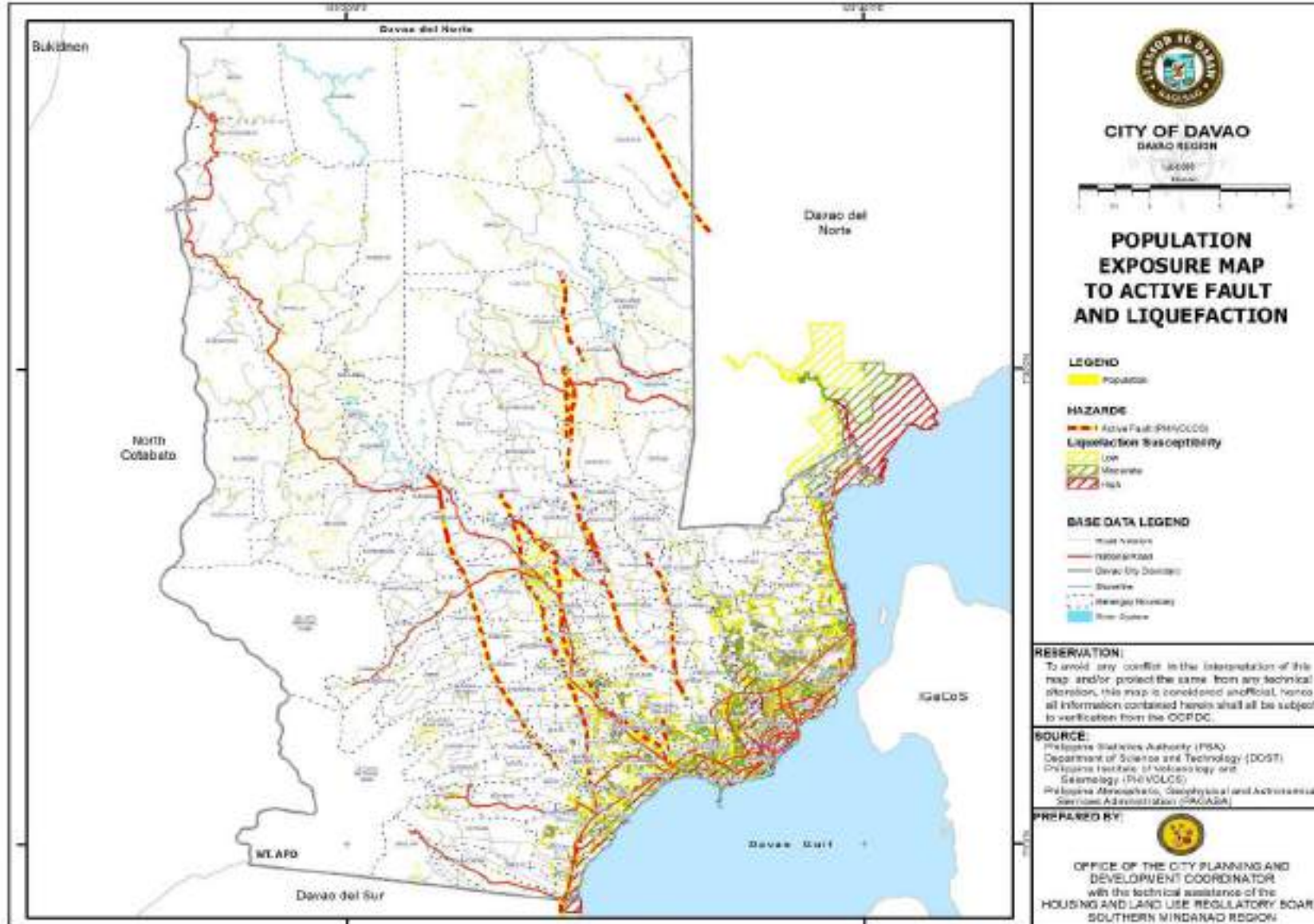
Table PO – 5C. Population Exposure Database to Fault Line, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Toril District																	
Alambre	8.01	2,010.00	250.92	-	10.75%	40.3%	12%	0.07%	5.32	4.61	0.71	-DO-	1,297	1,421	-	Yes	Yes
Bankas	32.04	7,671.00	239.43	-	0.00%				1.39	1.47	0.17		2,890	3,479	-	Yes	Yes
Binugao	54.54	6,934.00	127.14	0.06	11.93%				3.02	2.17	0.00		2,803	3,748	-	Yes	Yes
Camansi	2.46	1,189.00	483.17	0.84	10.01%				1.32	0.00	0.63		295	356	-	Yes	Yes
Lizada	109.55	20,112.0	183.59	6.96	7.58%				2.19	1.83	0.16		5,810	7,472	-	Yes	Yes
Lubogan	93.41	12,156.0	130.14	0.32	0.00%				0.57	0.06	0.00		4,164	5,074	-	Yes	Yes
Mulig	1.75	2,477.00	1,418.33	1.13	0.00%				5.86	12.05	3.91		1,007	1,158	-	Yes	Yes
Sirawan	88.24	7,140.00	80.91	4.30	9.87%				4.36	3.82	2.36		2,414	3,208	-	Yes	Yes
Tagluno	2.27	1,391.00	612.29	22.07	8.91%				1.61	7.69	0.00		592	636	-	Yes	Yes

Table PO – 5D. Population Exposure Database to Fault Line, Davao City

Exposure				Vulnerability							Adaptive Capacity						
Barangay	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls Made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Households Living Below Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals (0-72 months)			Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources
									Weight for Age	Height for Age	Length or Height for Weight		Members	Dependents			
Tugbok District																	
Angalan	12.64	2,475.00	195.83	1.45	13.17%	40.3%	12%	0.04%	5.90	22.05	8.48	-DO-	1,562	1,626	-	Yes	Yes
Bago Oshiro	142.40	11,932.0	83.79	11.41	6.55%				1.53	2.94	0.19		2,807	3,522	-	Yes	Yes
Balengaeng	2.33	2,086.00	896.13	-	8.82%				7.09	7.46	1.12		856	1,013	-	Yes	Yes
Biao Escuela	9.18	3,294.00	358.91	-	10.02%				3.06	3.71	0.00		1,384	1,643	-	Yes	Yes
Biao Gui-	3.94	3,664.00	929.01	-	3.03%				7.04	7.96	2.22		1,709	2,271	-	Yes	Yes
Los Amigos	43.65	9,722.00	222.74	1.43	7.25%				5.89	11.10	0.00		2,401	2,910	-	Yes	Yes
Manambu-	10.04	2,661.00	264.92	0.04	8.08%				5.56	8.61	0.00		1,069	1,410	-	Yes	Yes
Matina Biao	2.78	1,811.00	652.38	1.82	3.87%				0.42	0.42	0.00		1,015	1,578	-	Yes	Yes
Mintal	156.42	13,227.0	84.56	1.93	7.39%				4.17	3.53	0.53		15,905	20,994	-	Yes	Yes
New Car-	16.15	2,626.00	162.64	4.34	15.35%				21.24	30.83	3.63		598	692	-	Yes	Yes
New Valen-	5.41	1,679.00	310.53	0.12	16.26%				3.32	15.77	0.00		248	311	-	Yes	Yes
Sto. Niño	88.71	20,103.0	226.61	0.06	7.78%				1.85	2.34	0.19		4,931	5,621	-	Yes	Yes
Tacunan	57.42	12,773.0	222.45	0.40	4.31%				2.36	6.30	2.18		4,017	4,987	-	Yes	Yes
Tagakpan	10.85	4,208.00	387.69	0.19	12.69%				3.34	2.97	0.37		1,694	1,771	-	Yes	Yes
Talandang	8.31	3,392.00	408.07	0.06	15.45%				8.89	11.93	4.56		1,009	1,181	-	Yes	Yes
Tugbok	125.40	15,115.0	120.53	1.42	4.13%				2.71	4.20	0.92		22,762	28,718	-	Yes	Yes
Ula	14.75	4,130.00	279.97	0.29	7.48%				9.61	27.96	0.69		1,182	1,460	-	Yes	Yes

Map 2.4. Population Exposure Map to Fault Line System and Liquefaction, Davao City



Population Exposure Estimation

The following tables bare the results on the extent of exposed area and population in barangays that are either moderately or highly susceptible to such hazard. The exposed population in the tables is computed by multiplying the population density to the affected area. Below are the summary of the population exposure estimation per hazard:

Flood – Of the 8,600.07 hectares of residential areas that are identified as either low, moderate, or high susceptible to floods, 97% are expected to be exposed to floods (Table PO – 6A to Table PO – 6I). At least 2,153.34 hectares of the potentially exposed areas are considered as affected areas. Also, 31% of the 1,477,788 persons within the potentially exposed areas are identified as exposed population.

Table PO – 6A. Population Exposure Estimation to Flood, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Poblacion District														
1-A	7.19	3,103	432	6.94	2,996	97%	11.44	11.18	40.30%	19.30%	0.08%	0.70	6.32	0.00
2-A	1.65	3,589	2,171	1.23	2,660	74%	11.90	10.00				0.84	1.68	0.00
5-A	21.80	11,436	525	14.12	7,409	65%	0.00	11.92				5.84	10.65	0.81
8-A	86.07	11,075	129	47.94	6,168	56%	4.41	5.64				4.98	7.07	0.98
15-B	1.47	2,891	1,973	0.22	433	15%	12.90	9.34				0.59	0.30	3.26
19-B	190.47	31,766	167	40.47	6,750	21%	2.06	3.56				3.36	3.80	2.54
21-C	7.15	7,478	1,046	1.32	1,381	18%	6.33	9.08				2.04	3.80	0.00
22-C	6.65	6,634	998	3.53	3,522	53%	1.37	8.83				1.30	0.91	0.00
23-C	14.60	16,489	1,129	11.18	12,621	77%	17.28	13.42				3.12	2.52	0.15
31-D	17.40	8,321	478	7.74	3,700	44%	5.70	4.98				3.78	4.98	0.46
37-D	4.59	6,740	1,469	0.76	1,119	17%	2.55	7.82				0.78	0.49	0.29
39-D	3.62	5,143	1,419	2.53	3,598	70%	6.79	3.25				1.26	2.81	1.26
40-D	1.38	2,437	1,764	1.34	2,363	97%	11.98	11.78				1.21	4.53	0.91

Table PO – 6B. Population Exposure Estimation to Flood, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Talomo District														
Bago Aplaya	100.52	15,918	158	28.28	4,478	28%	0.37	-	40.30%	19.30%	0.07%	5.57	11.79	3.31
Bago Gallera	140.21	17,378	124	49.25	6,104	35%	1.59	4.25				1.78	1.82	0.08
Baliok	84.28	16,140	192	14.12	2,705	17%	0.05					1.80	1.93	0.41
Bucana	237.30	83,964	354	86.42	30,577	36%	9.05	14.46				2.11	2.57	2.14
Catalunan Grande	324.06	32,461	100	69.62	6,973	21%	2.22	6.65				0.44	0.38	0.12
Catalunan Pequeño	211.61	22,809	108	26.64	2,871	13%	0.89	3.73				1.57	4.23	0.00
Dumoy	171.70	18,622	108	28.49	3,090	17%	1.75	-				3.46	4.24	0.09
Langub	14.46	2,883	199	0.01	3	0%	0.21	11.48				0.26	0.67	0.09
Ma-a	452.85	59,803	132	136.31	18,001	30%	5.01	6.25				5.78	20.87	2.40
Magtuod	56.05	5,058	90	10.06	908	18%	5.24	10.28				0.04	0.10	0.00
Matina Aplaya	166.75	33,384	200	72.79	14,572	44%	7.58	8.37				1.22	1.59	2.05
Matina Crossing	261.39	32,436	124	66.49	8,250	25%	6.17	-				2.69	2.64	0.88
Matina Pangi	162.30	18,081	111	51.00	5,682	31%	3.03	9.49				1.10	0.20	0.24
Talomo	311.47	59,678	192	226.76	43,447	73%	7.09	38.16				2.44	6.92	2.20

Table PO – 6C. Population Exposure Estimation to Flood, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Agdao District														
Agdao Proper	7.86	8,897	1,132	7.62	8,625	97%	21.30	19.13	40.30%	19.30%	0.07%	1.82	2.78	0.19
Centro	24.77	13,652	551	18.39	10,139	74%	1.05	7.27				2.98	6.84	0.15
Gov, Paciano Bangoy	22.55	8,904	395	17.65	6,971	78%	5.35	8.77				4.14	7.89	1.87
Gov. Vicente Duterte	21.81	8,816	404	14.16	5,724	65%	16.16	11.74				7.40	13.31	1.50
Tomas Monteverde	2.36	5,716	2,427	1.69	4,114	72%	13.59	10.29				3.74	3.87	0.13
Lapu - Lapu	25.12	10,306	410	17.27	7,086	69%	8.06	8.83				3.38	3.09	0.35
Leon Garcia Sr.	12.47	5,783	464	10.85	5,035	87%	0.64					6.67	5.44	2.40
Rafael Castillo	13.18	11,738	891	7.41	6,602	56%	2.26	5.20				3.42	5.38	0.49
San Antonio	27.41	2,966	108	0.01	1	0%	5.90	12.98				3.66	3.24	0.00
Ubalde	6.37	9,903	1,554	0.93	1,452	15%	1.51					4.29	7.08	3.86
Wilfredo Aquino	27.58	15,586	565	1.51	851	5%	3.46	1.02				1.26	3.05	1.41

Table PO – 6D. Population Exposure Estimation to Flood, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Buhangin District														
A. Angliongto	167.48	13,539	81	6.30	509	4%	29.03	3.84	40.30%	19.30%	0.06%	1.29	0.91	0.76
Buhangin	355.82	65,461	184	9.41	1,730	3%	23.82	6.67				1.03	0.92	0.69
Cabantian	332.16	43,758	132	5.47	721	2%	19.33	2.13				0.39	0.14	0.00
Callawa	8.34	3,553	426	0.11	48	1%	25.33	9.85				3.31	3.31	0.74
Communal	171.91	16,740	97	7.08	690	4%	5.30					1.54	1.77	0.23
Indangan	258.09	14,867	58	0.40	23	0%	0.06					4.29	6.68	0.54
Mandug	175.55	13,594	77	20.99	1,625	12%	22.62	6.14				5.81	14.53	2.14
Pampanganga	54.09	14,381	266	10.16	2,702	19%	0.01					3.57	8.38	6.12
Sasa	237.68	52,386	220	47.18	10,400	20%	24.37	6.49				4.43	8.24	1.03
Tigatto	273.57	36,387	133	102.74	13,665	38%	14.36	2.75				3.30	2.67	0.72
V. Hizon	124.53	11,265	90	17.98	1,626	14%	22.86	3.83				0.85	0.85	0.00
Waan	39.30	3,925	100	21.29	2,126	54%	24.61	12.51				3.19	4.13	1.50

Table PO – 6E. Population Exposure Estimation to Flood, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Bunawan District														
Lasang	53.31	10,223	192	20.65	3,960	39%	9.33	14.60	40.30%	19.30%	0.05%	10.69	17.30	1.02
Bunawan	128.46	23,495	183	35.10	6,420	27%	0.45	10.75				5.26	9.29	0.82
Gatungan	2.22	1,190	536	0.04	19	2%	0.00	10.84				4.53	6.78	0.58
Ilang	134.12	24,947	186	7.03	1,308	5%	0.87	8.09				3.86	4.61	0.22
Mahayag	59.43	6,307	106	0.74	78	1%	0.02	8.58				3.95	5.41	0.00
Mudiang	71.06	2,937	41	1.00	41	1%	0.03	7.08				2.56	1.40	0.93
Panacan	274.98	35,806	130	31.89	4,153	20%	4.92	6.28				12.05	22.89	4.22
San Isidro	28.72	5,333	186	0.08	15	0%	0.00	3.21				5.18	5.76	0.33
Tibungco	141.33	41,864	296	14.31	4,240	10%	5.83	14.08				4.48	6.96	0.07
Ilang	134.12	24,947	186	7.03	1,308	5%	0.87	8.09				3.86	4.61	0.22
Mahayag	59.43	6,307	106	0.74	78	1%	0.02	8.58				3.95	5.41	0.00
Paquibato District														
Malabog	19.18	10,816	564	0.03	18	0%	0.00	-	40.30%	19.30%	0.09%	9.08	19.45	0.00
Paradise Embac	2.07	2,654	1,285	0.00	0	0%	0.00	18.09				7.92	2.99	0.00
Salapawan	3.26	2,282	701	0.01	8	0%	0.00					0.00	0.00	0.00
Sumimao	1.84	1,666	907	0.66	599	36%	3.06	21.19				4.86	15.41	0.00
Tapak	18.76	5,258	280	1.93	541	10%	0.00	20.88				17.11	12.29	0.00

Table PO – 6F. Population Exposure Estimation to Flood, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Baguio District														
Baguio	12.60	4,655	370	8.10	2,992	64%	19.40	6.68	40.30%	19.30%	0.05%	2.03	4.21	2.34
Malagos	18.01	6,524	362	4.89	1,772	27%	21.06	9.03				4.20	7.97	2.91
Marilog District														
Gumitan	8.53	1,756	206	0.03	7	0%	0.00	-	40.30%	19.30%	0.09%	17.97	59.91	8.29
Malamba	13.27	4,864	367	1.40	512	11%	1.05	10.90				9.13	17.97	0.14
Marilog	95.55	16,188	169	0.10	17	0%	0.00	-				11.04	16.60	0.09
Salaysay	10.44	4,431	424	0.03	15	0%	0.00	-				9.49	18.31	1.19
Tamugan	10.47	8,351	797	8.77	6,993	84%	0.02	-				1.64	8.11	0.00

Table PO – 6G. Population Exposure Estimation to Flood, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Calinan District														
Biao Joaquin	3.25	2,289	704	2.38	1,673	73%	0.70	10.31	40.30%	19.30%	0.16%	2.90	5.81	0.00
Calinan	111.68	23,052	206	107.19	22,124	96%	0.38	4.95				2.71	2.71	0.31
Cawayan	1.90	2,295	1,209	0.30	368	16%	1.44	10.68				2.05	4.45	0.68
Dacudao	7.27	4,418	608	0.29	178	4%	0.68	14.19				5.93	7.99	0.78
Dalagdag	2.76	934	338	1.18	401	43%	2.78	20.99				2.68	5.22	0.00
Dominga	1.77	1,607	909	1.73	1,575	98%	0.00	16.55				6.23	11.57	0.00
Inayangan	3.33	4,832	1,450	0.01	11	0%	0.00	17.40				4.25	8.33	0.00
Lacson	5.22	5,873	1,125	1.30	1,466	25%	0.58	10.52				8.95	16.53	0.83
Lamanan	4.70	4,538	966	0.06	57	1%	3.75	14.43				5.17	12.50	0.00
Lampianao	2.41	845	350	0.29	102	12%	0.00	13.25				4.85	8.65	0.00
Megkawayan	5.99	3,015	503	0.06	32	1%	0.00	16.85				12.57	14.66	0.00
Pangyan	5.65	2,035	360	1.99	717	35%	0.00	9.24				1.98	7.14	0.00
Riverside	22.28	5,450	245	19.33	4,728	87%	16.07	8.31				3.41	5.56	2.14
Saloy	2.03	2,112	1,040	0.01	10	0%	0.00	18.56				5.06	5.45	0.00
Sirib	7.86	5,199	662	1.96	1,297	25%	0.00	15.87				4.87	9.43	0.44
Subasta	10.24	3,641	356	6.61	2,350	65%	0.66	21.15				6.79	14.97	1.80
Talomo River	20.66	6,846	331	19.81	6,564	96%	0.72	5.24	2.44	5.96	0.36			
Wangan	3.45	5,821	1,686	1.34	2,254	39%	0.12	14.82	0.86	0.74	0.12			

Table PO – 6H. Population Exposure Estimation to Flood, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Toril District														
Alambre	8.01	2,010	251	0.09	21	1%	0.00	10.75	40.30%	19.30%	0.07%	5.32	4.61	0.71
Bankas Heights	32.04	7,671	239	18.61	4,457	58%	0.00	-				1.39	1.47	0.17
Bato	46.16	10,007	217	2.08	451	5%	0.00	-				4.07	3.35	1.53
Binugao	54.54	6,934	127	26.77	3,404	49%	0.06	11.93				3.02	2.17	0.00
Catigan	6.36	3,044	479	0.24	113	4%	0.00	19.45				6.56	26.47	8.14
Crossing Bayabas	96.18	11,490	119	21.61	2,581	22%	2.21	7.30				2.99	2.18	1.00
Daliao	113.90	21,124	185	23.42	4,344	21%	0.33	5.52				1.34	4.43	0.21
Daliao Plantation	5.75	3,214	559	0.00	1	0%	12.41	22.96				0.62	6.02	0.00
Eden	53.21	2,385	45	2.35	105	4%	0.25	14.93				9.97	19.14	1.86
Kilate	2.66	1,309	492	0.11	54	4%	0.92	12.99				3.11	5.63	2.48
Lizada	109.55	20,112	184	19.82	3,639	18%	6.96	7.58				2.19	1.83	0.16
Lubogan	93.41	12,156	130	32.08	4,175	34%	0.32	-				0.57	0.06	0.00
Marapangi	80.99	6,889	85	12.97	1,103	16%	0.00	9.06				6.20	9.60	2.60
Sibulan	2.31	2,479	1,072	0.01	9	0%	1.13	-				13.36	13.92	0.00
Sirawan	88.24	7,140	81	22.25	1,800	25%	0.00	9.87				4.36	3.82	2.36
Tagluno	2.27	1,391	612	0.09	53	4%	22.07	8.91	1.61	7.69	0.00			
Tungkalan	4.24	2,910	686	0.05	33	1%	0.00	-	0.72	0.72	0.00			

Table PO – 6I. Population Exposure Estimation to Flood, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Tugbok District														
Angalan	12.64	2,475	196	11.73	2,297	93%	1.45	13.17	40.30%	19.30%	0.04%	5.90	22.05	8.48
Bago Oshiro	142.40	11,932	84	2.96	248	2%	11.41	6.55				1.53	2.94	0.19
Balengaeng	2.33	2,086	896	2.27	2,038	98%	0.00	8.82				7.09	7.46	1.12
Biao Escuela	9.18	3,294	359	1.62	581	18%	0.00	10.02				3.06	3.71	0.00
Biao Guianga	3.94	3,664	929	1.69	1,570	43%	0.00	3.03				7.04	7.96	2.22
Los Amigos	43.65	9,722	223	38.62	8,601	88%	1.43	7.25				5.89	11.10	0.00
Manambulan	10.04	2,661	265	9.10	2,409	91%	0.04	8.08				5.56	8.61	0.00
Manuel Guianga	8.17	6,436	787	0.17	132	2%	0.02	14.70				0.80	1.14	0.00
Matina Biao	2.78	1,811	652	1.80	1,171	65%	1.82	3.87				0.42	0.42	0.00
Mintal	156.42	13,227	85	65.05	5,501	42%	1.93	7.39				4.17	3.53	0.53
New Carmen	16.15	2,626	163	13.17	2,142	82%	4.34	15.35				21.24	30.83	3.63
New Valencia	5.41	1,679	311	2.24	696	41%	0.12	16.26				3.32	15.77	0.00
Sto. Niño	88.71	20,103	227	8.74	1,979	10%	0.06	7.78				1.85	2.34	0.19
Tacunan	57.42	12,773	222	31.80	7,073	55%	0.40	4.31				2.36	6.30	2.18
Tagakpan	10.85	4,208	388	6.82	2,645	63%	0.19	12.69				3.34	2.97	0.37
Talandang	8.31	3,392	408	3.19	1,303	38%	0.06	15.45				8.89	11.93	4.56
Tugbok	125.40	15,115	121	107.98	13,015	86%	1.42	4.13				2.71	4.20	0.92
Ula	14.75	4,130	280	7.04	1,970	48%	0.29	7.48	9.61	27.96	0.69			

Landslide - Of the 8,655.14 hectares of residential areas that were identified as either low, moderate, or high susceptible to landslides, 65% are expected to be exposed to landslides (Table PO – 7A to Table PO – 7E). At least 1,201 hectares of the potentially exposed areas are considered as affected areas. Also, 24% of the 904,788 persons within the potentially exposed areas are identified as exposed population.

Table PO – 7A. Population Exposure Estimation to Landslide, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Poblacion District														
19-B	190.47	31,766	167	1.32	220	1%	2.06	3.56	40.30%	19.30%	0.08%	3.36	3.80	2.54
Baguio District														
Carmen	1.52	2,156	1,419	1.26	1,791	83%	23.42	19.02	40.30%	19.30%	0.05%	11.72	13.67	1.17
Gumalang	4.62	5,081	1,100	0.38	413	8%	22.61	12.04				4.50	6.33	0.42
Tambobong	4.85	5,993	1,234	4.49	5,546	93%	22.41	18.42				6.79	19.72	0.26
Tawan-Tawan	2.84	3,889	1,367	0.04	58	1%	23.27	11.70				5.04	5.22	0.00
Buhangin District														
A. Angliongto	167.48	13,539	81	0.72	58	0%	29.03	3.84	40.30%	19.30%	0.06%	1.29	0.91	0.76
Acacia	15.40	3,262	212	15.15	3,208	98%	29.80	11.56				3.21	6.04	2.64
Buhangin	355.82	65,461	184	36.71	6,754	10%	23.82	6.67				1.03	0.92	0.69
Cabantian	332.16	43,758	132	83.13	10,951	25%	19.33	2.13				0.39	0.14	0.00
Callawa	8.34	3,553	426	0.68	289	8%	25.33	9.85				3.31	3.31	0.74
Communal	171.91	16,740	97	67.72	6,594	39%	5.30	-				1.54	1.77	0.23
Indangan	258.09	14,867	58	93.10	5,363	36%	0.06	-				4.29	6.68	0.54
Mandug	175.55	13,594	77	20.17	1,562	11%	22.62	6.14				5.81	14.53	2.14
Sasa	237.68	52,386	220	1.14	251	0%	24.37	6.49				4.43	8.24	1.03
Tigatto	273.57	36,387	133	39.43	5,245	14%	14.36	2.75				3.30	2.67	0.72
Waan	39.30	3,925	100	7.17	716	18%	24.61	12.51	3.19	4.13	1.50			

Table PO – 7B. Population Exposure Estimation to Landslide, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Bunawan District														
Bunawan	128.46	23,495	183	7.75	1,417	6%	0.45	10.75	40.30%	19.30%	0.05%	5.26	9.29	0.82
Gatungan	2.22	1,190	536	1.70	913	77%	0.00	10.84				4.53	6.78	0.58
Ilang	134.12	24,947	186	16.66	3,099	12%	0.00	8.09				3.86	4.61	0.22
Mahayag	59.43	6,307	106	7.19	763	12%	0.02	8.58				3.95	5.41	0.00
Mudiang	71.06	2,937	41	38.15	1,577	54%	0.03	7.08				2.56	1.40	0.93
Panacan	274.98	35,806	130	67.73	8,820	25%	4.92	6.28				12.05	22.89	4.22
San Isidro	28.72	5,333	186	3.40	632	12%	0.00	3.21				5.18	5.76	0.33
Tibungco	141.33	41,864	296	18.18	5,386	13%	5.83	14.08				4.48	6.96	0.07
Calinan District														
Biao Joaquin	3.25	2,289	704	0.82	579	25%	0.70	10.31	40.30%	19.30%	0.16%	2.90	5.81	0.00
Calinan	111.68	23,052	206	0.02	3	0%	0.38	4.95				2.71	2.71	0.31
Dalagdag	2.76	934	338	1.14	386	41%	2.78	20.99				2.68	5.22	0.00
Dominga	1.77	1,607	909	0.11	104	6%	0.00	16.55				6.23	11.57	0.00
Inayangan	3.33	4,832	1,450	1.89	2,746	57%	0.00	17.40				4.25	8.33	0.00
Lacson	5.22	5,873	1,125	0.07	78	1%	0.58	10.52				8.95	16.53	0.83
Lamanan	4.70	4,538	966	4.47	4,319	95%	3.75	14.43				5.17	12.50	0.00
Lampianao	2.41	845	350	1.85	647	77%	0.00	13.25				4.85	8.65	0.00
Megkawayan	5.99	3,015	503	5.52	2,776	92%	0.00	16.85				12.57	14.66	0.00
Pangyan	5.65	2,035	360	1.33	478	23%	0.00	9.24				1.98	7.14	0.00
Saloy	2.03	2,112	1,040	1.78	1,848	87%	16.07	18.56				5.06	5.45	0.00
Sirib	7.86	5,199	662	0.90	594	11%	0.00	15.87				4.87	9.43	0.44
Talomo River	20.66	6,846	331	0.10	34	0%	0.72	5.24				2.44	5.96	0.36
Tamayong	4.85	7,273	1,498	2.67	4,001	55%	2.45	14.82	10.93	25.18	1.29			

Table PO – 7C. Population Exposure Estimation to Landslide, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Marilog District														
Baganihan	3.21	1,295	404	0.16	65	5%	0.77	20.77	40.30%	19.30%	0.09%	-	10.78	12.08
Bantol	2.73	2,324	852	2.61	2,226	96%	0.04	18.93				0.66	18.21	0.00
Buda	20.59	1,885	92	4.07	373	20%	5.25	14.16				7.97	10.51	0.00
Dalag Lumot	10.73	1,864	174	9.86	1,713	92%	0.32	17.06				10.62	6.59	0.00
Datu Salumay	21.74	2,232	103	4.94	507	23%	1.43	13.44				4.10	0.82	0.00
Gumitan	8.53	1,756	206	6.63	1,366	78%	0.00	-				17.97	59.91	8.29
Magsaysay	9.53	2,425	254	8.68	2,209	91%	0.00	19.84				2.45	9.17	0.31
Malamba	13.27	4,864	367	10.09	3,700	76%	1.05	10.90				9.13	17.97	0.14
Marilog	95.55	16,188	169	91.12	15,438	95%	0.00	-				11.04	16.60	0.09
Salaysay	10.44	4,431	424	10.06	4,270	96%	0.00	-				9.49	18.31	1.19
Suawan	7.71	4,586	595	7.31	4,351	95%	2.73	20.15				9.90	14.65	0.40
Tamugan	10.47	8,351	797	0.03	27	0%	0.02	-	1.64	8.11	0.00			
Paquibato District														
Colosas	9.80	4,731	483	9.65	4,658	98%	0.00	20.42	40.30%	19.30%	0.09%	10.53	18.17	2.38
Fatima	10.80	3,502	324	7.61	2,467	70%	3.51	23.99				12.28	10.02	0.00
Lumiad	9.12	1,553	170	8.62	1,468	95%	0.00	20.35				20.29	10.36	0.84
Mabuhay	7.57	1,062	140	0.68	95	9%	0.00	14.69				5.03	15.82	2.63
Malabog	19.18	10,816	564	18.22	10,276	95%	0.00	-				9.08	19.45	0.00
Mapula	15.55	2,876	185	14.69	2,717	94%	0.00	-				15.57	20.75	0.21
Pandaitan	9.86	4,037	409	9.34	3,823	95%	0.00	13.57				8.20	2.83	2.23
Pañalum	2.12	1,831	865	2.08	1,796	98%	0.00					16.56	13.87	0.76
Paquibato	13.38	2,495	187	12.54	2,339	94%	2.69	18.16				9.09	8.70	0.92
Paradise Embac	2.07	2,654	1,285	1.90	2,445	92%	0.00	18.09				7.92	2.99	0.00
Salapawan	3.26	2,282	701	3.03	2,124	93%	0.00					0.00	0.00	0.00
Sumimao	1.84	1,666	907	1.78	1,612	97%	3.06	21.19	4.86	15.41	0.00			
Tapak	18.76	5,258	280	18.46	5,172	98%	0.00	20.88	17.11	12.29	0.00			

Table PO – 7D. Population Exposure Estimation to Landslide, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Talomo District														
Catalunan Grande	324.06	32,461	100	5.07	508	2%	2.22	6.65	40.30%	19.30%	0.07%	0.44	0.38	0.12
Langub	14.46	2,883	199	13.48	2,688	93%	0.21	11.48				0.26	0.67	0.09
Ma-a	452.85	59,803	132	101.76	13,438	22%	5.01	6.25				5.78	20.87	2.40
Magtuod	56.05	5,058	90	46.37	4,184	83%	5.24	10.28				0.04	0.10	0.00
Matina Crossing	261.39	32,436	124	29.25	3,629	11%	6.17	-				2.69	2.64	0.88
Matina Pangí	162.30	18,081	111	64.73	7,211	40%	3.03	9.49				1.10	0.20	0.24
Talomo	311.47	59,678	192	10.51	2,013	3%	7.09	38.16				2.44	6.92	2.20
Toril District														
Alambre	8.01	2,010	251	0.09	22	1%	0.00	10.75	40.30%	19.30%	0.07%	5.32	4.61	0.71
Atan-Awe	0.91	1,119	1,228	0.89	1,092	98%	0.00	20.82				6.33	2.53	1.27
Baracatan	4.31	2,895	671	1.55	1,039	36%	0.00	17.55				4.18	5.13	5.84
Bato	46.16	10,007	217	1.00	218	2%	2.25					4.07	3.35	1.53
Bayabas	3.35	2,989	893	2.05	1,835	61%	0.00	13.72				2.43	6.68	0.00
Binugao	54.54	6,934	127	24.70	3,140	45%	0.23	11.93				3.02	2.17	0.00
Camansi	2.46	1,189	483	1.73	835	70%	0.06	10.01				1.32	0.00	0.63
Catigan	6.36	3,044	479	2.21	1,059	35%	0.00	19.45				6.56	26.47	8.14
Daliaon Plantation	5.75	3,214	559	2.17	1,212	38%	12.41	22.96				0.62	6.02	0.00
Eden	53.21	2,385	45	51.48	2,308	97%	0.25	14.93				9.97	19.14	1.86
Kilate	2.66	1,309	492	0.19	93	7%	0.92	12.99				3.11	5.63	2.48
Marapangi	80.99	6,889	85	1.99	170	2%	0.00	9.06				6.20	9.60	2.60
Sibulan	2.31	2,479	1,072	2.14	2,289	92%	0.00	-				13.36	13.92	0.00
Sirawan	88.24	7,140	81	7.50	607	9%	4.30	9.87				4.36	3.82	2.36
Tagurano	1.70	1,230	722	0.60	434	35%	0.00	16.83				5.63	10.00	0.00
Tibuloy	3.79	2,218	585	3.57	2,086	94%	0.00	16.14				7.96	14.84	5.07
Tungkalan	4.24	2,910	686	1.09	746	26%	0.00	-	0.72	0.72	0.00			

Table PO – 7E. Population Exposure Estimation to Landslide, Davao City

Barangay	Exposure						Sensitivity							
	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Tugbok District														
Manambulan	10.04	2,661	265	0.12	32	1%	0.04	8.08	40.30%	19.30%	0.04%	5.56	8.61	0.00
Matina Biao	2.78	1,811	652	0.91	593	33%	1.82	3.87				0.42	0.42	0.00
New Carmen	16.15	2,626	163	2.26	367	14%	4.34	15.35				21.24	30.83	3.63
New Valencia	5.41	1,679	311	1.00	311	19%	-	16.26				3.32	15.77	0.00

Liquefaction - Of the 6,646.45 hectares of residential areas that are identified as either low, moderate, or high susceptible to liquefaction, 87% are expected to be exposed to liquefaction (Table PO – 8A to Table PO – 8D). At least 2,422.05 hectares of the potentially exposed areas are considered as affected areas. Also, 52% of the 1,088,592 persons within the potentially exposed areas are identified as exposed population.

Table PO – 8A. Population Exposure Estimation to Liquefaction, Davao City

Barangay	Exposure						Sensitivity								
	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals			
												Weight for Age	Height for Age	Length or Height for Weight	
Poblacion District															
1-A	7.19	3,103	432	6.69	2,887	93%	11.44	11.18	40.30%	19.30%	0.08%	0.70	6.32	0.00	
2-A	1.65	3,589	2,171	1.61	3,494	97%	11.90	10.00				0.84	1.68	0.00	
3-A	0.55	370	671	0.55	370	100%	0.00	0.00				25.00	0.00	0.00	
4-A	2.93	1,683	574	2.93	1,683	100%	20.38	14.56				5.28	8.54	3.66	
5-A	21.80	11,436	525	13.27	6,964	61%	0.00	11.92				5.84	10.65	0.81	
6-A	4.39	2,084	475	0.93	441	21%	16.27	16.70				4.48	7.46	0.37	
7-A	10.56	3,984	377	5.60	2,114	53%	2.28	6.93				5.44	6.49	0.18	
8-A	86.07	11,075	129	34.14	4,393	40%	4.41	5.64				4.98	7.07	0.98	
9-A	14.10	5,698	404	8.69	3,513	62%	0.44	4.41				3.70	4.97	0.77	
10-A	5.84	6,764	1,159	4.27	4,946	73%	4.95	2.96				4.26	6.68	0.00	
11-B	2.56	1,901	742	2.56	1,901	100%	11.31	10.36				0.66	3.29	1.97	
12-B	1.20	840	702	1.20	839	100%	3.69	74.17				4.84	9.60	0.80	
13-B	0.57	427	744	0.57	427	100%	8.43	6.56				11.63	18.18	15.91	
14-B	3.10	1,175	379	3.09	1,173	100%	8.85	3.57				3.67	2.75	11.01	
15-B	1.47	2,891	1,973	1.46	2,890	100%	12.90	9.34				0.59	0.30	3.26	
16-B	0.44	840	1,902	0.43	810	96%	0.00	0.00				4.00	2.40	0.80	
17-B	0.54	810	1,509	0.53	793	98%	0.00	0.86				3.88	5.83	4.85	
18-B	0.42	1,832	4,346	0.40	1,760	96%	0.05	15.72				3.19	9.57	2.13	
19-B	190.47	31,766	167	31.90	5,319	17%	2.06	3.56				3.36	3.80	2.54	
20-B	14.69	4,581	312	13.62	4,249	93%	0.59	4.26				1.61	5.38	1.61	
21-C	7.15	7,478	1,046	5.16	5,397	72%	6.33	9.08				2.04	3.80	0.00	
22-C	6.65	6,634	998	4.76	4,749	72%	1.37	8.83				1.30	0.91	0.00	
23-C	14.60	16,489	1,129	12.74	14,385	87%	17.28	13.42				3.12	2.52	0.15	
24-C	2.52	2,602	1,034	2.51	2,601	100%	2.15	3.88				0.45	0.00	0.00	
25-C	1.73	1,967	1,137	1.73	1,966	100%	0.00	6.61				0.00	0.00	0.00	
26-C	2.26	2,510	1,112	2.23	2,484	99%	0.00	3.98				0.54	0.81	0.00	
27-C	0.66	2,152	3,241	0.64	2,088	97%	15.43	12.27				2.70	2.70	0.00	
28-C	1.65	2,270	1,376	1.65	2,269	100%	0.31	8.72				1.05	1.75	0.00	
29-C	1.07	1,557	1,461	1.07	1,557	100%	6.10	5.59				2.13	0.00	0.00	
30-D	1.38	1,608	1,167	1.37	1,595	99%	1.49	3.67				0.00	0.00	0.00	

Table PO – 8B. Population Exposure Estimation to Liquefaction, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
31-D	17.40	8,321	478	13.55	6,476	78%	5.70	4.98	40.30%	19.30%	0.08%	3.78	4.98	0.46
32-D	2.77	1,985	717	2.75	1,972	99%	4.23	3.88				3.75	4.58	0.42
33-D	3.86	2,033	526	3.86	2,032	100%	2.80	9.05				5.30	6.23	3.43
34-D	2.48	1,682	678	2.48	1,682	100%	22.41	0.89				0.47	0.00	1.40
35-D	0.35	578	1,666	0.35	578	100%	0.00	18.69				0.00	4.35	1.45
36-D	2.39	1,581	662	2.39	1,581	100%	2.53	4.68				0.00	1.43	0.00
37-D	4.59	6,740	1,469	3.54	5,208	77%	2.55	7.82				0.78	0.49	0.29
38-D	1.84	1,505	817	1.73	1,410	94%	19.00	15.48				2.21	1.10	0.00
39-D	3.62	5,143	1,419	2.92	4,145	81%	6.79	3.25				1.26	2.81	1.26
40-D	1.38	2,437	1,764	1.34	2,363	97%	11.98	11.78				1.21	4.53	0.91
Agdao District														
Agdao Proper	7.86	8,897	1,132	7.62	8,625	97%	21.30	19.13	40.30%	19.30%	0.07%	1.82	2.78	0.19
Centro	24.77	13,652	551	22.37	12,331	90%	1.05	7.27				2.98	6.84	0.15
Gov. Paciano Bangoy	22.55	8,904	395	17.47	6,900	77%	5.35	8.77				4.14	7.89	1.87
Gov. Vicente Duterte	21.81	8,816	404	20.02	8,091	92%	16.16	11.74				7.40	13.31	1.50
Tomas Monteverde	2.36	5,716	2,427	2.09	5,081	89%	13.59	10.29				3.74	3.87	0.13
Lapu - Lapu	25.12	10,306	410	23.68	9,713	94%	8.06	3.83				3.38	3.09	0.35
Leon Garcia Sr.	12.47	5,783	464	12.04	5,586	97%	0.64	0.00				6.67	5.44	2.40
Rafael Castillo	13.18	11,738	891	11.86	10,567	90%	2.26	5.20				3.42	5.38	0.49
San Antonio	27.41	2,966	108	25.28	2,736	92%	5.90	12.98				3.66	3.24	0.00
Ubalde	6.37	9,903	1,554	5.94	9,226	93%	1.51	1.40				4.29	7.08	3.86
Wilfredo Aquino	27.58	15,586	565	19.31	10,911	70%	3.46	1.02	1.26	3.05	1.41			

Table PO – 8C. Population Exposure Estimation to Liquefaction, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Buhangin District														
A. Angliongto	167.48	13,539	81	24.62	1,990	15%	29.03	3.84	40.30%	19.30%	0.06%	1.29	0.91	0.76
Buhangin	355.82	65,461	184	1.20	221	0%	23.82	6.67				1.03	0.92	0.69
Mandug	175.55	13,594	77	14.09	1,091	8%	22.62	6.14				5.81	14.53	2.14
Pampanga	54.09	14,381	266	0.05	15	0%	0.01	0.00				3.57	8.38	6.12
Sasa	237.68	52,386	220	25.93	5,715	11%	24.37	6.49				4.43	8.24	1.03
Tigatto	273.57	36,387	133	156.38	20,800	57%	14.36	2.75				3.30	2.67	0.72
V. Hizon	124.53	11,265	90	52.73	4,770	42%	22.86	3.83				0.85	0.85	0.00
Waan	39.30	3,925	100	18.52	1,849	47%	24.61	12.51				3.19	4.13	1.50
Bunawan District														
Lasang	53.31	10,223	192	50.58	9,699	95%	9.33	14.60	40.30%	19.30%	0.05%	10.69	17.30	1.02
Bunawan	128.46	23,495	183	89.65	16,397	70%	0.45	10.75				5.26	9.29	0.82
Ilang	134.12	24,947	186	10.88	2,024	8%	0.00	8.09				3.86	4.61	0.22
Mahayag	59.43	6,307	106	7.63	810	13%	0.02	8.58				3.95	5.41	0.00
Panacan	274.98	35,806	130	51.96	6,767	19%	4.92	6.28				12.05	22.89	4.22
San Isidro	28.72	5,333	186	18.25	3,388	64%	0.00	3.21				5.18	5.76	0.33
Tibungco	28.72	41,864	1,457	1.24	1,801	4%	5.83	14.08				4.48	6.96	0.07
Talomo District														
Bago Aplaya	100.52	15,918	158	94.69	14,993	94%	0.37	0.00	40.30%	19.30%	0.07%	5.57	11.79	3.31
Bago Gallera	140.21	17,378	124	1.56	194	1%	1.59	4.25				1.78	1.82	0.08
Bucana	237.30	83,964	354	216.58	76,631	91%	9.05	14.46				2.11	2.57	2.14
Catalunan Grande	324.06	32,461	100	0.01	0.61	0%	2.22	6.65				0.44	0.38	0.12
Dumoy	324.06	18,622	57	82.31	4,730	25%	1.75	0.00				3.46	4.24	0.09
Ma-A	452.85	59,803	132	232.93	30,761	51%	5.01	6.25				5.78	20.87	2.40
Matina Aplaya	166.75	33,384	200	154.67	30,965	93%	7.58	8.37				1.22	1.59	2.05
Matina Crossing	261.39	32,436	124	170.46	21,152	65%	6.17	0.00				2.69	2.64	0.88
Matina Pangi	162.30	18,081	111	42.34	4,717	26%	3.03	9.49				1.10	0.20	0.24
Talomo	311.47	59,678	192	226.37	43,372	73%	7.09	38.16				2.44	6.92	2.20

Table PO – 8D. Population Exposure Estimation to Liquefaction, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Toril District														
Binugao	54.54	6,934	127	15.57	1,980	29%	0.06	11.93	40.30%	19.30%	0.07%	3.02	2.17	0.00
Crossing Bayabas	96.18	11,490	119	0.01	1.03	0%	2.21	7.30				2.99	2.18	1.00
Daliao	113.90	21,124	185	106.80	19,808	94%	0.33	5.52				1.34	4.43	0.21
Lizada	109.55	20,112	184	98.22	18,032	90%	6.96	7.58				2.19	1.83	0.16
Sirawan	88.24	7,140	81	24.35	1,970	28%	4.30	9.87				4.36	3.82	2.36
Toril	72.35	12,140	168	48.61	8,155	67%	0.49	6.58				7.13	8.50	0.39
Tugbok District														
New Carmen	16.15	2,626	163	11.98	1,948	74%	4.34	15.35	40.30%	19.30%	0.04%	21.24	30.83	3.63

Storm Surge - Of the 4,254.91 hectares of residential areas that are identified as susceptible to 2-meter to 5-meter storm surge, 99% are expected to be exposed to storm surge (Table PO – 9A to Table PO – 9C). At least 1,324.41 hectares of the potentially exposed areas are considered as affected areas. Also, 45% of the 887,094 persons within the potentially exposed areas are identified as exposed population.

Table PO – 9A. Population Exposure Estimation to Storm Surge, Davao City

Barangay	Exposure						Sensitivity							
	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Poblacion District														
1-A	7.19	3,103	432	6.95	3,001	97%	11.44	11.18	40.30%	19.30%	0.08%	0.70	6.32	0.00
2-A	1.65	3,589	2,171	1.62	3,513	98%	11.90	10.00				0.84	1.68	0.00
3-A	0.55	370	671	0.55	370	100%	0.00	0.00				25.00	0.00	0.00
4-A	2.93	1,683	574	2.93	1,683	100%	20.38	14.56				5.28	8.54	3.66
5-A	21.80	11,436	525	10.31	5,408	47%	0.00	11.92				5.84	10.65	0.81
6-A	4.39	2,084	475	0.51	240	12%	16.27	16.70				4.48	7.46	0.37
7-A	10.56	3,984	377	0.59	224	6%	2.28	6.93				5.44	6.49	0.18
8-A	86.07	11,075	129	9.24	1,188	11%	4.41	5.64				4.98	7.07	0.98
9-A	14.10	5,698	404	1.24	501	9%	0.44	4.41				3.70	4.97	0.77
10-A	5.84	6,764	1,159	3.30	3,831	57%	4.95	2.96				4.26	6.68	0.00
11-B	2.56	1,901	742	2.56	1,899	100%	11.31	10.36				0.66	3.29	1.97
12-B	1.20	840	702	1.20	839	100%	3.69	74.17				4.84	9.60	0.80
13-B	0.57	427	744	0.57	427	100%	8.43	6.56				11.63	18.18	15.91
14-B	3.10	1,175	379	3.09	1,173	100%	8.85	3.57				3.67	2.75	11.01
15-B	1.47	2,891	1,973	1.46	2,890	100%	12.90	9.34				0.59	0.30	3.26
16-B	0.44	840	1,902	0.43	810	96%	0.00	0.00				4.00	2.40	0.80
17-B	0.54	810	1,509	0.53	793	98%	0.00	0.86				3.88	5.83	4.85
18-B	0.42	1,832	4,346	0.40	1,760	96%	0.05	15.72				3.19	9.57	2.13
19-B	190.47	31,766	167	0.00	0	0%	2.06	3.56				3.36	3.80	2.54
20-B	14.69	4,581	312	8.94	2,789	61%	0.59	4.26				1.61	5.38	1.61
21-C	7.15	7,478	1,046	5.18	5,422	73%	6.33	9.08				2.04	3.80	0.00
22-C	6.65	6,634	998	4.78	4,776	72%	1.37	8.83				1.30	0.91	0.00
23-C	14.60	16,489	1,129	12.79	14,444	88%	17.28	13.42				3.12	2.52	0.15
24-C	2.52	2,602	1,034	2.51	2,601	100%	2.15	3.88				0.45	0.00	0.00
25-C	1.73	1,967	1,137	1.73	1,966	100%	0.00	6.61				0.00	0.00	0.00
26-C	2.26	2,510	1,112	2.23	2,484	99%	0.00	3.98				0.54	0.81	0.00
27-C	0.66	2,152	3,241	0.64	2,088	97%	15.43	12.27				2.70	2.70	0.00
28-C	1.65	2,270	1,376	1.65	2,269	100%	0.31	8.72				1.05	1.75	0.00
29-C	1.07	1,557	1,461	1.07	1,557	100%	6.10	5.59				2.13	0.00	0.00
30-D	1.38	1,608	1,167	1.37	1,595	99%	1.49	3.67				0.00	0.00	0.00

Table PO – 9B. Population Exposure Estimation to Storm Surge, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
31-D	17.40	8,321	478	13.56	6,483	78%	5.70	4.98	40.30%	19.30%	0.08%	3.78	4.98	0.46
32-D	2.77	1,985	717	2.75	1,972	99%	4.23	3.88				3.75	4.58	0.42
33-D	3.86	2,033	526	3.86	2,032	100%	2.80	9.05				5.30	6.23	3.43
34-D	2.48	1,682	678	2.48	1,682	100%	22.41	0.89				0.47	0.00	1.40
35-D	0.35	578	1,666	0.35	578	100%	0.00	18.69				0.00	4.35	1.45
36-D	2.39	1,581	662	2.39	1,581	100%	2.53	4.68				0.00	1.43	0.00
37-D	4.59	6,740	1,469	3.54	5,208	77%	2.55	7.82				0.78	0.49	0.29
38-D	1.84	1,505	817	1.73	1,410	94%	19.00	15.48				2.21	1.10	0.00
39-D	3.62	5,143	1,419	2.92	4,145	81%	6.79	3.25				1.26	2.81	1.26
40-D	1.38	2,437	1,764	1.34	2,363	97%	11.98	11.78				1.21	4.53	0.91
Agdao District														
Agdao Proper	7.86	8,897	1,132	7.62	8,625	97%	21.30	19.13	40.30%	19.30%	0.07%	1.82	2.78	0.19
Centro	24.77	13,652	551	22.72	12,521	92%	1.05	7.27				2.98	6.84	0.15
Gov. Paciano Bangoy	22.55	8,904	395	14.39	5,681	64%	5.35	8.77				4.14	7.89	1.87
Gov. Vicente Duterte	21.81	8,816	404	20.34	8,221	93%	16.16	11.74				7.40	13.31	1.50
Tomas Monteverde	2.36	5,716	2,427	2.09	5,081	89%	13.59	10.29				3.74	3.87	0.13
Lapu - Lapu	25.12	10,306	410	23.68	9,713	94%	8.06	3.83				3.38	3.09	0.35
Leon Garcia Sr.	12.47	5,783	464	12.04	5,586	97%	0.64	0.00				6.67	5.44	2.40
Rafael Castillo	13.18	11,738	891	11.86	10,567	90%	2.26	5.20				3.42	5.38	0.49
San Antonio	27.41	2,966	108	25.28	2,736	92%	5.90	12.98				3.66	3.24	0.00
Ubalde	6.37	9,903	1,554	5.94	9,226	93%	1.51	1.40				4.29	7.08	3.86
Wilfredo Aquino	27.58	15,586	565	8.59	4,855	31%	3.46	1.02	1.26	3.05	1.41			
Buhangin District														
A. Angliongto	167.48	13,539	81	3.71	300	2%	29.03	3.84	40.30%	19.30%	0.06%	1.29	0.91	0.76
Pampanganga	54.09	14,381	266	0.07	18	0%	0.01	0.00				3.57	8.38	6.12
Sasa	237.68	52,386	220	15.53	3,424	7%	24.37	6.49				4.43	8.24	1.03
V. Hizon	124.53	11,265	90	34.45	3,116	28%	22.86	3.83				0.85	0.85	0.00

Table PO – 9C. Population Exposure Estimation to Storm Surge, Davao City

Barangay	Exposure						Sensitivity							
	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Bunawan District														
Lasang	53.31	10,223	192	37.91	7,269	71%	9.33	14.60	40.30%	19.30%	0.05%	10.69	17.30	1.02
Bunawan	128.46	23,495	183	73.00	13,350	57%	0.45	10.75				5.26	9.29	0.82
Ilang	134.12	24,947	186	11.24	2,092	8%	0.87	8.09				3.86	4.61	0.22
Mahayag	59.43	6,307	106	8.08	857	14%	0.02	8.58				3.95	5.41	0.00
Panacan	274.98	35,806	130	32.21	4,194	12%	4.92	6.28				12.05	22.89	4.22
Tibungco	141.33	41,864	296	7.40	2,191	5%	5.83	14.08				4.48	6.96	0.07
Talomo District														
Bago Aplaya	100.52	15,918	158	83.51	13,223	83%	0.37	0.00	40.30%	19.30%	0.07%	5.57	11.79	3.31
Bago Gallera	140.21	17,378	124	1.52	188	1%	1.59	4.25				1.78	1.82	0.08
Bucana	237.30	83,964	354	189.27	66,970	80%	9.05	14.46				2.11	2.57	2.14
Dumoy	171.70	18,622	108	40.74	4,419	24%	1.75	0.00				3.46	4.24	0.09
Ma-a	452.85	59,803	132	7.45	983	2%	5.01	6.25				5.78	20.87	2.40
Matina Aplaya	166.75	33,384	200	131.23	26,272	79%	7.58	8.37				1.22	1.59	2.05
Matina Crossing	261.39	32,436	124	20.70	2,568	8%	6.17	0.00				2.69	2.64	0.88
Talomo	311.47	59,678	192	202.72	38,841	65%	7.09	38.16				2.44	6.92	2.20
Toril District														
Binugao	54.54	6,934	127	5.83	741	11%	0.06	11.93	40.30%	19.30%	0.07%	3.02	2.17	0.00
Daliao	113.90	21,124	185	48.79	9,049	43%	0.33	5.52				1.34	4.43	0.21
Lizada	109.55	20,112	184	71.85	13,190	66%	6.96	7.58				2.19	1.83	0.16
Sirawan	88.24	7,140	81	17.36	1,404	20%	4.30	9.87				4.36	3.82	2.36

Fault Line - Of the 2,532 hectares of residential areas that are identified with presence of fault line systems, 78% are expected to be greatly exposed to fault line systems (Table PO – 10A to Table PO – 10B). At least 753 hectares of the potentially exposed areas are considered as affected areas. Also, 0.44% of the 322,393 persons within the potentially exposed areas are identified as exposed population.

Table PO – 10A. Population Exposure Estimation to Fault Line, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Baguio District														
Malagos	4.34	6,524	1,503	0.08	115	1.77%	21.06	9.03	40.30%	19.30%	0.05%	4.20	7.97	2.91
Calinan District														
Calinan	111.68	23,052	206	0.16	34	0.15%	0.38	4.95	40.30%	19.30%	0.16%	2.71	2.71	0.31
Pangyan	5.65	2,035	360	0.11	39	1.92%	0.00	9.24				1.98	7.14	0.00
Riverside	22.28	5,450	245	0.74	180	3.31%	16.07	8.31				3.41	5.56	2.14
Subasta	10.24	3,641	356	0.15	54	1.48%	0.66	21.15				6.79	14.97	1.80
Talomo River	20.66	6,846	331	0.15	50	0.72%	0.72	5.24	40.30%	19.30%	0.16%	2.44	5.96	0.36
Wangan	3.45	5,821	1,686	0.05	76	1.30%	0.12	10.62				0.86	0.74	0.12
Marilog District														
Tamugan	10.47	8,351	797	0.16	130	1.56%	0.02	0.00	40.30%	19.30%	0.09%	1.64	8.11	0.00
Paquibato District														
Malabog	19.18	10,816	564	0.00	2	0.02%	0.00	0.00	40.30%	19.30%	0.09%	9.08	19.45	0.00
Pañalum	2.12	1,831	865	0.00	0	0.01%	0.00	0.00				16.56	13.87	0.76
Sumimao	1.84	1,666	907	0.01	7	0.40%	3.06	21.19				4.86	15.41	0.00
Talomo District														
Catalunan Grande	324.06	32,461	100	0.49	49	0.15%	2.22	6.65	40.30%	19.30%	0.07%	0.44	0.38	0.12
Catalunan Pequeño	211.61	22,809	108	1.26	136	0.60%	0.89	3.73				1.57	4.23	0.00
Talomo	311.47	59,678	192	0.38	74	0.12%	7.09	38.16				2.44	6.92	2.20

Table PO – 10B. Population Exposure Estimation to Fault Line, Davao City

Exposure							Sensitivity							
Barangay	Estimated Residential Area (Ha)	Barangay Population	Residential Area to Population Density (Persons/Hectare)	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals		
												Weight for Age	Height for Age	Length or Height for Weight
Toril District														
Bankas Heights	32.04	7,671	239	0.07	17	0.22%	0.00	0.00	40.30%	19.30%	0.07%	1.39	1.47	0.17
Binugao	54.54	6,934	127	0.59	75	1.08%	0.06	11.93				3.02	2.17	0.00
Lizada	109.55	20,112	184	0.00	0	0.00%	6.96	7.58				2.19	1.83	0.16
Sirawan	88.24	7,140	81	0.54	43	0.61%	4.30	9.87				4.36	3.82	2.36
Tugbok District														
Angalan	12.64	2,475	196	0.01	3	0.11%	1.45	13.17	40.30%	19.30%	0.04%	5.90	22.05	8.48
Bago Oshiro	142.40	11,932	84	0.10	9	0.07%	11.41	6.55				1.53	2.94	0.19
Los Amigos	43.65	9,722	223	0.16	35	0.36%	1.43	7.25				5.89	11.10	0.00
Mintal	156.42	13,227	85	1.06	90	0.68%	1.93	7.39				4.17	3.53	0.53
Sto. Niño	88.71	20,103	227	0.47	107	0.53%	0.06	7.78				1.85	2.34	0.19
Tacunan	57.42	12,773	222	-	0	0.00%	0.40	4.31				2.36	6.30	2.18
Tagakpan	10.85	4,208	388	0.04	14	0.34%	0.19	12.69				3.34	2.97	0.37
Tugbok	125.40	15,115	121	0.75294	91	0.60%	1.42	4.13				2.71	4.20	0.92

Population Degree of Impact Rating

The succeeding tables include degree of impact rating, which represents the level and kind of impacts the system will likely experience and the time and resources needed for interventions to return to pre-impact levels. The rating is an output during the workshop, where the exposure elements and sensitivity indicators are carefully assessed. The score varies from one (1) being the lowest to three (3) being the highest. The lowest score (1) indicates that the estimated direct and indirect impacts are low to negligible, which can be felt within a short-term period. The moderate score (2) is provided when there would be expected moderate direct impacts in terms of number of fatalities, injuries, and value of damaged properties. The high score (3) is given in areas where the impact of such hazard is expected to be disastrous given the extent of exposure and current sensitivity of the system. Below are the summary of the tables per hazard:

Flood – The highest degree of impact rating is given to Barangays 1-A, 2-A, 5-A, 8-A, 22-C, 23-C, 31-D, 39-D, and 40-D in Poblacion District, Agdao Proper, Centro, Gov. Paciano Bangoy, Gov. Vicente Duterte, Tomas Monteverde, Lapu-Lapu, Leon Garcia Sr., and Rafael Castillo in Agdao District, Baguio Proper in Baguio District, Tigatto and Waan in Buhangin District, Lasang, Bunawan, and Panacan in Bunawan District, Biao Joaquin, Calinan Proper, Dalagdag, Dominga, Pangyan, Riverside, Subasta, Talomo River, and Wangan in Calinan District, Tamugan in Marilog District, Sumimao in Paquibato District, Bago Gallera, Bucana, Ma-a, Matina Aplaya, Matina Crossing, Matina Pangi, and Talomo Proper in Talomo District, Bankas Heights, Binugao, and Lubogan in Toril District, and Angalan, Balengaeng, Biao Guianga, Los Amigos, Matina Biao, Mintal, New Carmen, New Valencia, Tacunan, Tagakpan, Talandang, Tugbok Proper, and Ula in Tugbok District. These barangays are flood-affected areas, which are identified as near the waterways with presence of vulnerable sectors like informal settlers and households living in dwelling units made from light to salvageable materials (Table PO – 11A to Table PO – 11E).

Table PO – 11A. Population Degree of Impact Rating to Flood, Davao City

Exposure				Sensitivity							Degree of Impact Rating	
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals			
									Weight for Age	Height for Age		Length or Height for Weight
Poblacion District												
1-A	6.94	2,996	97%	11.44	11.18	40.30%	19.30%	0.08%	0.70	6.32	0.00	3
2-A	1.23	2,660	74%	11.90	10.00				0.84	1.68	0.00	3
5-A	14.12	7,409	65%	0.00	11.92				5.84	10.65	0.81	3
8-A	47.94	6,168	56%	4.41	5.64				4.98	7.07	0.98	3
15-B	0.22	433	15%	12.90	9.34				0.59	0.30	3.26	2
19-B	40.47	6,750	21%	2.06	3.56				3.36	3.80	2.54	2
21-C	1.32	1,381	18%	6.33	9.08				2.04	3.80	0.00	2
22-C	3.53	3,522	53%	1.37	8.83				1.30	0.91	0.00	3
23-C	11.18	12,621	77%	17.28	13.42				3.12	2.52	0.15	3
31-D	7.74	3,700	44%	5.70	4.98				3.78	4.98	0.46	3
37-D	0.76	1,119	17%	2.55	7.82				0.78	0.49	0.29	2
39-D	2.53	3,598	70%	6.79	3.25				1.26	2.81	1.26	3
40-D	1.34	2,363	97%	11.98	11.78				1.21	4.53	0.91	3
Talomo District												
Bago Aplaya	28.28	4,478	28%	0.37	-	40.30%	19.30%	0.07%	5.57	11.79	3.31	2
Bago Gallera	49.25	6,104	35%	1.59	4.25				1.78	1.82	0.08	3
Baliok	14.12	2,705	17%	0.05					1.80	1.93	0.41	2
Bucana	86.42	30,577	36%	9.05	14.46				2.11	2.57	2.14	3
Catalunan Grande	69.62	6,973	21%	2.22	6.65				0.44	0.38	0.12	2
Catalunan Pequeño	26.64	2,871	13%	0.89	3.73				1.57	4.23	0.00	2
Dumoy	28.49	3,090	17%	1.75	-				3.46	4.24	0.09	2
Langub	0.01	3	0%	0.21	11.48				0.26	0.67	0.09	1
Ma-a	136.31	18,001	30%	5.01	6.25				5.78	20.87	2.40	3
Magtuod	10.06	908	18%	5.24	10.28				0.04	0.10	0.00	2
Matina Aplaya	72.79	14,572	44%	7.58	8.37				1.22	1.59	2.05	3
Matina Crossing	66.49	8,250	25%	6.17	-				2.69	2.64	0.88	3
Matina Pangí	51.00	5,682	31%	3.03	9.49				1.10	0.20	0.24	3
Talomo	226.76	43,447	73%	7.09	38.16	2.44	6.92	2.20	3			

Table PO – 11B. Population Degree of Impact Rating to Flood, Davao City

Exposure				Sensitivity							Degree of Impact Rating	
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals			
									Weight for Age	Height for Age		Length or Height for Weight
Agdao District												
Agdao Proper	7.62	8,625	97%	21.30	19.13	40.30%	19.30%	0.07%	1.82	2.78	0.19	3
Centro	18.39	10,139	74%	1.05	7.27				2.98	6.84	0.15	3
Gov, Paciano Bangoy	17.65	6,971	78%	5.35	8.77				4.14	7.89	1.87	3
Gov. Vicente Duterte	14.16	5,724	65%	16.16	11.74				7.40	13.31	1.50	3
Tomas Monteverde	1.69	4,114	72%	13.59	10.29				3.74	3.87	0.13	3
Lapu - Lapu	17.27	7,086	69%	8.06	8.83				3.38	3.09	0.35	3
Leon Garcia Sr.	10.85	5,035	87%	0.64					6.67	5.44	2.40	3
Rafael Castillo	7.41	6,602	56%	2.26	5.20				3.42	5.38	0.49	3
San Antonio	0.01	1	0%	5.90	12.98				3.66	3.24	0.00	1
Ubalde	0.93	1,452	15%	1.51	-				4.29	7.08	3.86	2
Wilfredo Aquino	1.51	851	5%	3.46	1.02				1.26	3.05	1.41	1
Buhangin District												
A. Angliongto	6.30	509	4%	29.03	3.84	40.30%	19.30%	0.06%	1.29	0.91	0.76	1
Buhangin	9.41	1,730	3%	23.82	6.67				1.03	0.92	0.69	1
Cabantian	5.47	721	2%	19.33	2.13				0.39	0.14	0.00	1
Callawa	0.11	48	1%	25.33	9.85				3.31	3.31	0.74	1
Communal	7.08	690	4%	5.30	-				1.54	1.77	0.23	1
Indangan	0.40	23	0%	0.06					4.29	6.68	0.54	1
Mandug	20.99	1,625	12%	22.62	6.14				5.81	14.53	2.14	2
Pampangang	10.16	2,702	19%	0.01					3.57	8.38	6.12	2
Sasa	47.18	10,400	20%	24.37	6.49				4.43	8.24	1.03	2
Tigatto	102.74	13,665	38%	14.36	2.75				3.30	2.67	0.72	3
V. Hizon	17.98	1,626	14%	22.86	3.83				0.85	0.85	0.00	2
Waan	21.29	2,126	54%	24.61	12.51				3.19	4.13	1.50	3

Table PO – 11C. Population Degree of Impact Rating to Flood, Davao City

Exposure				Sensitivity							Degree of Impact Rating	
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals			
									Weight for Age	Height for Age		Length or Height for Weight
Bunawan District												
Lasang	20.65	3,960	39%	9.33	14.60	40.30%	19.30%	0.05%	10.69	17.30	1.02	3
Bunawan	35.10	6,420	27%	0.45	10.75				5.26	9.29	0.82	3
Gatungan	0.04	19	2%	0.00	10.84				4.53	6.78	0.58	1
Ilang	7.03	1,308	5%	0.87	8.09				3.86	4.61	0.22	1
Mahayag	0.74	78	1%	0.02	8.58				3.95	5.41	0.00	1
Mudiang	1.00	41	1%	0.03	7.08				2.56	1.40	0.93	1
Panacan	31.89	4,153	20%	4.92	6.28				12.05	22.89	4.22	3
San Isidro	0.08	15	0%	0.00	3.21				5.18	5.76	0.33	1
Tibungco	14.31	4,240	10%	5.83	14.08				4.48	6.96	0.07	2
Ilang	7.03	1,308	5%	0.87	8.09				3.86	4.61	0.22	1
Mahayag	0.74	78	1%	0.02	8.58	3.95	5.41	0.00	1			
Paquibato District												
Malabog	0.03	18	0%	0.00	-	40.30%	19.30%	0.09%	9.08	19.45	0.00	1
Paradise Embac	0.00	0	0%	0.00	18.09				7.92	2.99	0.00	1
Salapawan	0.01	8	0%	0.00					0.00	0.00	0.00	1
Sumimao	0.66	599	36%	3.06	21.19				4.86	15.41	0.00	3
Tapak	1.93	541	10%	0.00	20.88				17.11	12.29	0.00	2
Baguio District												
Baguio	8.10	2,992	64%	19.40	6.68	40.30%	19.30%	0.05%	2.03	4.21	2.34	3
Malagos	4.89	1,772	27%	21.06	9.03				4.20	7.97	2.91	2
Marilog District												
Gumitan	0.03	7	0%	0.00	-	40.30%	19.30%	0.09%	17.97	59.91	8.29	1
Malamba	1.40	512	11%	1.05	10.90				9.13	17.97	0.14	2
Marilog	0.10	17	0%	0.00	-				11.04	16.60	0.09	1
Salaysay	0.03	15	0%	0.00	-				9.49	18.31	1.19	1
Tamugan	8.77	6,993	84%	0.02	-				1.64	8.11	0.00	3

Table PO – 11D. Population Degree of Impact Rating to Flood, Davao City

Exposure				Sensitivity							Degree of Impact Rating	
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals			
									Weight for Age	Height for Age		Length or Height for Weight
Calinan District												
Biao Joaquin	2.38	1,673	73%	0.70	10.31	40.30%	19.30%	0.16%	2.90	5.81	0.00	3
Calinan	107.19	22,124	96%	0.38	4.95				2.71	2.71	0.31	3
Cawayan	0.30	368	16%	1.44	10.68				2.05	4.45	0.68	2
Dacudao	0.29	178	4%	0.68	14.19				5.93	7.99	0.78	1
Dalagdag	1.18	401	43%	2.78	20.99				2.68	5.22	0.00	3
Dominga	1.73	1,575	98%	0.00	16.55				6.23	11.57	0.00	3
Inayangan	0.01	11	0%	0.00	17.40				4.25	8.33	0.00	1
Lacson	1.30	1,466	25%	0.58	10.52				8.95	16.53	0.83	2
Lamanan	0.06	57	1%	3.75	14.43				5.17	12.50	0.00	1
Lampianao	0.29	102	12%	0.00	13.25				4.85	8.65	0.00	2
Megkawayan	0.06	32	1%	0.00	16.85				12.57	14.66	0.00	1
Pangyan	1.99	717	35%	0.00	9.24				1.98	7.14	0.00	3
Riverside	19.33	4,728	87%	16.07	8.31				3.41	5.56	2.14	3
Saloy	0.01	10	0%	0.00	18.56				5.06	5.45	0.00	1
Sirib	1.96	1,297	25%	0.00	15.87				4.87	9.43	0.44	2
Subasta	6.61	2,350	65%	0.66	21.15				6.79	14.97	1.80	3
Talomo River	19.81	6,564	96%	0.72	5.24				2.44	5.96	0.36	3
Wangan	1.34	2,254	39%	0.12	14.82				0.86	0.74	0.12	3
Toril District												
Alambre	0.09	21	1%	0.00	10.75	40.30%	19.30%	0.07%	5.32	4.61	0.71	1
Bankas Heights	18.61	4,457	58%	0.00	-				1.39	1.47	0.17	3
Bato	2.08	451	5%	0.00	-				4.07	3.35	1.53	1
Binugao	26.77	3,404	49%	0.06	11.93				3.02	2.17	0.00	3
Catigan	0.24	113	4%	0.00	19.45				6.56	26.47	8.14	1
Crossing Bayabas	21.61	2,581	22%	2.21	7.30				2.99	2.18	1.00	2
Daliao	23.42	4,344	21%	0.33	5.52				1.34	4.43	0.21	2
Daliaon Plantation	0.00	1	0%	12.41	22.96				0.62	6.02	0.00	1
Eden	2.35	105	4%	0.25	14.93				9.97	19.14	1.86	1
Kilate	0.11	54	4%	0.92	12.99				3.11	5.63	2.48	1

Table PO – 11E. Population Degree of Impact Rating to Flood, Davao City

Exposure				Sensitivity								Degree of Impact Rating
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals			
									Weight for Age	Height for Age	Length or Height for Weight	
Lizada	19.82	3,639	18%	6.96	7.58	40.30%	19.30%	0.07%	2.19	1.83	0.16	2
Lubogan	32.08	4,175	34%	0.32	-				0.57	0.06	0.00	3
Marapangi	12.97	1,103	16%	0.00	9.06				6.20	9.60	2.60	2
Sibulan	0.01	9	0%	1.13	-				13.36	13.92	0.00	1
Sirawan	22.25	1,800	25%	0.00	9.87				4.36	3.82	2.36	2
Tagluno	0.09	53	4%	22.07	8.91				1.61	7.69	0.00	1
Tungkalan	0.05	33	1%	0.00	-				0.72	0.72	0.00	1
Tugbok District												
Angalan	11.73	2,297	93%	1.45	13.17	40.30%	19.30%	0.04%	5.90	22.05	8.48	3
Bago Oshiro	2.96	248	2%	11.41	6.55				1.53	2.94	0.19	1
Balengaeng	2.27	2,038	98%	0.00	8.82				7.09	7.46	1.12	3
Biao Escuela	1.62	581	18%	0.00	10.02				3.06	3.71	0.00	2
Los Amigos	38.62	8,601	88%	1.43	7.25				5.89	11.10	0.00	3
Manambulan	9.10	2,409	91%	0.04	8.08				5.56	8.61	0.00	3
Manuel Guianga	0.17	132	2%	0.02	14.70				0.80	1.14	0.00	1
Matina Biao	1.80	1,171	65%	1.82	3.87				0.42	0.42	0.00	3
Mintal	65.05	5,501	42%	1.93	7.39				4.17	3.53	0.53	3
New Carmen	13.17	2,142	82%	4.34	15.35				21.24	30.83	3.63	3
New Valencia	2.24	696	41%	0.12	16.26				3.32	15.77	0.00	3
Sto. Niño	8.74	1,979	10%	0.06	7.78				1.85	2.34	0.19	1
Tacunan	31.80	7,073	55%	0.40	4.31				2.36	6.30	2.18	3
Tagakpan	6.82	2,645	63%	0.19	12.69				3.34	2.97	0.37	3
Talandang	3.19	1,303	38%	0.06	15.45				8.89	11.93	4.56	3
Tugbok	107.98	13,015	86%	1.42	4.13				2.71	4.20	0.92	3
Ula	7.04	1,970	48%	0.29	7.48	9.61	27.96	0.69	3			

Landslide – The highest degree of impact rating is provided to Barangays Carmen and Tambobong in Baguio District, Acacia, Communal, and Indangan in Buhangin District, Gatungan and Mudiang in Bunawan District, Dalagdag, Inayangan, Lamanan, Lampianao, Megkawayan, Saloy, and Tamayong in Calinan District, Bantol, Dalag Lumot, Gumitan, Magsaysay, Malamba, Marilog Proper, Salaysay, and Suawan in Marilog District, Colosas, Fatima, Lumiad, Malabog, Mapula, Pandaitan, Pañalum, Paquibato Proper, Paradise Embac, Salapawan, Sumimao, and Tapak in Paquibato District, Langub, Ma-a, Magtuod, Matina Crossing, and Matina Pangi in Talomo District, Atan-Awe, Baracatan, Bayabas, Binugao, Camansi, Catigan, Daliaon Plantation, Eden, Sibulan, Tagurano, and Tibuloy in Toril District, and Matina Biao in Tugbok District. These barangays are landslide-affected areas located in high slopes and elevation with presence of vulnerable sectors (Table PO – 12A to Table PO – 12D).

Table PO – 12A. Population Degree of Impact Rating to Landslide, Davao City

Exposure				Sensitivity								Degree of Impact Rating
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals			
									Weight for Age	Height for Age	Length or Height for Weight	
Poblacion District												
19-B	1.32	220	1%	2.06	3.56	40.30%	19.30%	0.08%	3.36	3.80	2.54	1
Baguio District												
Carmen	1.26	1,791	83%	23.42	19.02	40.30%	19.30%	0.05%	11.72	13.67	1.17	3
Gumalang	0.38	413	8%	22.61	12.04				4.50	6.33	0.42	1
Tambobong	4.49	5,546	93%	22.41	18.42	40.30%	19.30%	0.05%	6.79	19.72	0.26	3
Tawan-Tawan	0.04	58	1%	23.27	11.70				5.04	5.22	0.00	1
Buhangin District												
A. Angliongto	0.72	58	0%	29.03	3.84	40.30%	19.30%	0.06%	1.29	0.91	0.76	1
Acacia	15.15	3,208	98%	29.80	11.56				3.21	6.04	2.64	3
Buhangin	36.71	6,754	10%	23.82	6.67				1.03	0.92	0.69	2
Cabantian	83.13	10,951	25%	19.33	2.13				0.39	0.14	0.00	2
Callawa	0.68	289	8%	25.33	9.85				3.31	3.31	0.74	1
Communal	67.72	6,594	39%	5.30	-				1.54	1.77	0.23	3
Indangan	93.10	5,363	36%	0.06	-				4.29	6.68	0.54	3
Mandug	20.17	1,562	11%	22.62	6.14				5.81	14.53	2.14	2
Sasa	1.14	251	0%	24.37	6.49				4.43	8.24	1.03	1
Tigatto	39.43	5,245	14%	14.36	2.75				3.30	2.67	0.72	2
Waan	7.17	716	18%	24.61	12.51				3.19	4.13	1.50	2

Table PO – 12B. Population Degree of Impact Rating to Landslide, Davao City

Exposure				Sensitivity							Degree of Impact Rating	
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals			
									Weight for Age	Height for Age		Length or Height for Weight
Bunawan District												
Bunawan	7.75	1,417	6%	0.45	10.75	40.30%	19.30%	0.05%				
Gatungan	1.70	913	77%	0.00	10.84				5.26	9.29	0.82	1
Ilang	16.66	3,099	12%	0.00	8.09				4.53	6.78	0.58	3
Mahayag	7.19	763	12%	0.02	8.58				3.86	4.61	0.22	2
Mudiang	38.15	1,577	54%	0.03	7.08				3.95	5.41	0.00	2
Panacan	67.73	8,820	25%	4.92	6.28				2.56	1.40	0.93	3
San Isidro	3.40	632	12%	0.00	3.21				12.05	22.89	4.22	2
Tibungco	18.18	5,386	13%	5.83	14.08				5.18	5.76	0.33	2
						4.48	6.96	0.07	2			
Calinan District												
Biao Joaquin	0.82	579	25%	0.70	10.31	40.30%	19.30%	0.16%				
Calinan	0.02	3	0%	0.38	4.95				2.90	5.81	0.00	2
Dalagdag	1.14	386	41%	2.78	20.99				2.71	2.71	0.31	1
Dominga	0.11	104	6%	0.00	16.55				2.68	5.22	0.00	3
Inayangan	1.89	2,746	57%	0.00	17.40				6.23	11.57	0.00	1
Lacson	0.07	78	1%	0.58	10.52				4.25	8.33	0.00	3
Lamanan	4.47	4,319	95%	3.75	14.43				8.95	16.53	0.83	1
Lampianao	1.85	647	77%	0.00	13.25				5.17	12.50	0.00	3
Megkawayan	5.52	2,776	92%	0.00	16.85				4.85	8.65	0.00	3
Pangyan	1.33	478	23%	0.00	9.24				12.57	14.66	0.00	3
Saloy	1.78	1,848	87%	16.07	18.56				1.98	7.14	0.00	2
Sirib	0.90	594	11%	0.00	15.87				5.06	5.45	0.00	3
Talomo River	0.10	34	0%	0.72	5.24				4.87	9.43	0.44	2
Tamayong	2.67	4,001	55%	2.45	14.82				2.44	5.96	0.36	1
						10.93	25.18	1.29	3			
Marilog District												
Baganihan	0.16	65	5%	0.77	20.77	40.30%	19.30%	0.09%				
Bantol	2.61	2,226	96%	0.04	18.93				-	10.78	12.08	1
Buda	4.07	373	20%	5.25	14.16				0.66	18.21	0.00	3
Dalag Lumot	9.86	1,713	92%	0.32	17.06				7.97	10.51	0.00	2
Datu Salumay	4.94	507	23%	1.43	13.44				10.62	6.59	0.00	3
Gumitan	6.63	1,366	78%	0.00	-				4.10	0.82	0.00	2
Magsaysay	8.68	2,209	91%	0.00	19.84				17.97	59.91	8.29	3
Malamba	10.09	3,700	76%	1.05	10.90				2.45	9.17	0.31	3
Marilog	91.12	15,438	95%	0.00	-				9.13	17.97	0.14	3
Salaysay	10.06	4,270	96%	0.00	-				11.04	16.60	0.09	3
									9.49	18.31	1.19	3

Table PO – 12C. Population Degree of Impact Rating to Landslide, Davao City

Exposure				Sensitivity							Degree of Impact Rating	
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals			
									Weight for Age	Height for Age		Length or Height for Weight
Suawan	7.31	4,351	95%	2.73	20.15	40.30%	19.30%	0.09%	9.90	14.65	0.40	3
Tamugan	0.03	27	0%	0.02	-				1.64	8.11	0.00	1
Paquibato District												
Colosas	9.65	4,658	98%	0.00	20.42	40.30%	19.30%	0.09%	10.53	18.17	2.38	3
Fatima	7.61	2,467	70%	3.51	23.99				12.28	10.02	0.00	3
Lumiad	8.62	1,468	95%	0.00	20.35				20.29	10.36	0.84	3
Mabuhay	0.68	95	9%	0.00	14.69				5.03	15.82	2.63	1
Malabog	18.22	10,276	95%	0.00					9.08	19.45	0.00	3
Mapula	14.69	2,717	94%	0.00					15.57	20.75	0.21	3
Pandaitan	9.34	3,823	95%	0.00	13.57				8.20	2.83	2.23	3
Pañalum	2.08	1,796	98%	0.00					16.56	13.87	0.76	3
Paquibato	12.54	2,339	94%	2.69	18.16				9.09	8.70	0.92	3
Paradise Embac	1.90	2,445	92%	0.00	18.09				7.92	2.99	0.00	3
Salapawan	3.03	2,124	93%	0.00					0.00	0.00	0.00	3
Sumimao	1.78	1,612	97%	3.06	21.19				4.86	15.41	0.00	3
Tapak	18.46	5,172	98%	0.00	20.88				17.11	12.29	0.00	3
Talomo District												
Catalunan Grande	5.07	508	2%	2.22	6.65	40.30%	19.30%	0.07%	0.44	0.38	0.12	1
Langub	13.48	2,688	93%	0.21	11.48				0.26	0.67	0.09	3
Ma-a	101.76	13,438	22%	5.01	6.25				5.78	20.87	2.40	3
Magtuod	46.37	4,184	83%	5.24	10.28				0.04	0.10	0.00	3
Matina Crossing	29.25	3,629	11%	6.17	-				2.69	2.64	0.88	3
Matina Pangi	64.73	7,211	40%	3.03	9.49				1.10	0.20	0.24	3
Talomo	10.51	2,013	3%	7.09	38.16				2.44	6.92	2.20	1
Toril District												
Alambre	0.09	22	1%	0.00	10.75	40.30%	19.30%	0.07%	5.32	4.61	0.71	1
Atan-Awe	0.89	1,092	98%	0.00	20.82				6.33	2.53	1.27	3
Baracatan	1.55	1,039	36%	0.00	17.55				4.18	5.13	5.84	3
Bato	1.00	218	2%	2.25					4.07	3.35	1.53	1
Bayabas	2.05	1,835	61%	0.00	13.72				2.43	6.68	0.00	3
Binugao	24.70	3,140	45%	0.23	11.93				3.02	2.17	0.00	3
Camansi	1.73	835	70%	0.06	10.01				1.32	0.00	0.63	3
Catigan	2.21	1,059	35%	0.00	19.45				6.56	26.47	8.14	3
Daliaon Plantation	2.17	1,212	38%	12.41	22.96				0.62	6.02	0.00	3

Table PO – 12D. Population Degree of Impact Rating to Landslide, Davao City

Exposure				Sensitivity								Degree of Impact Rating
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals			
									Weight for Age	Height for Age	Length or Height for Weight	
Eden	51.48	2,308	97%	0.25	14.93	40.30%	19.30%	0.07%	9.97	19.14	1.86	3
Kilate	0.19	93	7%	0.92	12.99				3.11	5.63	2.48	1
Marapangi	1.99	170	2%	0.00	9.06				6.20	9.60	2.60	1
Sibulan	2.14	2,289	92%	0.00	-				13.36	13.92	0.00	3
Sirawan	7.50	607	9%	4.30	9.87				4.36	3.82	2.36	1
Tagurano	0.60	434	35%	0.00	16.83				5.63	10.00	0.00	3
Tibuloy	3.57	2,086	94%	0.00	16.14				7.96	14.84	5.07	3
Tungkalan	1.09	746	26%	0.00	-				0.72	0.72	0.00	2
Tugbok District												
Manambulan	0.12	32	1%	0.04	8.08	40.30%	19.30%	0.04%	5.56	8.61	0.00	1
Matina Biao	0.91	593	33%	1.82	3.87				0.42	0.42	0.00	3
New Carmen	2.26	367	14%	4.34	15.35				21.24	30.83	3.63	2
New Valencia	1.00	311	19%	-	16.26				3.32	15.77	0.00	2

Liquefaction – The highest degree of impact rating is given to Barangays 1A-40D in Poblacion District, Centro, Gov. Paciano Bangoy, Gov. Vicente Duterte, Tomas Monteverde, Lapu-Lapu, Leon Garcia Sr., Rafael Castillo, San Antonio, Ubalde, and Wilfred Aquino in Agdao District, Tigatto, Vicente Hizon, and Waan in Buhangin District, Lasang, Bunawan Proper, Panacan, and San Isidro in Bunawan District, Bago Aplaya, Bago Gallera, Catalunan Grande, Dumoy, Ma-a, Matina Aplaya, Matina Crossing, and Talomo Proper in Talomo District, and New Carmen in Tugbok District. These barangays are expected to be highly affected to liquefaction as these are either near waterways or coastal areas. These barangays also have presence of vulnerable sectors (Table PO – 13A to Table PO – 13C).

Table PO – 13A. Population Degree of Impact Rating to Liquefaction, Davao City

Barangay	Exposure			Sensitivity					Percentage of Malnourished Individuals			Degree of Impact Rating
	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Weight for Age	Height for Age	Length or Height for Weight	
									Weight for Age	Height for Age	Length or Height for Weight	
Poblacion District												
1-A	6.69	2,887	93%	11.44	11.18	40.30%	19.30%	0.08%	0.70	6.32	0.00	3
2-A	1.61	3,494	97%	11.90	10.00				0.84	1.68	0.00	3
3-A	0.55	370	100%	0.00	0.00				25.00	0.00	0.00	3
4-A	2.93	1,683	100%	20.38	14.56				5.28	8.54	3.66	3
5-A	13.27	6,964	61%	0.00	11.92				5.84	10.65	0.81	3
6-A	0.93	441	21%	16.27	16.70				4.48	7.46	0.37	2
7-A	5.60	2,114	53%	2.28	6.93				5.44	6.49	0.18	3
8-A	34.14	4,393	40%	4.41	5.64				4.98	7.07	0.98	3
9-A	8.69	3,513	62%	0.44	4.41				3.70	4.97	0.77	3
10-A	4.27	4,946	73%	4.95	2.96				4.26	6.68	0.00	3
11-B	2.56	1,901	100%	11.31	10.36				0.66	3.29	1.97	3
12-B	1.20	839	100%	3.69	74.17				4.84	9.60	0.80	3
13-B	0.57	427	100%	8.43	6.56				11.63	18.18	15.91	3
14-B	3.09	1,173	100%	8.85	3.57				3.67	2.75	11.01	3
15-B	1.46	2,890	100%	12.90	9.34				0.59	0.30	3.26	3
16-B	0.43	810	96%	0.00	0.00				4.00	2.40	0.80	3
17-B	0.53	793	98%	0.00	0.86				3.88	5.83	4.85	3
18-B	0.40	1,760	96%	0.05	15.72				3.19	9.57	2.13	3
19-B	31.90	5,319	17%	2.06	3.56				3.36	3.80	2.54	2
20-B	13.62	4,249	93%	0.59	4.26				1.61	5.38	1.61	3
21-C	5.16	5,397	72%	6.33	9.08				2.04	3.80	0.00	3
22-C	4.76	4,749	72%	1.37	8.83				1.30	0.91	0.00	3
23-C	12.74	14,385	87%	17.28	13.42				3.12	2.52	0.15	3
24-C	2.51	2,601	100%	2.15	3.88				0.45	0.00	0.00	3
25-C	1.73	1,966	100%	0.00	6.61				0.00	0.00	0.00	3
26-C	2.23	2,484	99%	0.00	3.98				0.54	0.81	0.00	3
27-C	0.64	2,088	97%	15.43	12.27				2.70	2.70	0.00	3
28-C	1.65	2,269	100%	0.31	8.72				1.05	1.75	0.00	3
29-C	1.07	1,557	100%	6.10	5.59				2.13	0.00	0.00	3
30-D	1.37	1,595	99%	1.49	3.67				0.00	0.00	0.00	3

Table PO – 13B. Population Degree of Impact Rating to Liquefaction, Davao City

Exposure				Sensitivity							Degree of Impact Rating	
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals			
									Weight for Age	Height for Age	Length or Height for Weight	
31-D	13.55	6,476	78%	5.70	4.98	40.30%	19.30%	0.08%	3.78	4.98	0.46	3
32-D	2.75	1,972	99%	4.23	3.88				3.75	4.58	0.42	3
33-D	3.86	2,032	100%	2.80	9.05				5.30	6.23	3.43	3
34-D	2.48	1,682	100%	22.41	0.89				0.47	0.00	1.40	3
35-D	0.35	578	100%	0.00	18.69				0.00	4.35	1.45	3
36-D	2.39	1,581	100%	2.53	4.68				0.00	1.43	0.00	3
37-D	3.54	5,208	77%	2.55	7.82				0.78	0.49	0.29	3
38-D	1.73	1,410	94%	19.00	15.48				2.21	1.10	0.00	3
39-D	2.92	4,145	81%	6.79	3.25				1.26	2.81	1.26	3
40-D	1.34	2,363	97%	11.98	11.78				1.21	4.53	0.91	3
Agdao District												
Agdao Proper	7.62	8,625	97%	21.30	19.13	40.30%	19.30%	0.07%	1.82	2.78	0.19	3
Centro	22.37	12,331	90%	1.05	7.27				2.98	6.84	0.15	3
Gov. Paciano Bangoy	17.47	6,900	77%	5.35	8.77				4.14	7.89	1.87	3
Gov. Vicente Duterte	20.02	8,091	92%	16.16	11.74				7.40	13.31	1.50	3
Tomas Monteverde	2.09	5,081	89%	13.59	10.29				3.74	3.87	0.13	3
Lapu - Lapu	23.68	9,713	94%	8.06	3.83				3.38	3.09	0.35	3
Leon Garcia Sr.	12.04	5,586	97%	0.64	0.00				6.67	5.44	2.40	3
Rafael Castillo	11.86	10,567	90%	2.26	5.20				3.42	5.38	0.49	3
San Antonio	25.28	2,736	92%	5.90	12.98				3.66	3.24	0.00	3
Ubalde	5.94	9,226	93%	1.51	1.40				4.29	7.08	3.86	3
Wilfredo Aquino	19.31	10,911	70%	3.46	1.02	1.26	3.05	1.41	3			
Buhangin District												
A. Angliongto	24.62	1,990	15%	29.03	3.84	40.30%	19.30%	0.06%	1.29	0.91	0.76	2
Buhangin	1.20	221	0%	23.82	6.67				1.03	0.92	0.69	1
Mandug	14.09	1,091	8%	22.62	6.14				5.81	14.53	2.14	1
Pampanganga	0.05	15	0%	0.01	0.00				3.57	8.38	6.12	1
Sasa	25.93	5,715	11%	24.37	6.49				4.43	8.24	1.03	2
Tigatto	156.38	20,800	57%	14.36	2.75				3.30	2.67	0.72	3
V. Hizon	52.73	4,770	42%	22.86	3.83				0.85	0.85	0.00	3
Waan	18.52	1,849	47%	24.61	12.51				3.19	4.13	1.50	3

Table PO – 13B. Population Degree of Impact Rating to Liquefaction, Davao City

Exposure				Sensitivity							Degree of Impact Rating		
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals				
									Weight for Age	Height for Age	Length or Height for Weight		
Bunawan District													
Lasang	50.58	9,699	95%	9.33	14.60	40.30%	19.30%	0.05%	10.69	17.30	1.02	3	
Bunawan	89.65	16,397	70%	0.45	10.75				5.26	9.29	0.82	3	
Ilang	10.88	2,024	8%	0.00	8.09				3.86	4.61	0.22	1	
Mahayag	7.63	810	13%	0.02	8.58				3.95	5.41	0.00	2	
Panacan	51.96	6,767	19%	4.92	6.28				12.05	22.89	4.22	3	
San Isidro	18.25	3,388	64%	0.00	3.21				5.18	5.76	0.33	3	
Tibungco	1.24	1,801	4%	5.83	14.08				4.48	6.96	0.07	1	
Talomo District													
Bago Aplaya	94.69	14,993	94%	0.37	0.00	40.30%	19.30%	0.07%	5.57	11.79	3.31	3	
Bago Gallera	1.56	194	1%	1.59	4.25				1.78	1.82	0.08	1	
Bucana	216.58	76,631	91%	9.05	14.46				2.11	2.57	2.14	3	
Catalunan Grande	0.01	0.61	0%	2.22	6.65				0.44	0.38	0.12	1	
Dumoy	82.31	4,730	25%	1.75	0.00				3.46	4.24	0.09	3	
Ma-A	232.93	30,761	51%	5.01	6.25				5.78	20.87	2.40	3	
Matina Aplaya	154.67	30,965	93%	7.58	8.37				1.22	1.59	2.05	3	
Matina Crossing	170.46	21,152	65%	6.17	0.00				2.69	2.64	0.88	3	
Matina Pangi	42.34	4,717	26%	3.03	9.49				1.10	0.20	0.24	2	
Talomo	226.37	43,372	73%	7.09	38.16				2.44	6.92	2.20	3	
Toril District													
Binugao	15.57	1,980	29%	0.06	11.93				3.02	2.17	0.00	3	
Crossing Bayabas	0.01	1.03	0%	2.21	7.30				2.99	2.18	1.00	1	
Daliao	106.80	19,808	94%	0.33	5.52				1.34	4.43	0.21	3	
Lizada	98.22	18,032	90%	6.96	7.58	2.19	1.83	0.16	3				
Sirawan	24.35	1,970	28%	4.30	9.87	4.36	3.82	2.36	3				
Toril	48.61	8,155	67%	0.49	6.58	7.13	8.50	0.39	3				
Tugbok District													
New Carmen	11.98	1,948	74%	4.34	15.35	40.30%	19.30%	0.04%	21.24	30.83	3.63	3	

Storm Surge – The highest degree of impact rating is provided to Barangays 1A-40D in Poblacion District, Agdao Proper, Centro, Gov. Paciano Bangoy, Gov. Vicente Duterte, Tomas Monteverde, Lapu-Lapu, Leon Garcia Sr., Rafael Castillo, San Antonio, Ubalde, and Wilfredo Aquino in Agdao District, Lasang and Bunawan Proper in Bunawan District, Bago Aplaya, Bucana, Matina Aplaya, and Talomo Proper in Talomo District, and Daliao and Lizada in Toril District. These are near Davao Gulf, which may potentially experience up to 5-meter storm surge. A large number of population, including the vulnerable sector, is also potentially exposed to such hazard (Table PO – 14A to Table PO – 14C).

Table PO – 14A. Population Degree of Impact Rating to Storm Surge, Davao City

Exposure				Sensitivity							De- gree of Im- pact Rating	
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals			
									Weight for Age	Height for Age		Length or Height for Weight
Poblacion District												
1-A	6.95	3,001	97%	11.44	11.18	40.30%	19.30%	0.08%	0.70	6.32	0.00	3
2-A	1.62	3,513	98%	11.90	10.00				0.84	1.68	0.00	3
3-A	0.55	370	100%	0.00	0.00				25.00	0.00	0.00	3
4-A	2.93	1,683	100%	20.38	14.56				5.28	8.54	3.66	3
5-A	10.31	5,408	47%	0.00	11.92				5.84	10.65	0.81	3
6-A	0.51	240	12%	16.27	16.70				4.48	7.46	0.37	2
7-A	0.59	224	6%	2.28	6.93				5.44	6.49	0.18	1
8-A	9.24	1,188	11%	4.41	5.64				4.98	7.07	0.98	2
9-A	1.24	501	9%	0.44	4.41				3.70	4.97	0.77	1
10-A	3.30	3,831	57%	4.95	2.96				4.26	6.68	0.00	3
11-B	2.56	1,899	100%	11.31	10.36				0.66	3.29	1.97	3
12-B	1.20	839	100%	3.69	74.17				4.84	9.60	0.80	3
13-B	0.57	427	100%	8.43	6.56				11.63	18.18	15.91	3
14-B	3.09	1,173	100%	8.85	3.57				3.67	2.75	11.01	3
15-B	1.46	2,890	100%	12.90	9.34				0.59	0.30	3.26	3
16-B	0.43	810	96%	0.00	0.00				4.00	2.40	0.80	3
17-B	0.53	793	98%	0.00	0.86				3.88	5.83	4.85	3
18-B	0.40	1,760	96%	0.05	15.72				3.19	9.57	2.13	3
19-B	0.00	0	0%	2.06	3.56				3.36	3.80	2.54	1
20-B	8.94	2,789	61%	0.59	4.26				1.61	5.38	1.61	3
21-C	5.18	5,422	73%	6.33	9.08				2.04	3.80	0.00	3
22-C	4.78	4,776	72%	1.37	8.83				1.30	0.91	0.00	3
23-C	12.79	14,444	88%	17.28	13.42				3.12	2.52	0.15	3
24-C	2.51	2,601	100%	2.15	3.88				0.45	0.00	0.00	3

Table PO – 14B. Population Degree of Impact Rating to Storm Surge, Davao City

Exposure				Sensitivity								De- gree of Im- pact Rating			
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals						
									Weight for Age	Height for Age	Length or Height for Weight				
25-C	1.73	1,966	100%	0.00	6.61	40.30%	19.30%	0.08%	0.00	0.00	0.00	3			
26-C	2.23	2,484	99%	0.00	3.98				0.54	0.81	0.00	3			
27-C	0.64	2,088	97%	15.43	12.27				2.70	2.70	0.00	3			
28-C	1.65	2,269	100%	0.31	8.72				1.05	1.75	0.00	3			
29-C	1.07	1,557	100%	6.10	5.59				2.13	0.00	0.00	3			
30-D	1.37	1,595	99%	1.49	3.67				0.00	0.00	0.00	3			
31-D	13.56	6,483	78%	5.70	4.98				3.78	4.98	0.46	3			
32-D	2.75	1,972	99%	4.23	3.88				3.75	4.58	0.42	3			
33-D	3.86	2,032	100%	2.80	9.05				5.30	6.23	3.43	3			
34-D	2.48	1,682	100%	22.41	0.89				0.47	0.00	1.40	3			
35-D	0.35	578	100%	0.00	18.69				0.00	4.35	1.45	3			
36-D	2.39	1,581	100%	2.53	4.68				0.00	1.43	0.00	3			
37-D	3.54	5,208	77%	2.55	7.82				0.78	0.49	0.29	3			
38-D	1.73	1,410	94%	19.00	15.48				2.21	1.10	0.00	3			
39-D	2.92	4,145	81%	6.79	3.25				1.26	2.81	1.26	3			
40-D	1.34	2,363	97%	11.98	11.78				1.21	4.53	0.91	3			
Agdao District															
Agdao Proper	7.62	8,625	97%	21.30	19.13				40.30%	19.30%	0.08%	1.82	2.78	0.19	3
Centro	22.72	12,521	92%	1.05	7.27							2.98	6.84	0.15	3
Gov. Paciano Bangoy	14.39	5,681	64%	5.35	8.77							4.14	7.89	1.87	3
Gov. Vicente Duterte	20.34	8,221	93%	16.16	11.74	7.40	13.31	1.50				3			
Tomas Monteverde	2.09	5,081	89%	13.59	10.29	3.74	3.87	0.13				3			
Lapu - Lapu	23.68	9,713	94%	8.06	3.83	3.38	3.09	0.35				3			
Leon Garcia Sr.	12.04	5,586	97%	0.64	0.00	6.67	5.44	2.40				3			
Rafael Castillo	11.86	10,567	90%	2.26	5.20	3.42	5.38	0.49				3			
San Antonio	25.28	2,736	92%	5.90	12.98	3.66	3.24	0.00				3			
Ubalde	5.94	9,226	93%	1.51	1.40	4.29	7.08	3.86				3			
Wilfredo Aquino	8.59	4,855	31%	3.46	1.02	1.26	3.05	1.41	3						

Table PO – 14C. Population Degree of Impact Rating to Storm Surge, Davao City

Exposure				Sensitivity								De- gree of Im- pact Rating
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals			
									Weight for Age	Height for Age	Length or Height for Weight	
Buhangin District												
A. Angliongto	3.71	300	2%	29.03	3.84	40.30%	19.30%	0.06%	1.29	0.91	0.76	1
Pampanga	0.07	18	0%	0.01	0.00				3.57	8.38	6.12	1
Sasa	15.53	3,424	7%	24.37	6.49				4.43	8.24	1.03	1
V. Hizon	34.45	3,116	28%	22.86	3.83				0.85	0.85	0.00	2
Bunawan District												
Lasang	37.91	7,269	71%	9.33	14.60	40.30%	19.30%	0.05%	10.69	17.30	1.02	3
Bunawan	73.00	13,350	57%	0.45	10.75				5.26	9.29	0.82	3
Ilang	11.24	2,092	8%	0.87	8.09				3.86	4.61	0.22	1
Mahayag	8.08	857	14%	0.02	8.58				3.95	5.41	0.00	2
Panacan	32.21	4,194	12%	4.92	6.28				12.05	22.89	4.22	2
Tibungco	7.40	2,191	5%	5.83	14.08				4.48	6.96	0.07	1
Talomo District												
Bago Aplaya	83.51	13,223	83%	0.37	0.00	40.30%	19.30%	0.07%	5.57	11.79	3.31	3
Bago Gallera	1.52	188	1%	1.59	4.25				1.78	1.82	0.08	1
Bucana	189.27	66,970	80%	9.05	14.46				2.11	2.57	2.14	3
Dumoy	40.74	4,419	24%	1.75	0.00				3.46	4.24	0.09	2
Ma-a	7.45	983	2%	5.01	6.25				5.78	20.87	2.40	1
Matina Aplaya	131.23	26,272	79%	7.58	8.37				1.22	1.59	2.05	3
Matina Crossing	20.70	2,568	8%	6.17	0.00				2.69	2.64	0.88	1
Talomo	202.72	38,841	65%	7.09	38.16				2.44	6.92	2.20	3
Toril District												
Binugao	5.83	741	11%	0.06	11.93	40.30%	19.30%	0.07%	3.02	2.17	0.00	2
Daliao	48.79	9,049	43%	0.33	5.52				1.34	4.43	0.21	3
Lizada	71.85	13,190	66%	6.96	7.58				2.19	1.83	0.16	3
Sirawan	17.36	1,404	20%	4.30	9.87				4.36	3.82	2.36	2

Fault Line – The highest degree of impact rating is given to Barangays Catalunan Pequeño in Talomo District, and Los Amigos, Mintal, and Tugbok Proper in Tugbok District. These barangays are within fault line systems. The impact of such hazard is expected to be high in these areas where there are a large number of exposed population and vulnerable sectors (Table PO – 15A to Table PO – 15B).

Table PO – 15A. Population Degree of Impact Rating to Fault Line, Davao City

Exposure				Sensitivity								Degree of Impact Rating
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals			
									Weight for Age	Height for Age	Length or Height for Weight	
Baguio District												
Malagos	0.08	115	1.77%	21.06	9.03	40.30%	19.30%	0.05%	4.20	7.97	2.91	1
Calinan District												
Calinan	0.16	34	0.15%	0.38	4.95	40.30%	19.30%	0.16%	2.71	2.71	0.31	1
Pangyan	0.11	39	1.92%	0.00	9.24				1.98	7.14	0.00	1
Riverside	0.74	180	3.31%	16.07	8.31				3.41	5.56	2.14	1
Subasta	0.15	54	1.48%	0.66	21.15				6.79	14.97	1.80	1
Talomo River	0.15	50	0.72%	0.72	5.24				2.44	5.96	0.36	1
Wangan	0.05	76	1.30%	0.12	10.62				0.86	0.74	0.12	1
Marilog District												
Tamugan	0.16	130	1.56%	0.02	0.00	40.30%	19.30%	0.09%	1.64	8.11	0.00	1
Paquibato District												
Malabog	0.00	2	0.02%	0.00	0.00	40.30%	19.30%	0.09%	9.08	19.45	0.00	1
Pañalum	0.00	0	0.01%	0.00	0.00				16.56	13.87	0.76	1
Sumimao	0.01	7	0.40%	3.06	21.19				4.86	15.41	0.00	1
Talomo District												
Catalunan Grande	0.49	49	0.15%	2.22	6.65	40.30%	19.30%	0.07%	0.44	0.38	0.12	1
Catalunan Pequeño	1.26	136	0.60%	0.89	3.73				1.57	4.23	0.00	3
Talomo	0.38	74	0.12%	7.09	38.16				2.44	6.92	2.20	1

Table PO – 15B. Population Degree of Impact Rating to Fault Line, Davao City

Exposure				Sensitivity								Degree of Impact Rating
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living in Dwelling Units with Walls made from Light to Salvageable Materials	Percentage of Young and Old Dependents	Percentage of Individuals Living Below the Poverty Threshold	Percentage of Persons with Disabilities	Percentage of Malnourished Individuals			
									Weight for Age	Height for Age	Length or Height for Weight	
Toril District												
Bankas Heights	0.07	17	0.22%	0.00	0.00	40.30%	19.30%	0.07%	1.39	1.47	0.17	1
Binugao	0.59	75	1.08%	0.06	11.93				3.02	2.17	0.00	1
Lizada	0.00	0	0.00%	6.96	7.58				2.19	1.83	0.16	1
Sirawan	0.54	43	0.61%	4.30	9.87				4.36	3.82	2.36	1
Tugbok District												
Angalan	0.01	3	0.11%	1.45	13.17	40.30%	19.30%	0.04%	5.90	22.05	8.48	1
Bago Oshiro	0.10	9	0.07%	11.41	6.55				1.53	2.94	0.19	1
Los Amigos	0.16	35	0.36%	1.43	7.25				5.89	11.10	0.00	3
Mintal	1.06	90	0.68%	1.93	7.39				4.17	3.53	0.53	3
Sto. Niño	0.47	107	0.53%	0.06	7.78				1.85	2.34	0.19	1
Tacunan	-	0	0.00%	0.40	4.31				2.36	6.30	2.18	1
Tagakpan	0.04	14	0.34%	0.19	12.69				3.34	2.97	0.37	1
Tugbok	0.75294	91	0.60%	1.42	4.13				2.71	4.20	0.92	3

Population Adaptive Capacity

The following tables contain adaptive capacity scores, where the adaptive capacity indicators describe whether the system is able to accommodate or cope with the impacts with very minimal disruption or short to long term detrimental effects/impacts. The adaptive capacity rating is determined by getting the average of the assessment scores, where one (1) is the highest, two (2) is moderate, and three (3) is the lowest. The high score (1) signifies that there are adaptation measures in place to address impacts. The moderate score (2) indicates that it can accommodate within its resources the cost for adapting and mitigating impacts. The low score (1) shows that the system is not flexible to accommodate climate changes. Below are the summary of the tables per hazard:

Flood – The areas with the lowest adaptive capacity scores in curbing the effect of floods include Barangays 1-A, 2-A, 5-A, 8-A, 15-B, and 19-B in Poblacion District, A. Angliongto, Buhangin Proper, Cabantian, Callawa, Communal, and Indangan in Buhangin District, Bunawan Proper, Panacan, and Ilang in Bunawan District, Bucana, Matina Aplaya, Matina Crossing, Matina Pangí, and Talomo Proper in Talomo District, and Los Amigos in Tugbok District. These areas have 151,919 of exposed population to floods (Table PO – 16A to Table PO – 16E).

Table PO – 16A. Population, Adaptive Capacity Score, Flood, Davao City

Barangay	Exposure			Impact	Access to Post Disaster Financing	Adaptive Capacity					Adaptive Capacity Score
	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Degree of Impact		PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources	
						Members	Dependents				
Poblacion District											
1-A	6.94	2,996	97%	3	60% of the families have access	3,296	2,548	-	Yes	Yes	3
2-A	1.23	2,660	74%	3		2,279	2,129	-	Yes	Yes	3
5-A	14.12	7,409	65%	3		6,501	6,906	-	Yes	Yes	3
8-A	47.94	6,168	56%	3		3,635	4,250	-	Yes	Yes	3
15-B	0.22	433	15%	2		1,395	1,261	-	Yes	Yes	3
19-B	40.47	6,750	21%	2		15,128	15,784	-	Yes	Yes	3
21-C	1.32	1,381	18%	2		4,803	5,199	-	Yes	Yes	2
22-C	3.53	3,522	53%	3		4,165	4,465	-	Yes	Yes	2
23-C	11.18	12,621	77%	3		9,201	9,147	-	Yes	Yes	2
31-D	7.74	3,700	44%	3		4,196	4,455	-	Yes	Yes	2
37-D	0.76	1,119	17%	2		3,932	4,092	-	Yes	Yes	2
39-D	2.53	3,598	70%	3		2,477	2,566	-	Yes	Yes	2
40-D	1.34	2,363	97%	3		1,248	1,314	-	Yes	Yes	2
Talomo District											
Bago Aplaya	28.28	4,478	28%	2	-DO-	9,399	11,284	-	Yes	Yes	1
Bago Gallera	49.25	6,104	35%	3		7,636	9,068	-	Yes	Yes	1
Baliok	14.12	2,705	17%	2		5,760	6,882	-	Yes	Yes	1

Table PO – 16B. Population, Adaptive Capacity Score, Flood, Davao City

Exposure				Impact	Adaptive Capacity						Adaptive Capacity Score
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Degree of Impact	Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources	
						Members	Dependents				
Bucana	86.42	30,577	36%	3	-DO-	15,137	13,389	-	Yes	Yes	3
Catalunan Grande	69.62	6,973	21%	2		19,488	23,415	-	Yes	Yes	1
Catalunan Pequeño	26.64	2,871	13%	2		13,381	17,066	-	Yes	Yes	1
Dumoy	28.49	3,090	17%	2		9,920	12,762	-	Yes	Yes	2
Langub	0.01	3	0%	1		1,285	1,516	-	Yes	Yes	2
Ma-a	136.31	18,001	30%	3		32,669	37,525	-	Yes	Yes	1
Magtuod	10.06	908	18%	2		2,062	2,709	-	Yes	Yes	2
Matina Aplaya	72.79	14,572	44%	3		20,862	24,144	-	Yes	Yes	3
Matina Crossing	66.49	8,250	25%	3		12,355	13,798	-	Yes	Yes	3
Matina Pangi	51.00	5,682	31%	3		8,740	10,911	-	Yes	Yes	3
Talomo	226.76	43,447	73%	3	37,014	42,322	-	Yes	Yes	3	
Agdao District											
Agdao Proper	7.62	8,625	97%	3	-DO-	39,982	47,028	-	Yes	Yes	1
Centro	18.39	10,139	74%	3		1,747	1,923	-	Yes	Yes	2
Gov. Paciano Bangoy	17.65	6,971	78%	3		1,985	2,240	-	Yes	Yes	2
Gov. Vicente Duterte	14.16	5,724	65%	3		1,114	1,193	-	Yes	Yes	2
Tomas Monteverde	1.69	4,114	72%	3		1,134	1,478	-	Yes	Yes	1
Lapu - Lapu	17.27	7,086	69%	3		3,206	3,565	-	Yes	Yes	1
Leon Garcia Sr.	10.85	5,035	87%	3		4,127	4,384	-	Yes	Yes	2
Rafael Castillo	7.41	6,602	56%	3		1,927	1,577	-	Yes	Yes	1
San Antonio	0.01	1	0%	1		2,737	2,768	-	Yes	Yes	1
Ubalde	0.93	1,452	15%	2		1,435	1,421	-	Yes	Yes	1
Wilfredo Aquino	1.51	851	5%	1	2,313	2,333	-	Yes	Yes	1	
Buhangin District											
A. Angliongto	6.30	509	4%	1	-DO-	-	-	-	Yes	Yes	3
Buhangin	9.41	1,730	3%	1		60,804	70,959	-	Yes	Yes	3
Cabantian	5.47	721	2%	1		19,720	22,834	-			3
Callawa	0.11	48	1%	1		1,134	1,395	-	Yes	Yes	3
Communal	7.08	690	4%	1		3,556	3,801	-	Yes	Yes	3
Indangan	0.40	23	0%	1		5,801	6,533	-	Yes	Yes	3
Mandug	20.99	1,625	12%	2		8,673	10,635	-	Yes	Yes	2
Pampanga	10.16	2,702	19%	2		18,212	20,626	-	Yes	Yes	1
Sasa	47.18	10,400	20%	2		35,744	42,127	-	Yes	Yes	1
Tigatto	102.74	13,665	38%	3		9,143	10,354	-	Yes	Yes	3
V. Hizon	17.98	1,626	14%	2	-	-	-	Yes	Yes	1	
Waan	21.29	2,126	54%	3	1,524	1,763	-	Yes	Yes	2	

Table PO – 16C. Population, Adaptive Capacity Score, Flood, Davao City

Barangay	Exposure			Impact	Access to Post Disaster Financing	Adaptive Capacity					Adaptive Capacity Score
	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Degree of Impact		PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources	
						Members	Dependents				
Bunawan District											
Lasang	20.65	3,960	39%	3	-DO-	3,894	3,970	-	Yes	Yes	2
Bunawan	35.10	6,420	27%	3		19,877	23,810	-	Yes	Yes	3
Gatungan	0.04	19	2%	1		441	624	-	Yes	Yes	2
Ilang	7.03	1,308	5%	1		11,419	13,918	-	Yes	Yes	3
Mahayag	0.74	78	1%	1		1,491	1,942	-	Yes	Yes	2
Mudiang	1.00	41	1%	1		1,175	1,364	-	Yes	Yes	1
Panacan	31.89	4,153	20%	3		24,476	28,076	-	Yes	Yes	3
San Isidro	0.08	15	0%	1		1,094	1,485	-	Yes	Yes	2
Tibungco	14.31	4,240	10%	2		25,271	29,843	-	Yes	Yes	1
Paquibato District											
Malabog	0.03	18	0%	1	-DO-	3,770	2,794	-	Yes	Yes	2
Paradise Embac	0.00	0	0%	1		978	1,635	-	Yes	Yes	2
Salapawan	0.01	8	0%	1		609	304	-	Yes	Yes	2
Sumimao	0.66	599	36%	3		482	559	-	Yes	Yes	2
Tapak	1.93	541	10%	2		1,508	334	-	Yes	Yes	2
Baguio District											
Baguio	8.10	2,992	64%	3	-DO-	8,836	13,452	-	Yes	Yes	1
Malagos	4.89	1,772	27%	2		1,886	2,443	-	Yes	Yes	1
Calinan District											
Biao Joaquin	2.38	1,673	73%	3	-DO-	907	1,327	-	Yes	Yes	1
Calinan	107.19	22,124	96%	3		37,809	55,479	-	Yes	Yes	1
Cawayan	0.30	368	16%	2		566	591	-	Yes	Yes	2
Dacudao	0.29	178	4%	1		1,245	1,485	-	Yes	Yes	2
Dalagdag	1.18	401	43%	3		325	346	-	Yes	Yes	2
Dominga	1.73	1,575	98%	3		307	363	-	Yes	Yes	2
Inayangan	0.01	11	0%	1		1,454	1,994	-	Yes	Yes	2
Lacson	1.30	1,466	25%	2		1,089	1,294	-	Yes	Yes	2
Lamanan	0.06	57	1%	1		1,191	1,390	-	Yes	Yes	2
Lampianao	0.29	102	12%	2		270	283	-	Yes	Yes	2
Megkawayan	0.06	32	1%	1		604	588	-	Yes	Yes	2
Pangyan	1.99	717	35%	3		427	709	-	Yes	Yes	2
Riverside	19.33	4,728	87%	3		780	973	-	Yes	Yes	1
Saloy	0.01	10	0%	1		418	689	-	Yes	Yes	2
Sirib	1.96	1,297	25%	2		1,789	2,273	-	Yes	Yes	2
Subasta	6.61	2,350	65%	3		759	1,069	-	Yes	Yes	2
Talomo River	19.81	6,564	96%	3		1,398	1,901	-	Yes	Yes	2

Table PO – 16D. Population, Adaptive Capacity Score, Flood, Davao City

Exposure				Impact	Adaptive Capacity					Adaptive Capacity Score	
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Degree of Impact	Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs		Government Resources
						Members	Dependents				
Gumitan	0.03	7	0%	1	-DO-	644	202	-	Yes	Yes	2
Malamba	1.40	512	11%	2		1,407	747	-	Yes	Yes	2
Marilog	0.10	17	0%	1		13,227	16,556	-	Yes	Yes	2
Salaysay	0.03	15	0%	1		1,877	2,970	-	Yes	Yes	2
Tamugan	8.77	6,993	84%	3		2,704	2,814	-	Yes	Yes	2
Toril District											
Alambre	0.09	21	1%	1	-DO-	1,297	1,421	-	Yes	Yes	2
Bankas Heights	18.61	4,457	58%	3		2,890	3,479	-	Yes	Yes	2
Bato	2.08	451	5%	1		2,958	3,636	-	Yes	Yes	2
Binugao	26.77	3,404	49%	3		2,803	3,748	-	Yes	Yes	2
Catigan	0.24	113	4%	1		1,338	1,407	-	Yes	Yes	2
Crossing Bayabas	21.61	2,581	22%	2		3,436	4,445	-	Yes	Yes	1
Daliao	23.42	4,344	21%	2		7,644	10,032	-	Yes	Yes	1
Daliaon Plantation	0.00	1	0%	1		1,120	1,371	-	Yes	Yes	2
Eden	2.35	105	4%	1		668	826	-	Yes	Yes	1
Kilate	0.11	54	4%	1		395	634	-	Yes	Yes	2
Lizada	19.82	3,639	18%	2		5,810	7,472	-	Yes	Yes	2
Lubogan	32.08	4,175	34%	3		4,164	5,074	-	Yes	Yes	1
Marapangi	12.97	1,103	16%	2		2,109	2,890	-	Yes	Yes	2
Sibulan	0.01	9	0%	1		630	886	-	Yes	Yes	2
Sirawan	22.25	1,800	25%	2		2,414	3,208	-	Yes	Yes	2
Tagluno	0.09	53	4%	1		592	636	-	Yes	Yes	2
Tungkalan	0.05	33	1%	1		738	753	-	Yes	Yes	2
Tugbok District											
Angalan	11.73	2,297	93%	3	-DO-	1,562	1,626	-	Yes	Yes	1
Bago Oshiro	2.96	248	2%	1		2,807	3,522	-	Yes	Yes	1
Balengaeng	2.27	2,038	98%	3		856	1,013	-	Yes	Yes	2
Biao Escuela	1.62	581	18%	2		1,384	1,643	-	Yes	Yes	2
Biao Guianga	1.69	1,570	43%	3		1,709	2,271	-	Yes	Yes	2
Los Amigos	38.62	8,601	88%	3		2,401	2,910	-	Yes	Yes	3
Manambulan	9.10	2,409	91%	3		1,069	1,410	-	Yes	Yes	2
Manuel Guianga	0.17	132	2%	1		2,786	3,829	-	Yes	Yes	2
Matina Biao	1.80	1,171	65%	3		1,015	1,578	-	Yes	Yes	2
Mintal	65.05	5,501	42%	3		15,905	20,994	-	Yes	Yes	1
New Carmen	13.17	2,142	82%	3		598	692	-	Yes	Yes	2
New Valencia	2.24	696	41%	3		248	311	-	Yes	Yes	2
Sto. Niño	8.74	1,979	10%	1		4,931	5,621	-	Yes	Yes	1
Tacunan	31.80	7,073	55%	3		4,017	4,987	-	Yes	Yes	1

Table PO – 16E. Population, Adaptive Capacity Score, Flood, Davao City

Exposure				Impact	Adaptive Capacity					Adaptive Capacity Score	
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Degree of Impact	Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs		Government Resources
						Members	Dependents				
Tagakpan	6.82	2,645	63%	3	-DO-	1,694	1,771	-	Yes	Yes	2
Talandang	3.19	1,303	38%	3		1,009	1,181	-	Yes	Yes	2
Tugbok	107.98	13,015	86%	3		22,762	28,718	-	Yes	Yes	1
Ula	7.04	1,970	48%	3		1,182	1,460	-	Yes	Yes	1

Landslide - The areas with the lowest adaptive capacity scores in addressing the effect of landslides are Barangays 19-B in Poblacion District, Carmen, Gumalang, Tambobong, and Tawan-Tawan in Baguio District, A. Angliongto, Acacia, Buhangin Proper, Cabantian, Callawa, Communal, Indangan, Mandug, Sasa, Tigatto, and Waan in Buhangin District, Bunawan Proper, Gatungan, Ilang, Mahayag, Mudiang, Panacan, San Isidro, and Tibungco in Bunawan District, Biao Joaquin, Calinan Proper, Dalagdag, Dominga, Inayangan, Lacson, Lamanan, Lampianao, Megkawayan, Pangyan, Saloy, Sirib, Talomo River, and Tamayong in Calinan District, Baganihan, Bantol, Buda, Dalag Lumot, Datu Salumay, Gumitan, Magsaysay, Malamba, Marilog Proper, Salaysay, Suawan, and Tamugan in Marilog District, Colosas, Fatima, Lumiad, Mabuhay, Malabog, Mapula, Pandaitan, Panalum, Paquibato Proper, Paradise Embac, Salapawan, Sumimao, and Tapak in Paquibato District, Catalunan Grande, Langub, Ma-a, Magtuod, Matina Crossing, Matina Pangi, and Talomo Proper in Talomo District, Alambre, Atan-Awe, Baracatan, Bato, Bayabas, Binugao, Camansi, Catigan, Daliaon Plantation, Eden, Kilate, Marapangi, Sibulan, Tagurano, Tibuloy, and Tungkalan in Toril District, and Manambulan, Matina Biao, New Carmen, and New Valencia in Tugbok District. These areas have 221,611 of exposed population to landslides (Table PO – 17A to Table PO – 17C).

Table PO – 17A. Population, Adaptive Capacity Score, Landslide, Davao City

Exposure				Impact	Adaptive Capacity					Adaptive Capacity Score	
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Degree of Impact	Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs		Government Resources
						Members	Dependents				
Poblacion District											
19-B	1.32	220	1%	1	60% of the families have access	15,128	15,784	-	Yes	Yes	3
Baguio District											
Carmen	1.26	1,791	83%	3	-DO-	566	683	-	Yes	Yes	3
Gumalang	0.38	413	8%	1		1,697	2,077	-	Yes	Yes	3
Tambobong	4.49	5,546	93%	3		1,952	2,163	-	Yes	Yes	3
Tawan-Tawan	0.04	58	1%	1		1,283	1,548	-	Yes	Yes	3
Buhangin District											
A. Angliongto	0.72	58	0%	1	-DO-	-	-	-	Yes	Yes	3
Acacia	15.15	3,208	98%	3		4,382	5,328	-	Yes	Yes	3
Buhangin	36.71	6,754	10%	2		60,804	70,959	-	Yes	Yes	3
Cabantian	83.13	10,951	25%	2		19,720	22,834	-	Yes	Yes	3
Callawa	0.68	289	8%	1		1,134	1,395	-	Yes	Yes	3
Communal	67.72	6,594	39%	3		3,556	3,801	-	Yes	Yes	3
Indangan	93.10	5,363	36%	3		5,801	6,533	-	Yes	Yes	3
Mandug	20.17	1,562	11%	2		8,673	10,635	-	Yes	Yes	3
Sasa	1.14	251	0%	1		35,744	42,127	-	Yes	Yes	3
Tigatto	39.43	5,245	14%	2		9,143	10,354	-	Yes	Yes	3
Waan	7.17	716	18%	2	1,524	1,763	-	Yes	Yes	3	

Table PO – 17B. Population, Adaptive Capacity Score, Landslide, Davao City

Exposure			Impact	Adaptive Capacity						Adaptive Capacity Score	
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Degree of Impact	Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs		Government Resources
						Members	Dependents				
Bunawan District											
Bunawan	7.75	1,417	6%	1	-DO-	19,877	23,810	-	Yes	Yes	3
Gatungan	1.70	913	77%	3		441	624	-	Yes	Yes	3
Ilang	16.66	3,099	12%	2		11,419	13,918	-	Yes	Yes	3
Mahayag	7.19	763	12%	2		1,491	1,942	-	Yes	Yes	3
Mudiang	38.15	1,577	54%	3		1,175	1,364	-	Yes	Yes	3
Panacan	67.73	8,820	25%	2		24,476	28,076	-	Yes	Yes	3
San Isidro	3.40	632	12%	2		1,094	1,485	-	Yes	Yes	3
Tibungco	18.18	5,386	13%	2		25,271	29,843	-	Yes	Yes	3
Calinan District											
Biao Joaquin	0.82	579	25%	2	-DO-	907	1,327	-	Yes	Yes	3
Calinan	0.02	3	0%	1		37,809	55,479	-	Yes	Yes	3
Dalagdag	1.14	386	41%	3		325	346	-	Yes	Yes	3
Dominga	0.11	104	6%	1		307	363	-	Yes	Yes	3
Inayangan	1.89	2,746	57%	3		1,454	1,994	-	Yes	Yes	3
Lacson	0.07	78	1%	1		1,089	1,294	-	Yes	Yes	3
Lamanan	4.47	4,319	95%	3		1,191	1,390	-	Yes	Yes	3
Lampianao	1.85	647	77%	3		270	283	-	Yes	Yes	3
Megkawayan	5.52	2,776	92%	3		604	588	-	Yes	Yes	3
Pangyan	1.33	478	23%	2		427	709	-	Yes	Yes	3
Saloy	1.78	1,848	87%	3		418	689	-	Yes	Yes	3
Sirib	0.90	594	11%	2		1,789	2,273	-	Yes	Yes	3
Talomo River	0.10	34	0%	1		1,398	1,901	-	Yes	Yes	3
Tamayong	2.67	4,001	55%	3		1,847	2,419	-	Yes	Yes	3
Marilog District											
Baganihan	0.16	65	5%	1	-DO-	813	624	-	Yes	Yes	3
Bantol	2.61	2,226	96%	3		763	376	-	Yes	Yes	3
Buda	4.07	373	20%	2		498	506	-	Yes	Yes	3
Dalag Lumot	9.86	1,713	92%	3		571	301	-	Yes	Yes	3
Datu Salumay	4.94	507	23%	2		681	570	-	Yes	Yes	3
Gumitan	6.63	1,366	78%	3		644	202	-	Yes	Yes	3
Magsaysay	8.68	2,209	91%	3		1,074	548	-	Yes	Yes	3
Malamba	10.09	3,700	76%	3		1,407	747	-	Yes	Yes	3
Marilog	91.12	15,438	95%	3		13,227	16,556	-	Yes	Yes	3
Salaysay	10.06	4,270	96%	3		1,877	2,970	-	Yes	Yes	3
Suawan	7.31	4,351	95%	3		933	1,076	-	Yes	Yes	3
Tamugan	0.03	27	0%	1		2,704	2,814	-	Yes	Yes	3

Table PO – 17C. Population, Adaptive Capacity Score, Landslide, Davao City

Exposure				Impact	Adaptive Capacity						Adaptive Capacity Score	
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Degree of Impact	Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources		
						Members	Dependents					
Paquibato District												
Colosas	9.65	4,658	98%	3	-DO-	1,229	741	-	Yes	Yes	3	
Fatima	7.61	2,467	70%	3		627	517	-	Yes	Yes	3	
Lumiad	8.62	1,468	95%	3		487	555	-	Yes	Yes	3	
Mabuhay	0.68	95	9%	1		244	310	-	Yes	Yes	3	
Malabog	18.22	10,276	95%	3		3,770	2,794	-	Yes	Yes	3	
Mapula	14.69	2,717	94%	3		1,005	397	-	Yes	Yes	3	
Pandaitan	9.34	3,823	95%	3		1,365	891	-	Yes	Yes	3	
Pañalum	2.08	1,796	98%	3		810	1,120	-	Yes	Yes	3	
Paquibato	12.54	2,339	94%	3		5,247	7,433	-	Yes	Yes	3	
Paradise Embac	1.90	2,445	92%	3		978	1,635	-	Yes	Yes	3	
Salapawan	3.03	2,124	93%	3		609	304	-	Yes	Yes	3	
Sumimao	1.78	1,612	97%	3		482	559	-	Yes	Yes	3	
Tapak	18.46	5,172	98%	3		1,508	334	-	Yes	Yes	3	
Talomo District												
Catalunan Grande	5.07	508	2%	1	-DO-	19,488	23,415	-	Yes	Yes	3	
Langub	13.48	2,688	93%	3		1,285	1,516	-	Yes	Yes	3	
Ma-A	101.76	13,438	22%	3		32,669	37,525	-	Yes	Yes	3	
Magtuod	46.37	4,184	83%	3		2,062	2,709	-	Yes	Yes	3	
Matina Crossing	29.25	3,629	11%	3		12,355	13,798	-	Yes	Yes	3	
Matina Pangi	64.73	7,211	40%	3		8,740	10,911	-	Yes	Yes	3	
Talomo	10.51	2,013	3%	1		37,014	42,322	-	Yes	Yes	3	
Toril District												
Alambre	0.09	22	1%	1	-DO-	1,297	1,421	-	Yes	Yes	3	
Atan-Awe	0.89	1,092	98%	3		830	854	-	Yes	Yes	3	
Baracatan	1.55	1,039	36%	3		1,571	2,006	-	Yes	Yes	3	
Bato	1.00	218	2%	1		2,958	3,636	-	Yes	Yes	3	
Bayabas	2.05	1,835	61%	3		1,304	1,726	-	Yes	Yes	3	
Binugao	24.70	3,140	45%	3		2,803	3,748	-	Yes	Yes	3	
Camansi	1.73	835	70%	3		295	356	-	Yes	Yes	3	
Catigan	2.21	1,059	35%	3		1,338	1,407	-	Yes	Yes	3	
Daliaon Plantation	2.17	1,212	38%	3		1,120	1,371	-	Yes	Yes	3	
Eden	51.48	2,308	97%	3		668	826	-	Yes	Yes	3	
Kilate	0.19	93	7%	1		395	634	-	Yes	Yes	3	
Marapangi	1.99	170	2%	1		2,109	2,890	-	Yes	Yes	3	
Sibulan	2.14	2,289	92%	3		630	886	-	Yes	Yes	3	
Sirawan	7.50	607	9%	1		2,414	3,208	-	Yes	Yes	3	
Tagurano	0.60	434	35%	3		428	540	-	Yes	Yes	3	
Tibuloy	3.57	2,086	94%	3		733	958	-	Yes	Yes	3	
Tungkalan	1.09	746	26%	2		738	753	-	Yes	Yes	3	
Tugbok District												
Manambulan	0.12	32	1%	1		-DO-	1,069	1,410	-	Yes	Yes	3
Matina Biao	0.91	593	33%	3	-DO-	1,015	1,578	-	Yes	Yes	3	
New Carmen	2.26	367	14%	2	-DO-	598	692	-	Yes	Yes	3	
New Valencia	1.00	311	19%	2	-DO-	248	311	-	Yes	Yes	3	

Liquefaction - The areas with the lowest adaptive capacity scores in curbing the effect of liquefaction are Barangays 21-C, 22-C, 23-C, 31-D, and 37-D in Poblacion District, Centro, Gov. Vicente Duterte, and Lapu-Lapu in Agdao District, Lasang, Bunawan Proper, and Panacan in Bunawan District, Bago Aplaya, Bago Gallera, Bucana, Catalunan Grande, Dumoy, Matina Aplaya, and Talomo Proper in Talomo District, and Binugao, Lizada, Sirawan, and Toril in Toril District. These areas have 311,888 of exposed population to liquefaction (Table PO – 18A to Table PO – 18C).

Table PO – 18A. Population, Adaptive Capacity Score, Liquefaction, Davao City

Exposure				Impact	Adaptive Capacity					Adaptive Capacity Score	
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Degree of Impact	Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs		Government Resources
						Members	Dependents				
Poblacion District											
1-A	6.69	2,887	93%	3	60% of the families have access	3,296	2,548	-	Yes	Yes	2
2-A	1.61	3,494	97%	3		2,279	2,129	-	Yes	Yes	2
3-A	0.55	370	100%	3		543	385	-	Yes	Yes	2
4-A	2.93	1,683	100%	3		1,177	884	-	Yes	Yes	2
5-A	13.27	6,964	61%	3		6,501	6,906	-	Yes	Yes	2
6-A	0.93	441	21%	2		1,194	1,342	-	Yes	Yes	2
7-A	5.60	2,114	53%	3		2,018	1,883	-	Yes	Yes	1
8-A	34.14	4,393	40%	3		3,635	4,250	-	Yes	Yes	2
9-A	8.69	3,513	62%	3		3,034	2,942	-	Yes	Yes	1
10-A	4.27	4,946	73%	3		2,178	2,263	-	Yes	Yes	1
11-B	2.56	1,901	100%	3		1,109	1,008	-	Yes	Yes	1
12-B	1.20	839	100%	3		528	509	-	Yes	Yes	1
13-B	0.57	427	100%	3		6,785	6,834	-	Yes	Yes	1
14-B	3.09	1,173	100%	3		613	647	-	Yes	Yes	1
15-B	1.46	2,890	100%	3		1,395	1,261	-	Yes	Yes	1
16-B	0.43	810	96%	3		320	284	-	Yes	Yes	1
17-B	0.53	793	98%	3		489	463	-	Yes	Yes	1
18-B	0.40	1,760	96%	3		1,277	1,265	-	Yes	Yes	1
19-B	31.90	5,319	17%	2		15,128	15,784	-	Yes	Yes	2
20-B	13.62	4,249	93%	3		2,412	2,022	-	Yes	Yes	2
21-C	5.16	5,397	72%	3		4,803	5,199	-	Yes	Yes	3
22-C	4.76	4,749	72%	3		4,165	4,465	-	Yes	Yes	3
23-C	12.74	14,385	87%	3		9,201	9,147	-	Yes	Yes	3
24-C	2.51	2,601	100%	3		1,221	1,142	-	Yes	Yes	2
25-C	1.73	1,966	100%	3		749	688	-	Yes	Yes	2
26-C	2.23	2,484	99%	3		1,305	1,248	-	Yes	Yes	1

Table PO – 18B. Population, Adaptive Capacity Score, Liquefaction, Davao City

Exposure			Impact	Adaptive Capacity						Adaptive Capacity Score		
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Degree of Impact	Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs		Government Resources	
						Members	Dependents					
27-C	0.64	2,088	97%	3	60% of the families have access	1,443	1,294	-	Yes	Yes	1	
28-C	1.65	2,269	100%	3		1,214	1,253	-	Yes	Yes	1	
29-C	1.07	1,557	100%	3		705	618	-	Yes	Yes	1	
30-D	1.37	1,595	99%	3		695	616	-	Yes	Yes	1	
31-D	13.55	6,476	78%	3		4,196	4,455	-	Yes	Yes	3	
32-D	2.75	1,972	99%	3		1,253	1,140	-	Yes	Yes	2	
33-D	3.86	2,032	100%	3		1,210	1,073	-	Yes	Yes	2	
34-D	2.48	1,682	100%	3		1,847	886	-	Yes	Yes	2	
35-D	0.35	578	100%	3		463	288	-	Yes	Yes	2	
36-D	2.39	1,581	100%	3		912	837	-	Yes	Yes	2	
37-D	3.54	5,208	77%	3		3,932	4,092	-	Yes	Yes	3	
38-D	1.73	1,410	94%	3		895	823	-	Yes	Yes	2	
39-D	2.92	4,145	81%	3		2,477	2,566	-	Yes	Yes	2	
40-D	1.34	2,363	97%	3		1,248	1,314	-	Yes	Yes	2	
Agdao District												
Agdao Proper	7.62	8,625	97%	3	-DO-	39,982	47,028	-	Yes	Yes	2	
Centro	22.37	12,331	90%	3		1,747	1,923	-	Yes	Yes	3	
Gov. Paciano Bangoy	17.47	6,900	77%	3		1,985	2,240	-	Yes	Yes	2	
Gov. Vicente Duterte	20.02	8,091	92%	3		1,114	1,193	-	Yes	Yes	3	
Tomas Monteverde	2.09	5,081	89%	3		1,134	1,478	-	Yes	Yes	2	
Lapu - Lapu	23.68	9,713	94%	3		3,206	3,565	-	Yes	Yes	3	
Leon Garcia Sr.	12.04	5,586	97%	3		4,127	4,384	-	Yes	Yes	2	
Rafael Castillo	11.86	10,567	90%	3		1,927	1,577	-	Yes	Yes	2	
San Antonio	25.28	2,736	92%	3		2,737	2,768	-	Yes	Yes	1	
Ubalde	5.94	9,226	93%	3		1,435	1,421	-	Yes	Yes	2	
Wilfredo Aquino	19.31	10,911	70%	3		2,313	2,333	-	Yes	Yes	1	
Buhangin District												
A. Angliongto	24.62	1,990	15%	2		-DO-	-	-	-	Yes	Yes	1
Buhangin	1.20	221	0%	1			60,804	70,959	-	Yes	Yes	1
Mandug	14.09	1,091	8%	1	8,673		10,635	-	Yes	Yes	2	
Pampanga	0.05	15	0%	1	18,212		20,626	-	Yes	Yes	1	
Sasa	25.93	5,715	11%	2	35,744		42,127	-	Yes	Yes	1	
Tigatto	156.38	20,800	57%	3	9,143		10,354	-	Yes	Yes	2	
V. Hizon	52.73	4,770	42%	3	-		-	-	Yes	Yes	1	
Waan	18.52	1,849	47%	3	1,524		1,763	-	Yes	Yes	2	

Table PO – 18C. Population, Adaptive Capacity Score, Liquefaction, Davao City

Exposure				Impact	Adaptive Capacity						Adaptive Capacity Score
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Degree of Impact	Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources	
						Members	Dependents				
Bunawan District											
Lasang	50.58	9,699	95%	3	-DO-	3,894	3,970	-	Yes	Yes	3
Bunawan	89.65	16,397	70%	3		19,877	23,810	-	Yes	Yes	3
Ilang	10.88	2,024	8%	1		11,419	13,918	-	Yes	Yes	2
Mahayag	7.63	810	13%	2		1,491	1,942	-	Yes	Yes	1
Panacan	51.96	6,767	19%	3		24,476	28,076	-	Yes	Yes	3
San Isidro	18.25	3,388	64%	3		1,094	1,485	-	Yes	Yes	1
Tibungco	1.24	1,801	4%	1		25,271	29,843	-	Yes	Yes	2
Talomo District											
Bago Aplaya	94.69	14,993	94%	3	-DO-	9,399	11,284	-	Yes	Yes	3
Bago Gallera	1.56	194	1%	1		7,636	9,068	-	Yes	Yes	3
Bucana	216.58	76,631	91%	3		15,137	13,389	-	Yes	Yes	3
Catalunan Grande	0.01	0.61	0%	1		19,488	23,415	-	Yes	Yes	3
Dumoy	82.31	4,730	25%	3		9,920	12,762	-	Yes	Yes	3
Ma-a	232.93	30,761	51%	3		32,669	37,525	-	Yes	Yes	2
Matina Aplaya	154.67	30,965	93%	3		20,862	24,144	-	Yes	Yes	3
Matina Crossing	170.46	21,152	65%	3		12,355	13,798	-	Yes	Yes	2
Matina Pangi	42.34	4,717	26%	2		8,740	10,911	-	Yes	Yes	2
Talomo	226.37	43,372	73%	3		37,014	42,322	-	Yes	Yes	3
Toril District											
Binugao	15.57	1,980	29%	3	-DO-	2,803	3,748	-	Yes	Yes	3
Crossing Bayabas	0.01	1.03	0%	1		3,436	4,445	-	Yes	Yes	2
Daliao	106.80	19,808	94%	3		7,644	10,032	-	Yes	Yes	3
Lizada	98.22	18,032	90%	3		5,810	7,472	-	Yes	Yes	3
Sirawan	24.35	1,970	28%	3		2,414	3,208	-	Yes	Yes	3
Toril	48.61	8,155	67%	3		49,031	69,310	-	Yes	Yes	2
Tugbok District											
New Carmen	11.98	1,948	74%	3		598	692	-	Yes	Yes	2

Storm Surge - The areas with the lowest adaptive capacity scores in addressing the effect of storm surge include Barangays 1-A, 2-A, 4-A, 5-A, 6-A, 8-A, 10-A, 11-B, 12-B, 13-B, 14-B, 15-B, 16-B, 17-B, 18-B, 21-C, 22-C, 23-C, 24-C, 25-C, 26-C, 27-C, 28-C, 29-C, 30-C, 31-D, 32-D, 33-D, 34-D, 35-D, 36-D, 37-D, 38-D, 39-D, and 40-D in Poblacion District, Agdao Proper, Centro, Gov. Paciano Bangoy, Gov. Vicente Duterte, Tomas Monteverde, Lapu-Lapu, Leon Garcia Sr., Rafael Castillo, San Antonio, Ubalde, and Wilfredo Aquino in Agdao District, Lasang and Bunawan Proper in Bunawan District, Bago Aplaya, Bucana, Matina Aplaya, and Talomo Proper in Talomo District, and Binugao, Daliao, Lizada, and Sirawan in Toril District. These areas have 371,321 of exposed population to storm surge (Table PO – 19A to Table PO – 19C).

Table PO – 19A. Population, Adaptive Capacity Score, Storm Surge, Davao City

Barangay	Exposure			Impact	Access to Post Disaster Financing	Adaptive Capacity					Adaptive Capacity Score
	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Degree of Impact		PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources	
						Members	Dependents				
Poblacion District											
1-A	6.95	3,001	97%	3	60% of the families have access	3,296	2,548	-	Yes	Yes	3
2-A	1.62	3,513	98%	3		2,279	2,129	-	Yes	Yes	3
3-A	0.55	370	100%	3		543.00	385	-	Yes	Yes	1
4-A	2.93	1,683	100%	3		1,177	884	-	Yes	Yes	3
5-A	10.31	5,408	47%	3		6,501	6,906	-	Yes	Yes	3
6-A	0.51	240	12%	2		1,194	1,342	-	Yes	Yes	3
7-A	0.59	224	6%	1		2,018	1,883	-	Yes	Yes	2
8-A	9.24	1,188	11%	2		3,635	4,250	-	Yes	Yes	3
9-A	1.24	501	9%	1		3,034	2,942	-	Yes	Yes	1
10-A	3.30	3,831	57%	3		2,178	2,263	-	Yes	Yes	3
11-B	2.56	1,899	100%	3		1,109	1,008	-	Yes	Yes	3
12-B	1.20	839	100%	3		528	509	-	Yes	Yes	3
13-B	0.57	427	100%	3		6,785	6,834	-	Yes	Yes	3
14-B	3.09	1,173	100%	3		613	647	-	Yes	Yes	3
15-B	1.46	2,890	100%	3		1,395	1,261	-	Yes	Yes	3
16-B	0.43	810	96%	3		320	284	-	Yes	Yes	3
17-B	0.53	793	98%	3		489	463	-	Yes	Yes	3
18-B	0.40	1,760	96%	3		1,277	1,265	-	Yes	Yes	3
19-B	0.00	0	0%	1		15,128	15,784	-	Yes	Yes	1
20-B	8.94	2,789	61%	3		2,412	2,022	-	Yes	Yes	3
21-C	5.18	5,422	73%	3		4,803	5,199	-	Yes	Yes	3
22-C	4.78	4,776	72%	3		4,165	4,465	-	Yes	Yes	3
23-C	12.79	14,444	88%	3		9,201	9,147	-	Yes	Yes	3
24-C	2.51	2,601	100%	3		1,221	1,142	-	Yes	Yes	3
25-C	1.73	1,966	100%	3		749	688	-	Yes	Yes	3
26-C	2.23	2,484	99%	3		1,305	1,248	-	Yes	Yes	3
27-C	0.64	2,088	97%	3		1,443	1,294	-	Yes	Yes	3

Table PO – 19B. Population, Adaptive Capacity Score, Storm Surge, Davao City

Exposure				Impact	Adaptive Capacity						Adaptive Capacity Score
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Degree of Impact	Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs	Government Resources	
						Members	Dependents				
28-C	1.65	2,269	100%	3	-DO-	1,214	1,253	-	Yes	Yes	3
29-C	1.07	1,557	100%	3		705	618	-	Yes	Yes	3
30-D	1.37	1,595	99%	3		695	616	-	Yes	Yes	3
31-D	13.56	6,483	78%	3		4,196	4,455	-	Yes	Yes	3
32-D	2.75	1,972	99%	3		1,253	1,140	-	Yes	Yes	3
33-D	3.86	2,032	100%	3		1,210	1,073	-	Yes	Yes	3
34-D	2.48	1,682	100%	3		1,847	886	-	Yes	Yes	3
35-D	0.35	578	100%	3		463	288	-	Yes	Yes	3
36-D	2.39	1,581	100%	3		912	837	-	Yes	Yes	3
37-D	3.54	5,208	77%	3		3,932	4,092	-	Yes	Yes	3
38-D	1.73	1,410	94%	3		895	823	-	Yes	Yes	3
39-D	2.92	4,145	81%	3		2,477	2,566	-	Yes	Yes	3
40-D	1.34	2,363	97%	3		1,248	1,314	-	Yes	Yes	3
Agdao District											
Agdao Proper	7.62	8,625	97%	3	-DO-	39,982	47,028	-	Yes	Yes	3
Centro	22.72	12,521	92%	3		1,747	1,923	-	Yes	Yes	3
Gov. Paciano Bangoy	14.39	5,681	64%	3		1,985	2,240	-	Yes	Yes	3
Gov. Vicente Duterte	20.34	8,221	93%	3		1,114	1,193	-	Yes	Yes	3
Tomas Monteverde	2.09	5,081	89%	3		1,134	1,478	-	Yes	Yes	3
Lapu - Lapu	23.68	9,713	94%	3		3,206	3,565	-	Yes	Yes	3
Leon Garcia Sr.	12.04	5,586	97%	3		4,127	4,384	-	Yes	Yes	3
Rafael Castillo	11.86	10,567	90%	3		1,927	1,577	-	Yes	Yes	3
San Antonio	25.28	2,736	92%	3		2,737	2,768	-	Yes	Yes	3
Ubalde	5.94	9,226	93%	3		1,435	1,421	-	Yes	Yes	3
Wilfredo Aquino	8.59	4,855	31%	3		2,313	2,333	-	Yes	Yes	3
Buhangin District											
A. Angliongto	3.71	300	2%	1	-DO-	-	-	-	Yes	Yes	1
Pampanga	0.07	18	0%	1		18,212	20,626	-	Yes	Yes	1
Sasa	15.53	3,424	7%	1		35,744	42,127	-	Yes	Yes	1
V. Hizon	34.45	3,116	28%	2		-	-	-	Yes	Yes	2
Bunawan District											
Lasang	37.91	7,269	71%	3	-DO-	3,894	3,970	-	Yes	Yes	3
Bunawan	73.00	13,350	57%	3		19,877	23,810	-	Yes	Yes	3
Ilang	11.24	2,092	8%	1		11,419	13,918	-	Yes	Yes	1
Mahayag	8.08	857	14%	2		1,491	1,942	-	Yes	Yes	2
Panacan	32.21	4,194	12%	2		24,476	28,076	-	Yes	Yes	2
Tibungco	7.40	2,191	5%	1		25,271	29,843	-	Yes	Yes	1

Table PO – 19C. Population, Adaptive Capacity Score, Storm Surge, Davao City

Exposure			Impact	Adaptive Capacity						Adaptive Capacity Score	
Barangay	Affected Area (Hectares)	Exposed Population	Exposure Percentage	Degree of Impact	Access to Post Disaster Financing	PhilHealth Coverage		Household Financial Capacities to Relocate or Retrofit	Government Capacity to Generate Jobs		Government Resources
						Members	Dependents				
Talomo District											
Bago Aplaya	83.51	13,223	83%	3	-DO-	9,399	11,284	-	Yes	Yes	3
Bago Gallera	1.52	188	1%	1		7,636	9,068	-	Yes	Yes	1
Bucana	189.27	66,970	80%	3		15,137	13,389	-	Yes	Yes	3
Dumoy	40.74	4,419	24%	2		9,920	12,762	-	Yes	Yes	2
Ma-a	7.45	983	2%	1		32,669	37,525	-	Yes	Yes	1
Matina Aplaya	131.23	26,272	79%	3		20,862	24,144	-	Yes	Yes	3
Matina Crossing	20.70	2,568	8%	1		12,355	13,798	-	Yes	Yes	1
Talomo	202.72	38,841	65%	3		37,014	42,322	-	Yes	Yes	3
Toril District											
Binugao	5.83	741	11%	2	-DO-	2,803	3,748	-	Yes	Yes	3
Daliao	48.79	9,049	43%	3		7,644	10,032	-	Yes	Yes	3
Lizada	71.85	13,190	66%	3		5,810	7,472	-	Yes	Yes	3
Sirawan	17.36	1,404	20%	2		2,414	3,208	-	Yes	Yes	3

Fault Line - The areas with the lowest adaptive capacity scores in curbing the effect when there are movements in fault line systems include Barangays Calinan Proper and Riverside in Calinan District, Catalunan Grande, Catalunan Pequeño, and Talomo Proper in Talomo District, Binugao, Lizada, and Sirawan in Toril District, and Los Amigos, Mintal, Sto. Nino, and Tugbok Proper in Tugbok District. These areas have 822 of exposed population to fault line systems (Table PO – 20A).

Table PO – 20A. Population, Adaptive Capacity Score, Fault Line, Davao City

Barangay	Exposure			Impact	Access to Post Disaster Financing	Adaptive Capacity			Adaptive Capacity Score		
	Affected Area (Hectares)	Exposed Population	Exposure Percentage			Degree of Impact	PhilHealth Coverage	Household Financial Capacities to Relocate or Retrofit		Government Capacity to Generate Jobs	Government Resources
						Members	Dependents				
Baguio District											
Malagos	0.08	115	1.77%	1	60% of the families have access	1,886	2,443	-	Yes	Yes	1
Calinan District											
Calinan	0.16	34	0.15%	1	-DO-	37,809	55,479	-	Yes	Yes	3
Pangyan	0.11	39	1.92%	1		427	709	-	Yes	Yes	1
Riverside	0.74	180	3.31%	1		780	973	-	Yes	Yes	3
Subasta	0.15	54	1.48%	1		759	1,069	-	Yes	Yes	1
Talomo River	0.15	50	0.72%	1		1,398	1,901	-	Yes	Yes	2
Wangan	0.05	76	1.30%	1		1,459	1,673	-	Yes	Yes	1
Marilog District											
Tamugan	0.16	130	1.56%	1	-DO-	2,704	2,814	-	Yes	Yes	1
Paquibato District											
Malabog	0.00	2	0.02%	1	-DO-	3,770	2,794	-	Yes	Yes	2
Pañalum	0.00	0	0.01%	1		810	1,120	-	Yes	Yes	2
Sumimao	0.01	7	0.40%	1		482	559	-	Yes	Yes	2
Talomo District											
Catalunan Grande	0.49	49	0.15%	1	-DO-	19,488	23,415	-	Yes	Yes	3
Catalunan Pequeño	1.26	136	0.60%	3		13,381	17,066	-	Yes	Yes	3
Talomo	0.38	74	0.12%	1		37,014	42,322	-	Yes	Yes	3
Toril District											
Bankas Heights	0.07	17	0.22%	1	-DO-	2,890	3,479	-	Yes	Yes	1
Binugao	0.59	75	1.08%	1		2,803	3,748	-	Yes	Yes	3
Lizada	0.00	0	0.00%	1		5,810	7,472	-	Yes	Yes	3
Sirawan	0.54	43	0.61%	1		2,414	3,208	-	Yes	Yes	3
Tugbok District											
Angalan	0.01	3	0.11%	1	-DO-	1,562	1,626	-	Yes	Yes	1
Bago Oshiro	0.10	9	0.07%	1		2,807	3,522	-	Yes	Yes	1
Los Amigos	0.16	35	0.36%	1		2,401	2,910	-	Yes	Yes	3
Mintal	1.06	90	0.68%	1		15,905	20,994	-	Yes	Yes	3
Sto. Niño	0.47	107	0.53%	1		4,931	5,621	-	Yes	Yes	3
Tacunan		0	0.00%	1		4,017	4,987	-	Yes	Yes	2
Tagakpan	0.04	14	0.34%	1		1,694	1,771	-	Yes	Yes	1
Tugbok	0.75	91	0.60%	1		22,762	28,718	-	Yes	Yes	3

Population Vulnerability Index

The succeeding tables show the vulnerability indices to population. The vulnerability index is calculated by multiplying the degree of impact scores to adaptive capacity scores. The index scores are translated into vulnerability categories, where the vulnerability is either high, moderate, or low. Areas with high vulnerability are those where expected impacts to the population is high, due to the exposure and sensitivities, and the adaptive capacities are low to accommodate or cope with the expected effects. Those with low vulnerability show that these areas have high adaptive capacities. Below are the summary of the tables per hazard:

Flood – Results show that the residential areas in Barangays 1-A, 2-A, 5-A, and 8-A in Poblacion District, Tigatto in Buhangin District, Bunawan Proper and Panacan in Bunawan District, Bucana, Matina Aplaya, Matina Crossing, Matina Pangí, and Talomo Proper in Talomo District, and Los Amigos in Tugbok District are highly vulnerable to floods (Table PO – 21A to Table PO – 21D). These areas are expected to experience massive effects (e.g., damage to properties, loss of lives) whenever there are immense incidences of floods. The exposed population in these areas, which total to 130,997, also have low adaptive capacities.

Table PO – 21A. Population Vulnerability to Flood, Davao City

Barangay	Affected Area (Has)	Exposed Population	Exposure Percentage	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Poblacion District							
1-A	6.94	2,996	97%	3	3	9	High
2-A	1.23	2,660	74%	3	3	9	High
5-A	14.12	7,409	65%	3	3	9	High
8-A	47.94	6,168	56%	3	3	9	High
15-B	0.22	433	15%	2	3	6	Moderate
19-B	40.47	6,750	21%	2	3	6	Moderate
21-C	1.32	1,381	18%	2	2	4	Moderate
22-C	3.53	3,522	53%	3	2	6	Moderate
23-C	11.18	12,621	77%	3	2	6	Moderate
31-D	7.74	3,700	44%	3	2	6	Moderate
37-D	0.76	1,119	17%	2	2	4	Moderate
39-D	2.53	3,598	70%	3	2	6	Moderate
40-D	1.34	2,363	97%	3	2	6	Moderate
Talomo District							
Bago Aplaya	28.28	4,478	28%	2	1	2	Low
Bago Galleria	49.25	6,104	35%	3	1	3	Low
Baliok	14.12	2,705	17%	2	1	2	Low
Bucana	86.42	30,577	36%	3	3	9	High
Catalunan Grande	69.62	6,973	21%	2	1	2	Low
Catalunan Pequeño	26.64	2,871	13%	2	1	2	Low
Dumoy	28.49	3,090	17%	2	2	4	Moderate
Langub	0.01	3	0%	1	2	2	Low

Table PO – 21B. Population Vulnerability to Flood, Davao City

Barangay	Affected Area (Has)	Exposed Population	Exposure Percentage	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Ma-a	136.31	18,001	30%	3	1	3	Low
Magtuod	10.06	908	18%	2	2	4	Moderate
Matina Aplaya	72.79	14,572	44%	3	3	9	High
Matina Crossing	66.49	8,250	25%	3	3	9	High
Matina Pangi	51.00	5,682	31%	3	3	9	High
Talomo	226.76	43,447	73%	3	3	9	High
Agdao District							
Agdao Proper	7.62	8,625	97%	3	1	3	Low
Centro	18.39	10,139	74%	3	2	6	Moderate
Gov, Paciano Bangoy	17.65	6,971	78%	3	2	6	Moderate
Gov. Vicente Duterte	14.16	5,724	65%	3	2	6	Moderate
Tomas Monteverde	1.69	4,114	72%	3	1	3	Low
Lapu - Lapu	17.27	7,086	69%	3	1	3	Low
Leon Garcia Sr.	10.85	5,035	87%	3	2	6	Moderate
Rafael Castillo	7.41	6,602	56%	3	1	3	Low
San Antonio	0.01	1	0%	1	1	1	Low
Ubalde	0.93	1,452	15%	2	1	2	Low
Wilfredo Aquino	1.51	851	5%	1	1	1	Low
Buhangin District							
A. Angliongto	6.30	509	4%	1	3	3	Low
Buhangin	9.41	1,730	3%	1	3	3	Low
Cabantian	5.47	721	2%	1	3	3	Low
Callawa	0.11	48	1%	1	3	3	Low
Communal	7.08	690	4%	1	3	3	Low
Indangan	0.40	23	0%	1	3	3	Low
Mandug	20.99	1,625	12%	2	2	4	Moderate
Pampang	10.16	2,702	19%	2	1	2	Low
Sasa	47.18	10,400	20%	2	1	2	Low
Tigatto	102.74	13,665	38%	3	3	9	High
V. Hizon	17.98	1,626	14%	2	1	2	Low
Waan	21.29	2,126	54%	3	2	6	Moderate
Bunawan District							
Lasang	20.65	3,960	39%	3	2	6	Moderate
Bunawan	35.10	6,420	27%	3	3	9	High
Gatungan	0.04	19	2%	1	2	2	Low
Ilang	7.03	1,308	5%	1	3	3	Low
Mahayag	0.74	78	1%	1	2	2	Low
Mudiang	1.00	41	1%	1	1	1	Low
Panacan	31.89	4,153	20%	3	3	9	High
San Isidro	0.08	15	0%	1	2	2	Low

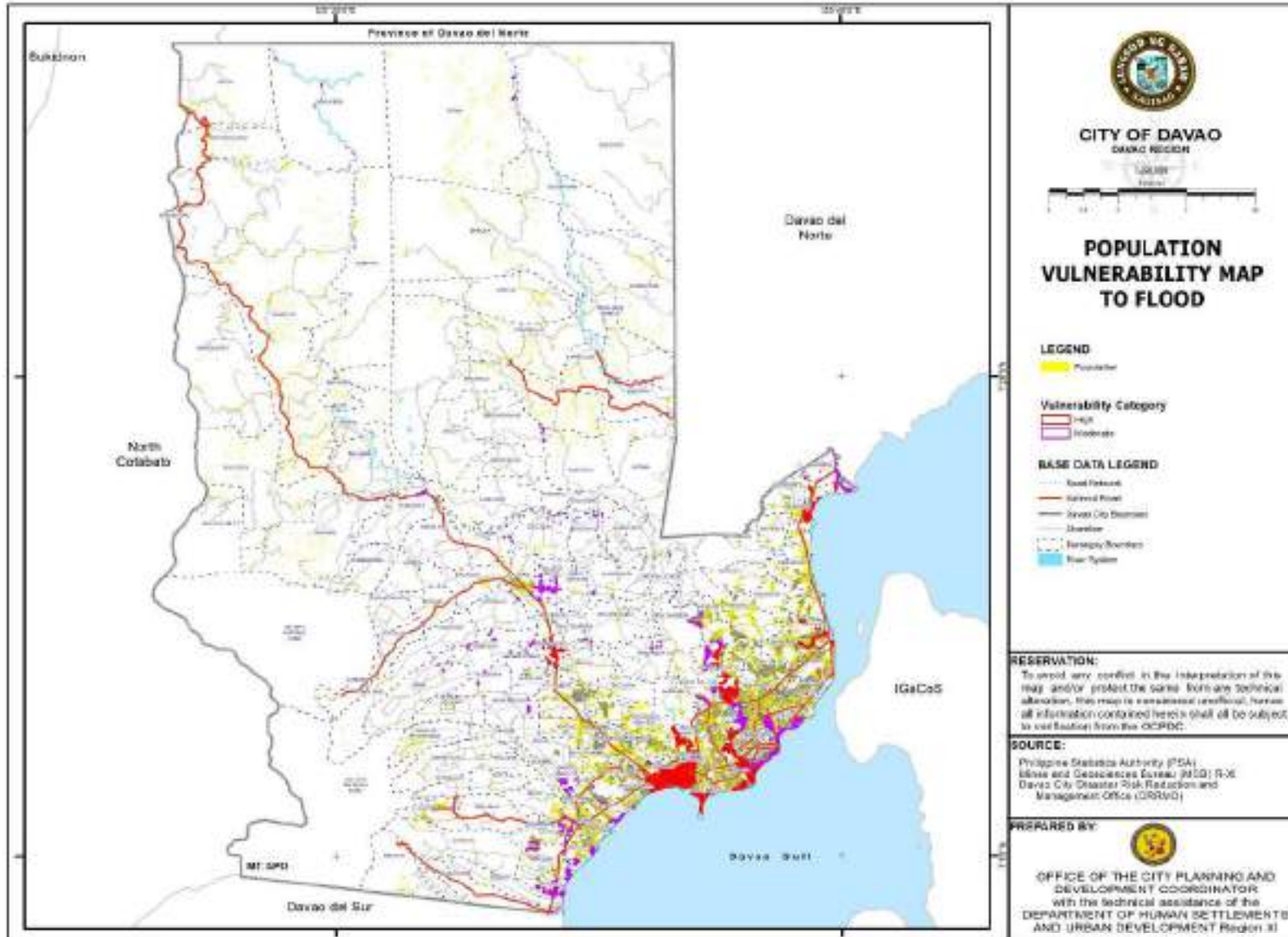
Table PO – 21C. Population Vulnerability to Flood, Davao City

Barangay	Affected Area (Has)	Exposed Population	Exposure Percentage	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Tibungco	14.31	4,240	10%	2	1	2	Low
Paquibato District							
Malabog	0.03	18	0%	1	2	2	Low
Paradise Embac	0.00	0	0%	1	2	2	Low
Salapawan	0.01	8	0%	1	2	2	Low
Sumimao	0.66	599	36%	3	2	6	Moderate
Tapak	1.93	541	10%	2	2	4	Moderate
Baguio District							
Baguio	8.10	2,992	64%	3	1	3	Low
Malagos	4.89	1,772	27%	2	1	2	Low
Calinan District							
Biao Joaquin	2.38	1,673	73%	3	1	3	Low
Calinan	107.19	22,124	96%	3	1	3	Low
Cawayan	0.30	368	16%	2	2	4	Moderate
Dacudao	0.29	178	4%	1	2	2	Low
Dalagdag	1.18	401	43%	3	2	6	Moderate
Dominga	1.73	1,575	98%	3	2	6	Moderate
Inayangan	0.01	11	0%	1	2	2	Low
Lacson	1.30	1,466	25%	2	2	4	Moderate
Lamanan	0.06	57	1%	1	2	2	Low
Lampianao	0.29	102	12%	2	2	4	Moderate
Megkawayan	0.06	32	1%	1	2	2	Low
Pangyan	1.99	717	35%	3	2	6	Moderate
Riverside	19.33	4,728	87%	3	1	3	Low
Saloy	0.01	10	0%	1	2	2	Low
Sirib	1.96	1,297	25%	2	2	4	Moderate
Subasta	6.61	2,350	65%	3	2	6	Moderate
Talomo River	19.81	6,564	96%	3	2	6	Moderate
Wangan	1.34	2,254	39%	3	2	6	Moderate
Marilog District							
Gumitan	0.03	7	0%	1	2	2	Low
Malamba	1.40	512	11%	2	2	4	Moderate
Marilog	0.10	17	0%	1	2	2	Low
Salaysay	0.03	15	0%	1	2	2	Low
Tamugan	8.77	6,993	84%	3	2	6	Moderate
Toril District							
Alambre	0.09	21	1%	1	2	2	Low
Bankas Heights	18.61	4,457	58%	3	2	6	Moderate
Bato	2.08	451	5%	1	2	2	Low
Binugao	26.77	3,404	49%	3	2	6	Moderate
Catigan	0.24	113	4%	1	2	2	Low
Crossing Bayabas	21.61	2,581	22%	2	1	2	Low

Table PO – 21D. Population Vulnerability to Flood, Davao City

Barangay	Affected Area (Has)	Exposed Population	Exposure Percentage	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Daliao	23.42	4,344	21%	2	1	2	Low
Daliao Plantation	0.00	1	0%	1	2	2	Low
Eden	2.35	105	4%	1	1	1	Low
Kilate	0.11	54	4%	1	2	2	Low
Lizada	19.82	3,639	18%	2	2	4	Moderate
Lubogan	32.08	4,175	34%	3	1	3	Low
Marapangi	12.97	1,103	16%	2	2	4	Moderate
Sibulan	0.01	9	0%	1	2	2	Low
Sirawan	22.25	1,800	25%	2	2	4	Moderate
Tagluno	0.09	53	4%	1	2	2	Low
Tungkalan	0.05	33	1%	1	2	2	Low
Tugbok District							
Angalan	11.73	2,297	93%	3	1	3	Low
Bago Oshiro	2.96	248	2%	1	1	1	Low
Balengaeng	2.27	2,038	98%	3	2	6	Moderate
Biao Escuela	1.62	581	18%	2	2	4	Moderate
Biao Guianga	1.69	1,570	43%	3	2	6	Moderate
Los Amigos	38.62	8,601	88%	3	3	9	High
Manambulan	9.10	2,409	91%	3	2	6	Moderate
Manuel Guianga	0.17	132	2%	1	2	2	Low
Matina Biao	1.80	1,171	65%	3	2	6	Moderate
Mintal	65.05	5,501	42%	3	1	3	Low
New Carmen	13.17	2,142	82%	3	2	6	Moderate
New Valencia	2.24	696	41%	3	2	6	Moderate
Sto. Niño	8.74	1,979	10%	1	1	1	Low
Tacunan	31.80	7,073	55%	3	1	3	Low
Tagakpan	6.82	2,645	63%	3	2	6	Moderate
Talandang	3.19	1,303	38%	3	2	6	Moderate
Tugbok	107.98	13,015	86%	3	1	3	Low
Ula	7.04	1,970	48%	3	1	3	Low

Map 2.5. Population Vulnerability Map to Flood



Landslide - Results show that the residential areas in Barangays Carmen and Tambobong in Baguio District, Acacia, Communal, and Indangan in Buhangin District, Gatungan and Mudiang in Bunawan District, Dalagdag, Inayangan, Lamanan, Lampianao, Megkawayan, Saloy, and Tamayong in Calinan District, Bantol, Dalag Lumot, Gumitan, Magsaysay, Malamba, Marilog Proper, Salaysay, and Suawan in Marilog District, Colosas, Fatima, Lumiad, Malabog, Mapula, Pandaitan, Pañalum, Paquibato Proper, Paradise Embac, Salapawan, Sumimao, and Tapak in Paquibato District, Langub, Ma-a, Magtuod, Matina Crossing, and Matina Pangi in Talom District, Atan-Awe, Baracatan, Bayabas, Binugao, Camansi, Catigan, Daliaon Plantation, Eden, Sibulan, Tagurano, and Tibuloy in Toril District, and Matina Biao in Tugbok District are highly vulnerable to landslides (Table PO – 22A to Table PO – 22C). These areas are expected to experience massive effects whenever there are immense incidences of landslides. The exposed population in these areas, which total to 166,567, also have low adaptive capacities.

Table PO – 22A. Population Vulnerability to Landslide, Davao City

Barangay	Affected Area (Has)	Exposed Population	Exposure Percentage	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Poblacion District							
19-B	1.32	220	1%	1	3	3	Low
Talomo District							
Catalunan Grande	5.07	508	2%	1	3	3	Low
Langub	13.48	2,688	93%	3	3	9	High
Ma-A	101.76	13,438	22%	3	3	9	High
Magtuod	46.37	4,184	83%	3	3	9	High
Matina Crossing	29.25	3,629	11%	3	3	9	High
Matina Pangi	64.73	7,211	40%	3	3	9	High
Talomo	10.51	2,013	3%	1	3	3	Low
Buhangin District							
A. Angliongto	0.72	58	0%	1	3	3	Low
Acacia	15.15	3,208	98%	3	3	9	High
Buhangin	36.71	6,754	10%	2	3	6	Moderate
Cabantian	83.13	10,951	25%	2	3	6	Moderate
Callawa	0.68	289	8%	1	3	3	Low
Communal	67.72	6,594	39%	3	3	9	High
Indangan	93.10	5,363	36%	3	3	9	High
Mandug	20.17	1,562	11%	2	3	6	Moderate
Sasa	1.14	251	0%	1	3	3	Low
Tigatto	39.43	5,245	14%	2	3	6	Moderate
Waan	7.17	716	18%	2	3	6	Moderate
Bunawan District							
Bunawan	7.75	1,417	6%	1	3	3	Low
Gatungan	1.70	913	77%	3	3	9	High
Ilang	16.66	3,099	12%	2	3	6	Moderate
Mahayag	7.19	763	12%	2	3	6	Moderate
Mudiang	38.15	1,577	54%	3	3	9	High
Panacan	67.73	8,820	25%	2	3	6	Moderate
San Isidro	3.40	632	12%	2	3	6	Moderate
Tibungco	18.18	5,386	13%	2	3	6	Moderate

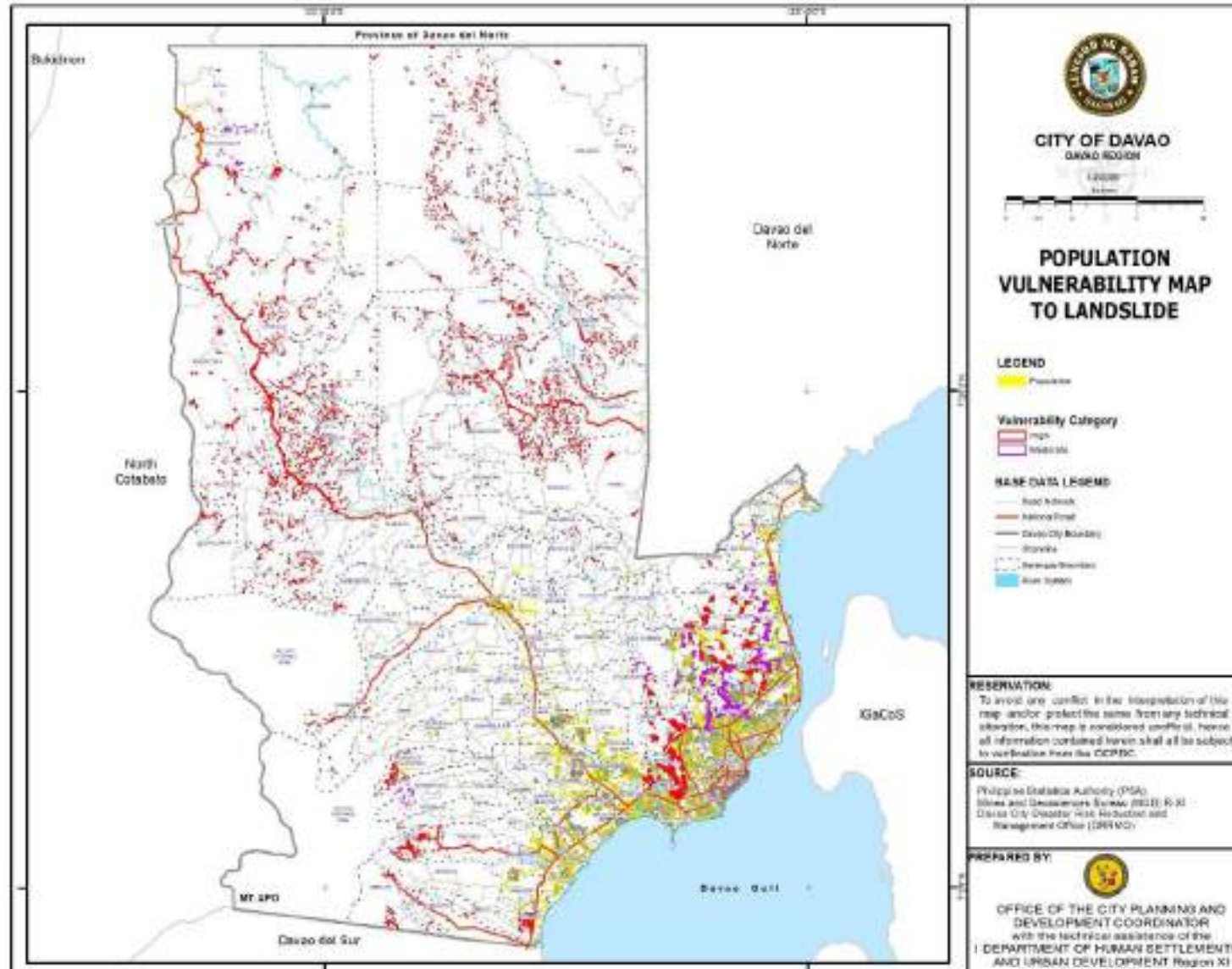
Table PO – 22B. Population Vulnerability to Landslide, Davao City

Barangay	Affected Area (Has)	Exposed Population	Exposure Percentage	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Paquibato District							
Colosas	9.65	4,658	98%	3	3	9	High
Fatima	7.61	2,467	70%	3	3	9	High
Lumiad	8.62	1,468	95%	3	3	9	High
Mabuhay	0.68	95	9%	1	3	3	Low
Malabog	18.22	10,276	95%	3	3	9	High
Mapula	14.69	2,717	94%	3	3	9	High
Pandaitan	9.34	3,823	95%	3	3	9	High
Pañalum	2.08	1,796	98%	3	3	9	High
Paquibato	12.54	2,339	94%	3	3	9	High
Paradise Embac	1.90	2,445	92%	3	3	9	High
Salapawan	3.03	2,124	93%	3	3	9	High
Sumimao	1.78	1,612	97%	3	3	9	High
Tapak	18.46	5,172	98%	3	3	9	High
Baguio District							
Carmen	1.26	1,791	83%	3	3	9	High
Gumalang	0.38	413	8%	1	3	3	Low
Tambobong	4.49	5,546	93%	3	3	9	High
Tawan-Tawan	0.04	58	1%	1	3	3	Low
Calinan District							
Biao Joaquin	0.82	579	25%	2	3	6	Moderate
Calinan	0.02	3	0%	1	3	3	Low
Dalagdag	1.14	386	41%	3	3	9	High
Dominga	0.11	104	6%	1	3	3	Low
Inayangan	1.89	2,746	57%	3	3	9	High
Lacson	0.07	78	1%	1	3	3	Low
Lamanan	4.47	4,319	95%	3	3	9	High
Lampianao	1.85	647	77%	3	3	9	High
Megkawayan	5.52	2,776	92%	3	3	9	High
Pangyan	1.33	478	23%	2	3	6	Moderate
Saloy	1.78	1,848	87%	3	3	9	High
Sirib	0.90	594	11%	2	3	6	Moderate
Talomo River	0.10	34	0%	1	3	3	Low
Tamayong	2.67	4,001	55%	3	3	9	High

Table PO – 22C. Population Vulnerability to Landslide, Davao City

Barangay	Affected Area (Has)	Exposed Population	Exposure Percentage	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Marilog District							
Baganihan	0.16	65	5%	1	3	3	Low
Bantol	2.61	2,226	96%	3	3	9	High
Buda	4.07	373	20%	2	3	6	Moderate
Dalag Lumot	9.86	1,713	92%	3	3	9	High
Datu Salumay	4.94	507	23%	2	3	6	Moderate
Gumitan	6.63	1,366	78%	3	3	9	High
Magsaysay	8.68	2,209	91%	3	3	9	High
Malamba	10.09	3,700	76%	3	3	9	High
Marilog	91.12	15,438	95%	3	3	9	High
Salaysay	10.06	4,270	96%	3	3	9	High
Suawan	7.31	4,351	95%	3	3	9	High
Tamugan	0.03	27	0%	1	3	3	Low
Toril District							
Alambre	0.09	22	1%	1	3	3	Low
Atan-Awe	0.89	1,092	98%	3	3	9	High
Baracatan	1.55	1,039	36%	3	3	9	High
Bato	1.00	218	2%	1	3	3	Low
Bayabas	2.05	1,835	61%	3	3	9	High
Binugao	24.70	3,140	45%	3	3	9	High
Camansi	1.73	835	70%	3	3	9	High
Catigan	2.21	1,059	35%	3	3	9	High
Daliaon Plantation	2.17	1,212	38%	3	3	9	High
Eden	51.48	2,308	97%	3	3	9	High
Kilate	0.19	93	7%	1	3	3	Low
Marapangi	1.99	170	2%	1	3	3	Low
Sibulan	2.14	2,289	92%	3	3	9	High
Sirawan	7.50	607	9%	1	3	3	Low
Tagurano	0.60	434	35%	3	3	9	High
Tibuloy	3.57	2,086	94%	3	3	9	High
Tungkalan	1.09	746	26%	2	3	6	Moderate
Tugbok District							
Manambulan	0.12	32	1%	1	3	3	Low
Matina Biao	0.91	593	33%	3	3	9	High
New Carmen	2.26	367	14%	2	3	6	Moderate
New Valencia	1.00	311	19%	2	3	6	Moderate

Map 2.6. Population Vulnerability Map to Landslide



Liquefaction - Results show that the residential areas in Barangays 21-C, 22-C, 23-C, 31-D, and 37-D in Poblacion Distric, Centro, Gov. Vicente Duterte, and Lapu -Lapu in Agdao District, Lasang, Bunawan Proper, and Panacan in Bunawan District, Bago Aplaya, Bucana, Dumoy, Matina Aplaya, and Talomo Proper in Talomo District, Binugao, Daliao, Lizada, and Sirawan in Toril District are highly vulnerable to liquefaction (Table PO – 23A to Table PO – 23C). These areas are expected to experience massive effects whenever there are immense incidences of liquefaction. The exposed population in these areas, which total to 304,927, have also low adaptive capacities.

Table PO – 23A. Population Vulnerability to Liquefaction, Davao City

Barangay	Affected Area (Has)	Exposed Population	Exposure Percentage	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Poblacion District							
1-A	6.69	2,887	93%	3	2	6	Moderate
2-A	1.61	3,494	97%	3	2	6	Moderate
3-A	0.55	370	100%	3	2	6	Moderate
4-A	2.93	1,683	100%	3	2	6	Moderate
5-A	13.27	6,964	61%	3	2	6	Moderate
6-A	0.93	441	21%	2	2	4	Moderate
7-A	5.60	2,114	53%	3	1	3	Low
8-A	34.14	4,393	40%	3	2	6	Moderate
9-A	8.69	3,513	62%	3	1	3	Low
10-A	4.27	4,946	73%	3	1	3	Low
11-B	2.56	1,901	100%	3	1	3	Low
12-B	1.20	839	100%	3	1	3	Low
13-B	0.57	427	100%	3	1	3	Low
14-B	3.09	1,173	100%	3	1	3	Low
15-B	1.46	2,890	100%	3	1	3	Low
16-B	0.43	810	96%	3	1	3	Low
17-B	0.53	793	98%	3	1	3	Low
18-B	0.40	1,760	96%	3	1	3	Low
19-B	31.90	5,319	17%	2	2	4	Moderate
20-B	13.62	4,249	93%	3	2	6	Moderate
21-C	5.16	5,397	72%	3	3	9	High
22-C	4.76	4,749	72%	3	3	9	High
23-C	12.74	14,385	87%	3	3	9	High
24-C	2.51	2,601	100%	3	2	6	Moderate
25-C	1.73	1,966	100%	3	2	6	Moderate
26-C	2.23	2,484	99%	3	1	3	Low

Table PO – 23B. Population Vulnerability to Liquefaction, Davao City

Barangay	Affected Area (Has)	Exposed Population	Exposure Percentage	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
27-C	0.64	2,088	97%	3	1	3	Low
28-C	1.65	2,269	100%	3	1	3	Low
29-C	1.07	1,557	100%	3	1	3	Low
30-D	1.37	1,595	99%	3	1	3	Low
31-D	13.55	6,476	78%	3	3	9	High
32-D	2.75	1,972	99%	3	2	6	Moderate
33-D	3.86	2,032	100%	3	2	6	Moderate
34-D	2.48	1,682	100%	3	2	6	Moderate
35-D	0.35	578	100%	3	2	6	Moderate
36-D	2.39	1,581	100%	3	2	6	Moderate
37-D	3.54	5,208	77%	3	3	9	High
38-D	1.73	1,410	94%	3	2	6	Moderate
39-D	2.92	4,145	81%	3	2	6	Moderate
40-D	1.34	2,363	97%	3	2	6	Moderate
Talomo District							
Bago Aplaya	94.69	14,993	94%	3	3	9	High
Bago Gallera	1.56	194	1%	1	3	3	Low
Bucana	216.58	76,631	91%	3	3	9	High
Catalunan Grande	0.01	0.61	0%	1	3	3	Low
Dumoy	82.31	4,730	25%	3	3	9	High
Ma-a	232.93	30,761	51%	3	2	6	Moderate
Matina Aplaya	154.67	30,965	93%	3	3	9	High
Matina Crossing	170.46	21,152	65%	3	2	6	Moderate
Matina Pangi	42.34	4,717	26%	2	2	4	Moderate
Talomo	226.37	43,372	73%	3	3	9	High
Agdao District							
Agdao Proper	7.62	8,625	97%	3	2	6	Moderate
Centro	22.37	12,331	90%	3	3	9	High
Gov. Paciano Bangoy	17.47	6,900	77%	3	2	6	Moderate
Gov. Vicente Duterte	20.02	8,091	92%	3	3	9	High
Tomas Monteverde	2.09	5,081	89%	3	2	6	Moderate
Lapu - Lapu	23.68	9,713	94%	3	3	9	High
Leon Garcia Sr.	12.04	5,586	97%	3	2	6	Moderate
Rafael Castillo	11.86	10,567	90%	3	2	6	Moderate
San Antonio	25.28	2,736	92%	3	1	3	Low

Table PO – 23C. Population Vulnerability to Liquefaction, Davao City

Barangay	Affected Area (Has)	Exposed Population	Exposure Percentage	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Ubalde	5.94	9,226	93%	3	2	6	Moderate
Wilfredo Aquino	19.31	10,911	70%	3	1	3	Low
Buhangin District							
A. Angliongto	24.62	1,990	15%	2	1	2	Low
Buhangin	1.20	221	0%	1	1	1	Low
Mandug	14.09	1,091	8%	1	2	2	Low
Pampanga	0.05	15	0%	1	1	1	Low
Sasa	25.93	5,715	11%	2	1	2	Low
Tigatto	156.38	20,800	57%	3	2	6	Moderate
V. Hizon	52.73	4,770	42%	3	1	3	Low
Waan	18.52	1,849	47%	3	2	6	Moderate
Bunawan District							
Lasang	50.58	9,699	95%	3	3	9	High
Bunawan	89.65	16,397	70%	3	3	9	High
Ilang	10.88	2,024	8%	1	2	2	Low
Mahayag	7.63	810	13%	2	1	2	Low
Panacan	51.96	6,767	19%	3	3	9	High
San Isidro	18.25	3,388	64%	3	1	3	Low
Tibungco	1.24	1,801	4%	1	2	2	Low
Toril District							
Binugao	15.57	1,980	29%	3	3	9	High
Crossing Bayabas	0.01	1.03	0%	1	2	2	Low
Daliao	106.80	19,808	94%	3	3	9	High
Lizada	98.22	18,032	90%	3	3	9	High
Sirawan	24.35	1,970	28%	3	3	9	High
Toril	48.61	8,155	67%	3	2	6	Moderate
Tugbok District							
New Carmen	11.98	1,948	74%	3	2	6	Moderate

Storm Surge - Results show that the residential areas in Barangays 1-A, 2-A, 4-A, 5-A, 10-A, 11-B, 12-B, 13-B, 14-B, 15-B, 16-B, 17-B, 18-B, 20-B, 21-C, 22-C, 23-C, 24-C, 25-C, 26-C, 27-C, 28-C, 29-C, 30-D, 31-D, 32-D, 33-D, 34-D, 35-D, 36-D, 37-D, 38-D, 39-D, and 40-D in Poblacion District, Agdao Proper, Centro, Gov. Paciano Bangoy, Gov. Vicente Duterte, Tomas Monteverde, Lapu-Lapu, Leon Garcia Sr., Rafael Castillo, San Antonio, Ubalde, Waan, and Wilfredo Aquino in Agdao District, Lasang and Bunawan Proper in Bunawan District, Bago Aplaya, Bucana, Matina Aplaya, and Talomo Proper in Talomo District, and Daliao and Lizada in Toril District are highly vulnerable to storm surge (Table PO – 24A to Table PO – 24C). These areas are expected to experience massive effects whenever there are immense incidences of storm surge. The exposed population in these areas, which total to 346,210, also have low adaptive capacities.

Table PO – 24A. Population Vulnerability to Storm Surge, Davao City

Barangay	Affected Area (Has)	Exposed Population	Exposure Percentage	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Poblacion District							
1-A	6.95	3,001	97%	3	3	9	High
2-A	1.62	3,513	98%	3	3	9	High
3-A	0.55	370	100%	3	1	3	Low
4-A	2.93	1,683	100%	3	3	9	High
5-A	10.31	5,408	47%	3	3	9	High
6-A	0.51	240	12%	2	3	6	Moderate
7-A	0.59	224	6%	1	2	2	Low
8-A	9.24	1,188	11%	2	3	6	Moderate
9-A	1.24	501	9%	1	1	1	Low
10-A	3.30	3,831	57%	3	3	9	High
11-B	2.56	1,899	100%	3	3	9	High
12-B	1.20	839	100%	3	3	9	High
13-B	0.57	427	100%	3	3	9	High
14-B	3.09	1,173	100%	3	3	9	High
15-B	1.46	2,890	100%	3	3	9	High
16-B	0.43	810	96%	3	3	9	High
17-B	0.53	793	98%	3	3	9	High
18-B	0.40	1,760	96%	3	3	9	High
19-B	0.00	0	0%	1	1	1	Low
20-B	8.94	2,789	61%	3	3	9	High
21-C	5.18	5,422	73%	3	3	9	High
22-C	4.78	4,776	72%	3	3	9	High
23-C	12.79	14,444	88%	3	3	9	High

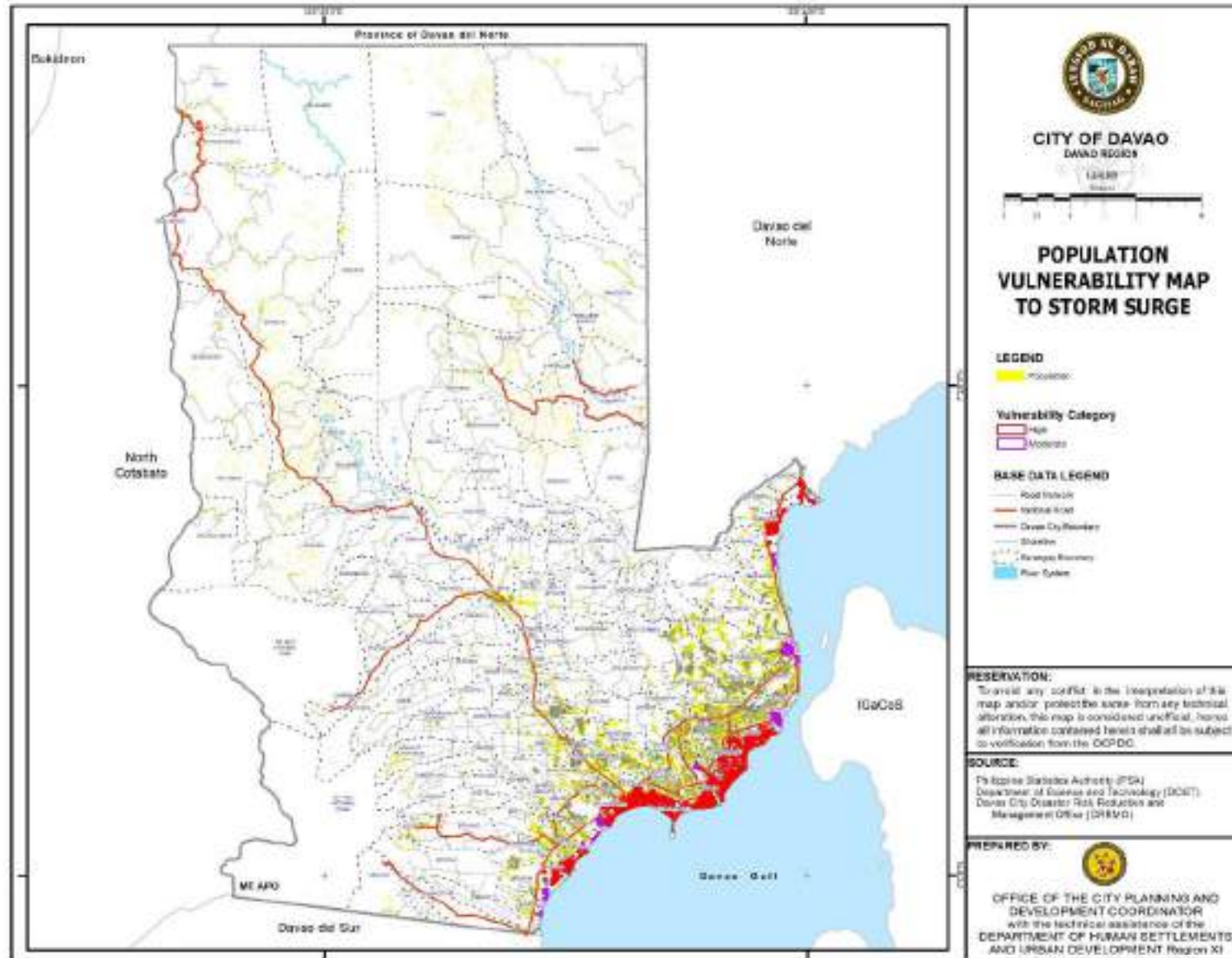
Table PO – 24B. Population Vulnerability to Storm Surge, Davao City

Barangay	Affected Area (Has)	Exposed Population	Exposure Percentage	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
24-C	2.51	2,601	100%	3	3	9	High
25-C	1.73	1,966	100%	3	3	9	High
26-C	2.23	2,484	99%	3	3	9	High
27-C	0.64	2,088	97%	3	3	9	High
28-C	1.65	2,269	100%	3	3	9	High
29-C	1.07	1,557	100%	3	3	9	High
30-D	1.37	1,595	99%	3	3	9	High
31-D	13.56	6,483	78%	3	3	9	High
32-D	2.75	1,972	99%	3	3	9	High
33-D	3.86	2,032	100%	3	3	9	High
34-D	2.48	1,682	100%	3	3	9	High
35-D	0.35	578	100%	3	3	9	High
36-D	2.39	1,581	100%	3	3	9	High
37-D	3.54	5,208	77%	3	3	9	High
38-D	1.73	1,410	94%	3	3	9	High
39-D	2.92	4,145	81%	3	3	9	High
40-D	1.34	2,363	97%	3	3	9	High
Talomo District							
Bago Aplaya	83.51	13,223	83%	3	3	9	High
Bago Gallera	1.52	188	1%	1	1	1	Low
Bucana	189.27	66,970	80%	3	3	9	High
Dumoy	40.74	4,419	24%	2	2	4	Moderate
Ma-a	7.45	983	2%	1	1	1	Low
Matina Aplaya	131.23	26,272	79%	3	3	9	High
Matina Crossing	20.70	2,568	8%	1	1	1	Low
Talomo	202.72	38,841	65%	3	3	9	High
Agdao District							
Agdao Proper	7.62	8,625	97%	3	3	9	High
Centro	22.72	12,521	92%	3	3	9	High
Gov. Paciano Bangoy	14.39	5,681	64%	3	3	9	High
Gov. Vicente Duterte	20.34	8,221	93%	3	3	9	High
Tomas Monteverde	2.09	5,081	89%	3	3	9	High

Table PO – 24C. Population Vulnerability to Storm Surge, Davao City

Barangay	Affected Area (Has)	Exposed Population	Exposure Percentage	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Lapu - Lapu	23.68	9,713	94%	3	3	9	High
Leon Garcia Sr.	12.04	5,586	97%	3	3	9	High
Rafael Castillo	11.86	10,567	90%	3	3	9	High
San Antonio	25.28	2,736	92%	3	3	9	High
Ubalde	5.94	9,226	93%	3	3	9	High
Wilfredo Aquino	8.59	4,855	31%	3	3	9	High
Buhangin District							
A. Angliongto	3.71	300	2%	1	1	1	Low
Pampang	0.07	18	0%	1	1	1	Low
Sasa	15.53	3,424	7%	1	1	1	Low
V. Hizon	34.45	3,116	28%	2	2	4	Moderate
Bunawan District							
Lasang	37.91	7,269	71%	3	3	9	High
Bunawan	73.00	13,350	57%	3	3	9	High
Ilang	11.24	2,092	8%	1	1	1	Low
Mahayag	8.08	857	14%	2	2	4	Moderate
Panacan	32.21	4,194	12%	2	2	4	Moderate
Tibungco	7.40	2,191	5%	1	1	1	Low
Toril District							
Binugao	5.83	741	11%	2	3	6	Moderate
Daliao	48.79	9,049	43%	3	3	9	High
Lizada	71.85	13,190	66%	3	3	9	High
Sirawan	17.36	1,404	20%	2	3	6	Moderate

Map 2.7. Population Vulnerability Map to Storm Surge

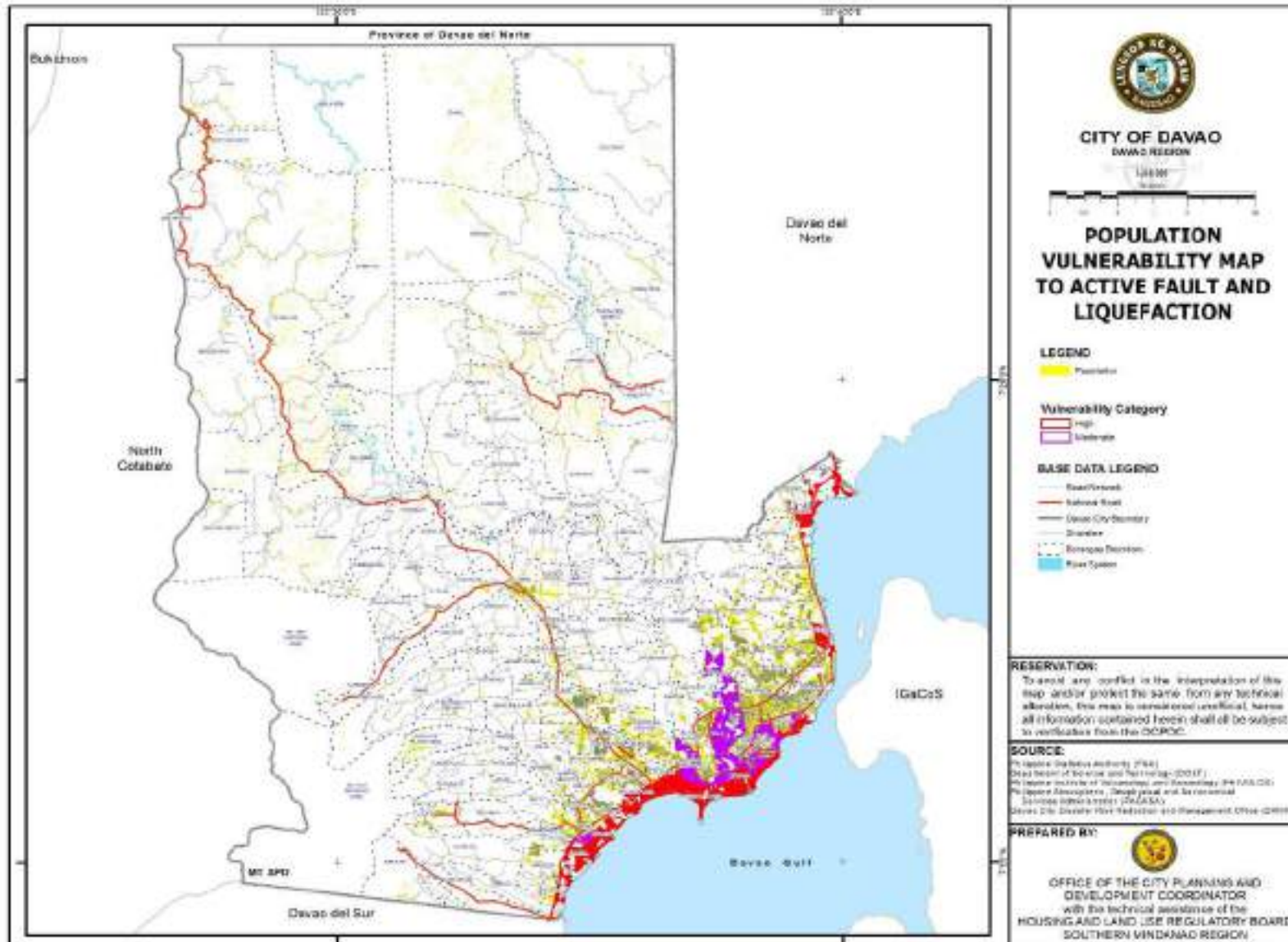


Fault Line - Results show that the residential areas in Barangays Catalunan Pequeno in Talomo District, and Los Amigos, Mintal, and Tugbok Proper in Tugbok District are highly vulnerable whenever there are movements in fault line systems (Table PO – 25). These areas are expected to experience massive effects whenever there vast movements in fault line systems. The exposed population in these areas, which total to 352, have also low adaptive capacities.

Table PO – 25. Population Vulnerability to Fault Line, Davao City

Barangay	Affected Area (Has)	Exposed Population	Exposure Percentage	Degree of Impact	Adaptive Capacity Score	Vulnerability Index	Vulnerability Category
Baguio District							
Malagos	0.08	115	1.77%	1	1	1	Low
Calinan District							
Calinan	0.16	34	0.15%	1	3	3	Low
Pangyan	0.11	39	1.92%	1	1	1	Low
Riverside	0.74	180	3.31%	1	3	3	Low
Subasta	0.15	54	1.48%	1	1	1	Low
Talomo River	0.15	50	0.72%	1	2	2	Low
Wangan	0.05	76	1.30%	1	1	1	Low
Marilog District							
Tamugan	0.16	130	1.56%	1	1	1	Low
Paquibato District							
Malabog	0.00	2	0.02%	1.00	2	2	Low
Pañalum	0.00	0	0.01%	1.00	2	2	Low
Sumimao	0.01	7	0.40%	1.00	2	2	Low
Talomo District							
Catalunan Grande	0.49	49	0.15%	1.00	3	3	Low
Catalunan Pequeño	1.26	136	0.60%	3.00	3	9	High
Talomo	0.38	74	0.12%	1.00	3	3	Low
Toril District							
Bankas Heights	0.07	17	0.22%	1.00	1	1	Low
Binugao	0.59	75	1.08%	1.00	3	3	Low
Lizada	0.00	0	0.00%	1.00	3	3	Low
Sirawan	0.54	43	0.61%	1.00	3	3	Low
Tugbok District							
Angalan	0.01	3	0.11%	1.00	1	1	Low
Bago Oshiro	0.10	9	0.07%	1.00	1	1	Low
Los Amigos	0.16	35	0.36%	3.00	3	9	High
Mintal	1.06	90	0.68%	3.00	3	9	High
Sto. Niño	0.47	107	0.53%	1.00	3	3	Low
Tacunan		0	0.00%	1.00	2	2	Low
Tagakpan	0.04	14	0.34%	1.00	1	1	Low
Tugbok	0.75294	91	0.60%	3.00	3	9	High

Map 2.8. Population Vulnerability Map to Fault Line and Liquefaction



Climate Change Vulnerability Assessment Summary Matrix for Population

Table PO – 26A. Climate Change Vulnerability Assessment Summary Matrix for Population, Flood

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 1-A	Residential Area: 7.19; Barangay Population: 3,103; Population Density: 432; Affected Area (Has): 6.94; Exposed Population: 2,996; Exposure Percentage: 0.9655; Percentage of Informal Settlers: 11.44%; % Population living in dwelling units from light to salvageable materials: 11.18%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Brgy. 2-A	Residential Area: 1.65; Barangay Population: 3,589; Population Density: 2,171; Affected Area (Has): 1.23; Exposed Population: 2,660; Exposure Percentage: 0.7411; Percentage of Informal Settlers: 11.90%; % Population living in dwelling units from light to salvageable materials: 10.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Brgy. 5-A	Residential Area: 21.80; Barangay Population: 11,436; Population Density: 525; Affected Area (Has): 14.12; Exposed Population: 7,409; Exposure Percentage: 0.6479; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 11.92%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Mobilize and empower barangay disaster council

Table PO – 26B. Climate Change Vulnerability Assessment Summary Matrix for Population, Flood

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 8-A	Residential Area: 86.07; Barangay Population: 11,075; Population Density: 129; Affected Area (Has): 47.94; Exposed Population: 6,168; Exposure Percentage: 0.557; Percentage of Informal Settlers: 4.41%; % Population living in dwelling units from light to salvageable materials: 5.64%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Brgy. 19-B	Residential Area: 190.47; Barangay Population: 31,766; Population Density: 167; Affected Area (Has): 40.47; Exposed Population: 6,750; Exposure Percentage: 0.2125; Percentage of Informal Settlers: 2.06%; % Population living in dwelling units from light to salvageable materials: 3.56%; Degree of Impact: 2; Adaptive Capacity Score: 3; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Brgy. 22-C	Residential Area: 6.65; Barangay Population: 6,634; Population Density: 998; Affected Area (Has): 3.53; Exposed Population: 3,522; Exposure Percentage: 0.5309; Percentage of Informal Settlers: 1.37%; % Population living in dwelling units from light to salvageable materials: 8.83%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council

Table PO – 26C. Climate Change Vulnerability Assessment Summary Matrix for Population, Flood

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 23-C	Residential Area: 14.60; Barangay Population: 16,489; Population Density: 1,129; Affected Area (Has): 11.18; Exposed Population: 12,621; Exposure Percentage: 0.7654; Percentage of Informal Settlers: 17.28%; % Population living in dwelling units from light to salvageable materials: 13.42%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Brgy. 31-D	Residential Area: 17.40; Barangay Population: 8,321; Population Density: 478; Affected Area (Has): 7.74; Exposed Population: 3,700; Exposure Percentage: 0.4447; Percentage of Informal Settlers: 5.70%; % Population living in dwelling units from light to salvageable materials: 4.98%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Brgy. 39-D	Residential Area: 3.62; Barangay Population: 5,143; Population Density: 1,419; Affected Area (Has): 2.53; Exposed Population: 3,598; Exposure Percentage: 0.6996; Percentage of Informal Settlers: 6.79%; % Population living in dwelling units from light to salvageable materials: 3.25%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Brgy. 40-D	Residential Area: 1.38; Barangay Population: 2,437; Population Density: 1,764; Affected Area (Has): 1.34; Exposed Population: 2,363; Exposure Percentage: 0.9695; Percentage of Informal Settlers: 11.98%; % Population living in dwelling units from light to salvageable materials: 11.78%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council

Table PO – 26D. Climate Change Vulnerability Assessment Summary Matrix for Population, Flood

Decision Areas	Technical Findings	Implications	Policy Interventions
Agdao Centro	Residential Area: 24.77; Barangay Population: 13,652; Population Density: 551; Affected Area (Has): 18.39; Exposed Population: 10,139; Exposure Percentage: 0.7427; Percentage of Informal Settlers: 1.05%; % Population living in dwelling units from light to salvageable materials: 7.27%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Gov. Paciano Bangoy	Residential Area: 22.55; Barangay Population: 8,904; Population Density: 395; Affected Area (Has): 17.65; Exposed Population: 6,971; Exposure Percentage: 0.783; Percentage of Informal Settlers: 5.35%; % Population living in dwelling units from light to salvageable materials: 8.77%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Leon Garcia Sr.	Residential Area: 12.47; Barangay Population: 5,783; Population Density: 464; Affected Area (Has): 10.85; Exposed Population: 5,035; Exposure Percentage: 0.8707; Percentage of Informal Settlers: 0.64%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Tigatto	Residential Area: 273.57; Barangay Population: 36,387; Population Density: 133; Affected Area (Has): 102.74; Exposed Population: 13,665; Exposure Percentage: 0.3756; Percentage of Informal Settlers: 14.36%; % Population living in dwelling units from light to salvageable materials: 2.75%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council

Table PO – 26E. Climate Change Vulnerability Assessment Summary Matrix for Population, Flood

Decision Areas	Technical Findings	Implications	Policy Interventions
Waan	Residential Area: 39.30; Barangay Population: 3,925; Population Density: 100; Affected Area (Has): 21.29; Exposed Population: 2,126; Exposure Percentage: 0.5417; Percentage of Informal Settlers: 24.61%; % Population living in dwelling units from light to salvageable materials: 12.51%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Lasang	Residential Area: 53.31; Barangay Population: 10,223; Population Density: 192; Affected Area (Has): 20.65; Exposed Population: 3,960; Exposure Percentage: 0.3874; Percentage of Informal Settlers: 9.33%; % Population living in dwelling units from light to salvageable materials: 14.60%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Bunawan	Residential Area: 128.46; Barangay Population: 23,495; Population Density: 183; Affected Area (Has): 35.10; Exposed Population: 6,420; Exposure Percentage: 0.2732; Percentage of Informal Settlers: 0.45%; % Population living in dwelling units from light to salvageable materials: 10.75%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council

Table PO – 26F. Climate Change Vulnerability Assessment Summary Matrix for Population, Flood

Decision Areas	Technical Findings	Implications	Policy Interventions
Panacan	Residential Area: 274.98; Barangay Population: 35,806; Population Density: 130; Affected Area (Has): 31.89; Exposed Population: 4,153; Exposure Percentage: 0.201; Percentage of Informal Settlers: 4.92%; % Population living in dwelling units from light to salvageable materials: 6.28%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Dalagdag	Residential Area: 2.76; Barangay Population: 934; Population Density: 338; Affected Area (Has): 1.18; Exposed Population: 401; Exposure Percentage: 0.429; Percentage of Informal Settlers: 2.78%; % Population living in dwelling units from light to salvageable materials: 20.99%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Dominga	Residential Area: 1.77; Barangay Population: 1,607; Population Density: 909; Affected Area (Has): 1.73; Exposed Population: 1,575; Exposure Percentage: 0.9799; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 16.55%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Lacson	Residential Area: 5.22; Barangay Population: 5,873; Population Density: 1,125; Affected Area (Has): 1.30; Exposed Population: 1,466; Exposure Percentage: 0.2497; Percentage of Informal Settlers: 0.58%; % Population living in dwelling units from light to salvageable materials: 10.52%; Degree of Impact: 2; Adaptive Capacity Score: 2; Vulnerability Index: 4; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council

Table PO – 26G. Climate Change Vulnerability Assessment Summary Matrix for Population, Flood

Decision Areas	Technical Findings	Implications	Policy Interventions
Pangyan	Residential Area: 5.65; Barangay Population: 2,035; Population Density: 360; Affected Area (Has): 1.99; Exposed Population: 717; Exposure Percentage: 0.3522; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 9.24%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Sirib	Residential Area: 7.86; Barangay Population: 5,199; Population Density: 662; Affected Area (Has): 1.96; Exposed Population: 1,297; Exposure Percentage: 0.2494; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 15.87%; Degree of Impact: 2; Adaptive Capacity Score: 2; Vulnerability Index: 4; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Subasta	Residential Area: 10.24; Barangay Population: 3,641; Population Density: 356; Affected Area (Has): 6.61; Exposed Population: 2,350; Exposure Percentage: 0.6454; Percentage of Informal Settlers: 0.66%; % Population living in dwelling units from light to salvageable materials: 21.15%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Talomo River	Residential Area: 20.66; Barangay Population: 6,846; Population Density: 331; Affected Area (Has): 19.81; Exposed Population: 6,564; Exposure Percentage: 0.9587; Percentage of Informal Settlers: 0.72%; % Population living in dwelling units from light to salvageable materials: 5.24%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council

Table PO – 26H. Climate Change Vulnerability Assessment Summary Matrix for Population, Flood

Decision Areas	Technical Findings	Implications	Policy Interventions
Wangan	Residential Area: 3.45; Barangay Population: 5,821; Population Density: 1,686; Affected Area (Has): 1.34; Exposed Population: 2,254; Exposure Percentage: 0.3872; Percentage of Informal Settlers: 0.12%; % Population living in dwelling units from light to salvageable materials: 14.82%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Tamugan	Residential Area: 10.47; Barangay Population: 8,351; Population Density: 797; Affected Area (Has): 8.77; Exposed Population: 6,993; Exposure Percentage: 0.8374; Percentage of Informal Settlers: 0.02%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Sumimao	Residential Area: 1.84; Barangay Population: 1,666; Population Density: 907; Affected Area (Has): 0.66; Exposed Population: 599; Exposure Percentage: 0.3596; Percentage of Informal Settlers: 3.06%; % Population living in dwelling units from light to salvageable materials: 21.19%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Bucana	Residential Area: 237.30; Barangay Population: 83,964; Population Density: 354; Affected Area (Has): 86.42; Exposed Population: 30,577; Exposure Percentage: 0.3642; Percentage of Informal Settlers: 9.05%; % Population living in dwelling units from light to salvageable materials: 14.46%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council

Table PO – 26I. Climate Change Vulnerability Assessment Summary Matrix for Population, Flood

Decision Areas	Technical Findings	Implications	Policy Interventions
Matina Aplaya	Residential Area: 166.75; Barangay Population: 33,384; Population Density: 200; Affected Area (Has): 72.79; Exposed Population: 14,572; Exposure Percentage: 0.4365; Percentage of Informal Settlers: 7.58%; % Population living in dwelling units from light to salvageable materials: 8.37%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Matina Crossing	Residential Area: 261.39; Barangay Population: 32,436; Population Density: 124; Affected Area (Has): 66.49; Exposed Population: 8,250; Exposure Percentage: 0.2544; Percentage of Informal Settlers: 6.17%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Matina Pangi	Residential Area: 162.30; Barangay Population: 18,081; Population Density: 111; Affected Area (Has): 51.00; Exposed Population: 5,682; Exposure Percentage: 0.3143; Percentage of Informal Settlers: 3.03%; % Population living in dwelling units from light to salvageable materials: 9.49%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Talomo Proper	Residential Area: 311.47; Barangay Population: 59,678; Population Density: 192; Affected Area (Has): 226.76; Exposed Population: 43,447; Exposure Percentage: 0.728; Percentage of Informal Settlers: 7.09%; % Population living in dwelling units from light to salvageable materials: 38.16%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council

Table PO – 26J. Climate Change Vulnerability Assessment Summary Matrix for Population, Flood

Decision Areas	Technical Findings	Implications	Policy Interventions
Bankas Heights	Residential Area: 32.04; Barangay Population: 7,671; Population Density: 239; Affected Area (Has): 18.61; Exposed Population: 4,457; Exposure Percentage: 0.581; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Binugao	Residential Area: 54.54; Barangay Population: 6,934; Population Density: 127; Affected Area (Has): 26.77; Exposed Population: 3,404; Exposure Percentage: 0.4909; Percentage of Informal Settlers: 0.06%; % Population living in dwelling units from light to salvageable materials: 11.93%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Sirawan	Residential Area: 88.24; Barangay Population: 7,140; Population Density: 81; Affected Area (Has): 22.25; Exposed Population: 1,800; Exposure Percentage: 0.2521; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 9.87%; Degree of Impact: 2; Adaptive Capacity Score: 2; Vulnerability Index: 4; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Balangaeng	Residential Area: 2.33; Barangay Population: 2,086; Population Density: 896; Affected Area (Has): 2.27; Exposed Population: 2,038; Exposure Percentage: 0.9769; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 8.82%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council

Table PO – 26K. Climate Change Vulnerability Assessment Summary Matrix for Population, Flood

Decision Areas	Technical Findings	Implications	Policy Interventions
Biao Guianga	Residential Area: 3.94; Barangay Population: 3,664; Population Density: 929; Affected Area (Has): 1.69; Exposed Population: 1,570; Exposure Percentage: 0.4285; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 3.03%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Manambulan	Residential Area: 10.04; Barangay Population: 2,661; Population Density: 265; Affected Area (Has): 9.10; Exposed Population: 2,409; Exposure Percentage: 0.9055; Percentage of Informal Settlers: 0.04%; % Population living in dwelling units from light to salvageable materials: 8.08%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> • Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) • Relocate informal settlers living near waterways • Continuously pursue national greening program • Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) • Install early warning device (e.g., river/coastal cameras) • Empower barangay disaster council
Matina Biao	Residential Area: 2.78; Barangay Population: 1,811; Population Density: 652; Affected Area (Has): 1.80; Exposed Population: 1,171; Exposure Percentage: 0.6468; Percentage of Informal Settlers: 1.82%; % Population living in dwelling units from light to salvageable materials: 3.87%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities (e.g., informal settlers) • Loss of lives • Damage to properties • Loss of income • Disease outbreak (e.g., dengue, leptospirosis) • Difficult to vacate/evacuate during night time 	<p>Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act)</p> <p>Relocate informal settlers living near waterways</p> <p>Continuously pursue national greening program</p> <p>Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms)</p> <p>Install early warning device (e.g., river/coastal cameras)</p> <p>Empower barangay disaster council</p>

Table PO – 26L. Climate Change Vulnerability Assessment Summary Matrix for Population, Flood

Decision Areas	Technical Findings	Implications	Policy Interventions
New Carmen	Residential Area: 16.15; Barangay Population: 2,626; Population Density: 163; Affected Area (Has): 13.17; Exposed Population: 2,142; Exposure Percentage: 0.8157; Percentage of Informal Settlers: 4.34%; % Population living in dwelling units from light to salvageable materials: 15.35%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> ● Displacement of communities (e.g., informal settlers) ● Loss of lives ● Damage to properties ● Loss of income ● Disease outbreak (e.g., dengue, leptospirosis) ● Difficult to vacate/evacuate during night time 	<p>Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act)</p> <p>Relocate informal settlers living near waterways</p> <p>Continuously pursue national greening program</p> <p>Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms)</p> <p>Install early warning device (e.g., river/coastal cameras)</p> <p>Empower barangay disaster council</p>
New Valencia	Residential Area: 5.41; Barangay Population: 1,679; Population Density: 311; Affected Area (Has): 2.24; Exposed Population: 696; Exposure Percentage: 0.4148; Percentage of Informal Settlers: 0.12%; % Population living in dwelling units from light to salvageable materials: 16.26%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> ● Displacement of communities (e.g., informal settlers) ● Loss of lives ● Damage to properties ● Loss of income ● Disease outbreak (e.g., dengue, leptospirosis) ● Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> ● Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) ● Relocate informal settlers living near waterways ● Continuously pursue national greening program ● Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) ● Install early warning device (e.g., river/coastal cameras) ● Empower barangay disaster council
Tagakpan	Residential Area: 10.85; Barangay Population: 4,208; Population Density: 388; Affected Area (Has): 6.82; Exposed Population: 2,645; Exposure Percentage: 0.6286; Percentage of Informal Settlers: 0.19%; % Population living in dwelling units from light to salvageable materials: 12.69%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> ● Displacement of communities (e.g., informal settlers) ● Loss of lives ● Damage to properties ● Loss of income ● Disease outbreak (e.g., dengue, leptospirosis) ● Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> ● Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) ● Relocate informal settlers living near waterways ● Continuously pursue national greening program ● Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) ● Install early warning device (e.g., river/coastal cameras) ● Empower barangay disaster council
Talandang	Residential Area: 8.31; Barangay Population: 3,392; Population Density: 408; Affected Area (Has): 3.19; Exposed Population: 1,303; Exposure Percentage: 0.3842; Percentage of Informal Settlers: 0.06%; % Population living in dwelling units from light to salvageable materials: 15.45%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> ● Displacement of communities (e.g., informal settlers) ● Loss of lives ● Damage to properties ● Loss of income ● Disease outbreak (e.g., dengue, leptospirosis) ● Difficult to vacate/evacuate during night time 	<ul style="list-style-type: none"> ● Strictly implement no habitation policy along waterways (Republic Act No. 7279 or Urban Development Housing Act) ● Relocate informal settlers living near waterways ● Continuously pursue national greening program ● Build evacuation center equip with different facilities (e.g., comfort rooms, conjugal rooms) ● Install early warning device (e.g., river/coastal cameras) ● Empower barangay disaster council

Table PO – 27A. Climate Change Vulnerability Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Carmen	Residential Area: 1.52; Barangay Population: 2,156; Population Density: 1,419.19; Affected Area (Has): 1.26; Exposed Population: 1,791; Exposure Percentage: 83%; Percentage of Informal Settlers: 23.42%; % Population living in dwelling units from light to salvageable materials: 19.02%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Tambobong	Residential Area: 4.85; Barangay Population: 5,993; Population Density: 1,234.41; Affected Area (Has): 4.49; Exposed Population: 5,546; Exposure Percentage: 93%; Percentage of Informal Settlers: 22.41%; % Population living in dwelling units from light to salvageable materials: 18.42%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Acacia	Residential Area: 15.40; Barangay Population: 3,262; Population Density: 211.77; Affected Area (Has): 15.15; Exposed Population: 3,208; Exposure Percentage: 98%; Percentage of Informal Settlers: 29.80%; % Population living in dwelling units from light to salvageable materials: 11.56%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Cabantian	Residential Area: 332.16; Barangay Population: 43,758; Population Density: 131.74; Affected Area (Has): 83.13; Exposed Population: 10,951; Exposure Percentage: 25%; Percentage of Informal Settlers: 19.33%; % Population living in dwelling units from light to salvageable materials: 2.13%; Degree of Impact: 2; Adaptive Capacity Score: 3; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas

Table PO – 27B. Climate Change Vulnerability Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Communal	Residential Area: 171.91; Barangay Population: 16,740; Population Density: 97.38; Affected Area (Has): 67.72; Exposed Population: 6,594; Exposure Percentage: 39%; Percentage of Informal Settlers: 5.30%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption • 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Indangan	Residential Area: 258.09; Barangay Population: 14,867; Population Density: 57.60; Affected Area (Has): 93.10; Exposed Population: 5,363; Exposure Percentage: 36%; Percentage of Informal Settlers: 0.06%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption • 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Gatungan	Residential Area: 2.22; Barangay Population: 1,190; Population Density: 535.81; Affected Area (Has): 1.70; Exposed Population: 913; Exposure Percentage: 77%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 10.84%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides •
Mudiang	Residential Area: 71.06; Barangay Population: 2,937; Population Density: 41.33; Affected Area (Has): 38.15; Exposed Population: 1,577; Exposure Percentage: 54%; Percentage of Informal Settlers: 0.03%; % Population living in dwelling units from light to salvageable materials: 7.08%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas

Table PO – 27C. Climate Change Vulnerability Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Panacan	Residential Area: 274.98; Barangay Population: 35,806; Population Density: 130.22; Affected Area (Has): 67.73; Exposed Population: 8,820; Exposure Percentage: 25%; Percentage of Informal Settlers: 4.92%; % Population living in dwelling units from light to salvageable materials: 6.28%; Degree of Impact: 2; Adaptive Capacity Score: 3; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Biao Joaquin	Residential Area: 3.25; Barangay Population: 2,289; Population Density: 704.29; Affected Area (Has): 0.82; Exposed Population: 579; Exposure Percentage: 25%; Percentage of Informal Settlers: 0.70%; % Population living in dwelling units from light to salvageable materials: 10.31%; Degree of Impact: 2; Adaptive Capacity Score: 3; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Dalagdag	Residential Area: 2.76; Barangay Population: 934; Population Density: 338.32; Affected Area (Has): 1.14; Exposed Population: 386; Exposure Percentage: 41%; Percentage of Informal Settlers: 2.78%; % Population living in dwelling units from light to salvageable materials: 20.99%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Inayangan	Residential Area: 3.33; Barangay Population: 4,832; Population Density: 1,449.75; Affected Area (Has): 1.89; Exposed Population: 2,746; Exposure Percentage: 57%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 17.40%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides

Table PO – 27D. Climate Change Vulnerability Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Lamanan	Residential Area: 4.70; Barangay Population: 4,538; Population Density: 966.12; Affected Area (Has): 4.47; Exposed Population: 4,319; Exposure Percentage: 95%; Percentage of Informal Settlers: 3.75%; % Population living in dwelling units from light to salvageable materials: 14.43%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Lampianao	Residential Area: 2.41; Barangay Population: 845; Population Density: 350.01; Affected Area (Has): 1.85; Exposed Population: 647; Exposure Percentage: 77%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 13.25%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides
Megkawayan	Residential Area: 5.99; Barangay Population: 3,015; Population Density: 503.12; Affected Area (Has): 5.52; Exposed Population: 2,776; Exposure Percentage: 92%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 16.85%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption • 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides •
Pangyan	Residential Area: 5.65; Barangay Population: 2,035; Population Density: 360.38; Affected Area (Has): 1.33; Exposed Population: 478; Exposure Percentage: 23%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 9.24%; Degree of Impact: 2; Adaptive Capacity Score: 3; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides

Table PO – 27E. Climate Change Vulnerability Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Saloy	Residential Area: 2.03; Barangay Population: 2,112; Population Density: 1,039.57; Affected Area (Has): 1.78; Exposed Population: 1,848; Exposure Percentage: 87%; Percentage of Informal Settlers: 16.07%; % Population living in dwelling units from light to salvageable materials: 18.56%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Tamayong	Residential Area: 4.85; Barangay Population: 7,273; Population Density: 1,498.10; Affected Area (Has): 2.67; Exposed Population: 4,001; Exposure Percentage: 55%; Percentage of Informal Settlers: 2.45%; % Population living in dwelling units from light to salvageable materials: 14.82%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption • 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Bantol	Residential Area: 2.73; Barangay Population: 2,324; Population Density: 852.01; Affected Area (Has): 2.61; Exposed Population: 2,226; Exposure Percentage: 96%; Percentage of Informal Settlers: 0.04%; % Population living in dwelling units from light to salvageable materials: 18.93%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Dalag Lumot	Residential Area: 10.73; Barangay Population: 1,864; Population Density: 173.68; Affected Area (Has): 9.86; Exposed Population: 1,713; Exposure Percentage: 92%; Percentage of Informal Settlers: 0.32%; % Population living in dwelling units from light to salvageable materials: 17.06%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas

Table PO – 27F. Climate Change Vulnerability Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Datu Salumay	Residential Area: 21.74; Barangay Population: 2,232; Population Density: 102.67; Affected Area (Has): 4.94; Exposed Population: 507; Exposure Percentage: 23%; Percentage of Informal Settlers: 1.43%; % Population living in dwelling units from light to salvageable materials: 13.44%; Degree of Impact: 2; Adaptive Capacity Score: 3; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Gumitan	Residential Area: 8.53; Barangay Population: 1,756; Population Density: 205.98; Affected Area (Has): 6.63; Exposed Population: 1,366; Exposure Percentage: 78%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides
Magsaysay	Residential Area: 9.53; Barangay Population: 2,425; Population Density: 254.40; Affected Area (Has): 8.68; Exposed Population: 2,209; Exposure Percentage: 91%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 19.84%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption • 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides
Malamba	Residential Area: 13.27; Barangay Population: 4,864; Population Density: 366.62; Affected Area (Has): 10.09; Exposed Population: 3,700; Exposure Percentage: 76%; Percentage of Informal Settlers: 1.05%; % Population living in dwelling units from light to salvageable materials: 10.90%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas

Table PO – 27G. Climate Change Vulnerability Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Marilog Proper	Residential Area: 95.55; Barangay Population: 16,188; Population Density: 169.42; Affected Area (Has): 91.12; Exposed Population: 15,438; Exposure Percentage: 95%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides
Salaysay	Residential Area: 10.44; Barangay Population: 4,431; Population Density: 424.37; Affected Area (Has): 10.06; Exposed Population: 4,270; Exposure Percentage: 96%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides
Suawan	Residential Area: 7.71; Barangay Population: 4,586; Population Density: 594.94; Affected Area (Has): 7.31; Exposed Population: 4,351; Exposure Percentage: 95%; Percentage of Informal Settlers: 2.73%; % Population living in dwelling units from light to salvageable materials: 20.15%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Colosas	Residential Area: 9.80; Barangay Population: 4,731; Population Density: 482.82; Affected Area (Has): 9.65; Exposed Population: 4,658; Exposure Percentage: 98%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 20.42%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides

Table PO – 27H. Climate Change Vulnerability Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Fatima	Residential Area: 10.80; Barangay Population: 3,502; Population Density: 324.18; Affected Area (Has): 7.61; Exposed Population: 2,467; Exposure Percentage: 70%; Percentage of Informal Settlers: 3.51%; % Population living in dwelling units from light to salvageable materials: 23.99%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Lumiad	Residential Area: 9.12; Barangay Population: 1,553; Population Density: 170.29; Affected Area (Has): 8.62; Exposed Population: 1,468; Exposure Percentage: 95%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 20.35%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides •
Malabog	Residential Area: 19.18; Barangay Population: 10,816; Population Density: 564.03; Affected Area (Has): 18.22; Exposed Population: 10,276; Exposure Percentage: 95%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides •
Mapula	Residential Area: 15.55; Barangay Population: 2,876; Population Density: 184.93; Affected Area (Has): 14.69; Exposed Population: 2,717; Exposure Percentage: 94%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides

Table PO – 271. Climate Change Vulnerability Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Pandaitan	Residential Area: 9.86; Barangay Population: 4,037; Population Density: 409.26; Affected Area (Has): 9.34; Exposed Population: 3,823; Exposure Percentage: 95%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 13.57%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides
Pañalum	Residential Area: 2.12; Barangay Population: 1,831; Population Density: 864.98; Affected Area (Has): 2.08; Exposed Population: 1,796; Exposure Percentage: 98%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides
Paquibato Proper	Residential Area: 13.38; Barangay Population: 2,495; Population Density: 186.53; Affected Area (Has): 12.54; Exposed Population: 2,339; Exposure Percentage: 94%; Percentage of Informal Settlers: 2.69%; % Population living in dwelling units from light to salvageable materials: 18.16%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Paradise Embac	Residential Area: 2.07; Barangay Population: 2,654; Population Density: 1,285.20; Affected Area (Has): 1.90; Exposed Population: 2,445; Exposure Percentage: 92%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 18.09%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides

Table PO – 27J. Climate Change Vulnerability Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Salapawan	Residential Area: 3.26; Barangay Population: 2,282; Population Density: 700.67; Affected Area (Has): 3.03; Exposed Population: 2,124; Exposure Percentage: 93%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption • 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides •
Sumimao	Residential Area: 1.84; Barangay Population: 1,666; Population Density: 906.88; Affected Area (Has): 1.78; Exposed Population: 1,612; Exposure Percentage: 97%; Percentage of Informal Settlers: 3.06%; % Population living in dwelling units from light to salvageable materials: 21.19%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption • 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Tapak	Residential Area: 18.76; Barangay Population: 5,258; Population Density: 280.26; Affected Area (Has): 18.46; Exposed Population: 5,172; Exposure Percentage: 98%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 20.88%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption • 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides •
Langub	Residential Area: 14.46; Barangay Population: 2,883; Population Density: 199.42; Affected Area (Has): 13.48; Exposed Population: 2,688; Exposure Percentage: 93%; Percentage of Informal Settlers: 0.21%; % Population living in dwelling units from light to salvageable materials: 11.48%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption • 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas

Table PO – 27K. Climate Change Vulnerability Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Ma-a	Residential Area: 452.85; Barangay Population: 59,803; Population Density: 132.06; Affected Area (Has): 101.76; Exposed Population: 13,438; Exposure Percentage: 22%; Percentage of Informal Settlers: 5.01%; % Population living in dwelling units from light to salvageable materials: 6.25%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption • 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Magtuod	Residential Area: 56.05; Barangay Population: 5,058; Population Density: 90.24; Affected Area (Has): 46.37; Exposed Population: 4,184; Exposure Percentage: 83%; Percentage of Informal Settlers: 5.24%; % Population living in dwelling units from light to salvageable materials: 10.28%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption • 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Matina Crossing	Residential Area: 261.39; Barangay Population: 32,436; Population Density: 124.09; Affected Area (Has): 29.25; Exposed Population: 3,629; Exposure Percentage: 11%; Percentage of Informal Settlers: 6.17%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption • 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Matina Pangi	Residential Area: 162.30; Barangay Population: 18,081; Population Density: 111.41; Affected Area (Has): 64.73; Exposed Population: 7,211; Exposure Percentage: 40%; Percentage of Informal Settlers: 3.03%; % Population living in dwelling units from light to salvageable materials: 9.49%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption • 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas

Table PO – 27L. Climate Change Vulnerability Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Atan-Awe	Residential Area: 0.91; Barangay Population: 1,119; Population Density: 1,228.39; Affected Area (Has): 0.89; Exposed Population: 1,092; Exposure Percentage: 98%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 20.82%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides •
Baracatan	Residential Area: 4.31; Barangay Population: 2,895; Population Density: 671.19; Affected Area (Has): 1.55; Exposed Population: 1,039; Exposure Percentage: 36%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 17.55%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides •
Bayabas	Residential Area: 3.35; Barangay Population: 2,989; Population Density: 893.06; Affected Area (Has): 2.05; Exposed Population: 1,835; Exposure Percentage: 61%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 13.72%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides •
Binugao	Residential Area: 54.54; Barangay Population: 6,934; Population Density: 127.14; Affected Area (Has): 24.70; Exposed Population: 3,140; Exposure Percentage: 45%; Percentage of Informal Settlers: 0.23%; % Population living in dwelling units from light to salvageable materials: 11.93%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas

Table PO – 27M. Climate Change Vulnerability Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Camansi	Residential Area: 2.46; Barangay Population: 1,189; Population Density: 483.17; Affected Area (Has): 1.73; Exposed Population: 835; Exposure Percentage: 70%; Percentage of Informal Settlers: 0.06%; % Population living in dwelling units from light to salvageable materials: 10.01%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Catigan	Residential Area: 6.36; Barangay Population: 3,044; Population Density: 478.56; Affected Area (Has): 2.21; Exposed Population: 1,059; Exposure Percentage: 35%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 19.45%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides •
Daliaon Plantation	Residential Area: 5.75; Barangay Population: 3,214; Population Density: 559.38; Affected Area (Has): 2.17; Exposed Population: 1,212; Exposure Percentage: 38%; Percentage of Informal Settlers: 12.41%; % Population living in dwelling units from light to salvageable materials: 22.96%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas
Eden	Residential Area: 53.21; Barangay Population: 2,385; Population Density: 44.82; Affected Area (Has): 51.48; Exposed Population: 2,308; Exposure Percentage: 97%; Percentage of Informal Settlers: 0.25%; % Population living in dwelling units from light to salvageable materials: 14.93%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas

Table PO – 27N. Climate Change Vulnerability Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Sibulan	Residential Area: 2.31; Barangay Population: 2,479; Population Density: 1,071.67; Affected Area (Has): 2.14; Exposed Population: 2,289; Exposure Percentage: 92%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides •
Tagurano	Residential Area: 1.70; Barangay Population: 1,230; Population Density: 722.17; Affected Area (Has): 0.60; Exposed Population: 434; Exposure Percentage: 35%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 16.83%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides
Tibuloy	Residential Area: 3.79; Barangay Population: 2,218; Population Density: 584.71; Affected Area (Has): 3.57; Exposed Population: 2,086; Exposure Percentage: 94%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 16.14%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides
Tungkalan	Residential Area: 4.24; Barangay Population: 2,910; Population Density: 685.98; Affected Area (Has): 1.09; Exposed Population: 746; Exposure Percentage: 26%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 2; Adaptive Capacity Score: 3; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides

Table PO – 270. Climate Change Vulnerability Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Matina Biao	Residential Area: 2.78; Barangay Population: 1,811; Population Density: 652.38; Affected Area (Has): 0.90970475440405; Exposed Population: 593; Exposure Percentage: 33%; Percentage of Informal Settlers: 1.82%; % Population living in dwelling units from light to salvageable materials: 3.87%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Possible loss of lives and damage to properties (e.g., housing units) • Economic disruption 	<ul style="list-style-type: none"> • Prohibit planting of cash crops and corn in high sloping areas. Only forest trees shall be planted in elevated areas • Pursue proper mitigating measures to prevent landslides • Relocate informal settlers living in landslide prone areas

Table PO – 28A. Climate Change Vulnerability Assessment Summary Matrix for Population, Liquefaction

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 1-A	Residential Area: 7.19; Barangay Population: 3,103; Population Density: 431.64; Affected Area (Has): 6.69; Exposed Population: 2,887; Exposure Percentage: 93%; Percentage of Informal Settlers: 11.44%; % Population living in dwelling units from light to salvageable materials: 11.18%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 2-A	Residential Area: 1.65; Barangay Population: 3,589; Population Density: 2,170.81; Affected Area (Has): 1.61; Exposed Population: 3,494; Exposure Percentage: 97%; Percentage of Informal Settlers: 11.90%; % Population living in dwelling units from light to salvageable materials: 10.00%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 3-A	Residential Area: 0.55; Barangay Population: 370; Population Density: 671.38; Affected Area (Has): 0.55; Exposed Population: 370; Exposure Percentage: 100%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 4-A	Residential Area: 2.93; Barangay Population: 1,683; Population Density: 573.66; Affected Area (Has): 2.93; Exposed Population: 1,683; Exposure Percentage: 100%; Percentage of Informal Settlers: 20.38%; % Population living in dwelling units from light to salvageable materials: 14.56%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction

Table PO – 28B. Climate Change Vulnerability Assessment Summary Matrix for Population, Liquefaction

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 5-A	Residential Area: 21.80; Barangay Population: 11,436; Population Density: 524.70; Affected Area (Has): 13.27; Exposed Population: 6,964; Exposure Percentage: 61%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 11.92%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 6-A	Residential Area: 4.39; Barangay Population: 2,084; Population Density: 474.62; Affected Area (Has): 0.93; Exposed Population: 441; Exposure Percentage: 21%; Percentage of Informal Settlers: 16.27%; % Population living in dwelling units from light to salvageable materials: 16.70%; Degree of Impact: 2; Adaptive Capacity Score: 2; Vulnerability Index: 4; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 8-A	Residential Area: 86.07; Barangay Population: 11,075; Population Density: 128.68; Affected Area (Has): 34.14; Exposed Population: 4,393; Exposure Percentage: 40%; Percentage of Informal Settlers: 4.41%; % Population living in dwelling units from light to salvageable materials: 5.64%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 19-B	Residential Area: 190.47; Barangay Population: 31,766; Population Density: 166.78; Affected Area (Has): 31.90; Exposed Population: 5,319; Exposure Percentage: 17%; Percentage of Informal Settlers: 2.06%; % Population living in dwelling units from light to salvageable materials: 3.56%; Degree of Impact: 2; Adaptive Capacity Score: 2; Vulnerability Index: 4; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction

Table PO – 28C. Climate Change Vulnerability Assessment Summary Matrix for Population, Liquefaction

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 5-A	Residential Area: 21.80; Barangay Population: 11,436; Population Density: 524.70; Affected Area (Has): 13.27; Exposed Population: 6,964; Exposure Percentage: 61%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 11.92%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 6-A	Residential Area: 4.39; Barangay Population: 2,084; Population Density: 474.62; Affected Area (Has): 0.93; Exposed Population: 441; Exposure Percentage: 21%; Percentage of Informal Settlers: 16.27%; % Population living in dwelling units from light to salvageable materials: 16.70%; Degree of Impact: 2; Adaptive Capacity Score: 2; Vulnerability Index: 4; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 8-A	Residential Area: 86.07; Barangay Population: 11,075; Population Density: 128.68; Affected Area (Has): 34.14; Exposed Population: 4,393; Exposure Percentage: 40%; Percentage of Informal Settlers: 4.41%; % Population living in dwelling units from light to salvageable materials: 5.64%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 19-B	Residential Area: 190.47; Barangay Population: 31,766; Population Density: 166.78; Affected Area (Has): 31.90; Exposed Population: 5,319; Exposure Percentage: 17%; Percentage of Informal Settlers: 2.06%; % Population living in dwelling units from light to salvageable materials: 3.56%; Degree of Impact: 2; Adaptive Capacity Score: 2; Vulnerability Index: 4; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction

Table PO – 28D. Climate Change Vulnerability Assessment Summary Matrix for Population, Liquefaction

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 20-B	Residential Area: 14.69; Barangay Population: 4,581; Population Density: 311.90; Affected Area (Has): 13.62; Exposed Population: 4,249; Exposure Percentage: 93%; Percentage of Informal Settlers: 0.59%; % Population living in dwelling units from light to salvageable materials: 4.26%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 21-C	Residential Area: 7.15; Barangay Population: 7,478; Population Density: 1,046.30; Affected Area (Has): 5.16; Exposed Population: 5,397; Exposure Percentage: 72%; Percentage of Informal Settlers: 6.33%; % Population living in dwelling units from light to salvageable materials: 9.08%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 22-C	Residential Area: 6.65; Barangay Population: 6,634; Population Density: 998.29; Affected Area (Has): 4.76; Exposed Population: 4,749; Exposure Percentage: 72%; Percentage of Informal Settlers: 1.37%; % Population living in dwelling units from light to salvageable materials: 8.83%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 23-C	Residential Area: 14.60; Barangay Population: 16,489; Population Density: 1,129.15; Affected Area (Has): 12.74; Exposed Population: 14,385; Exposure Percentage: 87%; Percentage of Informal Settlers: 17.28%; % Population living in dwelling units from light to salvageable materials: 13.42%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction

Table PO – 28E. Climate Change Vulnerability Assessment Summary Matrix for Population, Liquefaction

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 24-C	Residential Area: 2.52; Barangay Population: 2,602; Population Density: 1,034.44; Affected Area (Has): 2.51; Exposed Population: 2,601; Exposure Percentage: 100%; Percentage of Informal Settlers: 2.15%; % Population living in dwelling units from light to salvageable materials: 3.88%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 25-C	Residential Area: 1.73; Barangay Population: 1,967; Population Density: 1,137.04; Affected Area (Has): 1.73; Exposed Population: 1,966; Exposure Percentage: 100%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 6.61%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 31-D	Residential Area: 17.40; Barangay Population: 8,321; Population Density: 478.08; Affected Area (Has): 13.55; Exposed Population: 6,476; Exposure Percentage: 78%; Percentage of Informal Settlers: 5.70%; % Population living in dwelling units from light to salvageable materials: 4.98%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 32-D	Residential Area: 2.77; Barangay Population: 1,985; Population Density: 717.19; Affected Area (Has): 2.75; Exposed Population: 1,972; Exposure Percentage: 99%; Percentage of Informal Settlers: 4.23%; % Population living in dwelling units from light to salvageable materials: 3.88%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction

Table PO – 28F. Climate Change Vulnerability Assessment Summary Matrix for Population, Liquefaction

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 33-D	Residential Area: 3.86; Barangay Population: 2,033; Population Density: 526.19; Affected Area (Has): 3.86; Exposed Population: 2,032; Exposure Percentage: 100%; Percentage of Informal Settlers: 2.80%; % Population living in dwelling units from light to salvageable materials: 9.05%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 34-D	Residential Area: 2.48; Barangay Population: 1,682; Population Density: 677.94; Affected Area (Has): 2.48; Exposed Population: 1,682; Exposure Percentage: 100%; Percentage of Informal Settlers: 22.41%; % Population living in dwelling units from light to salvageable materials: 0.89%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 35-D	Residential Area: 0.35; Barangay Population: 578; Population Density: 1,666.45; Affected Area (Has): 0.35; Exposed Population: 578; Exposure Percentage: 100%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 18.69%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 36-D	Residential Area: 2.39; Barangay Population: 1,581; Population Density: 661.51; Affected Area (Has): 2.39; Exposed Population: 1,581; Exposure Percentage: 100%; Percentage of Informal Settlers: 2.53%; % Population living in dwelling units from light to salvageable materials: 4.68%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction

Table PO – 28G. Climate Change Vulnerability Assessment Summary Matrix for Population, Liquefaction

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 37-D	Residential Area: 4.59; Barangay Population: 6,740; Population Density: 1,469.41; Affected Area (Has): 3.54; Exposed Population: 5,208; Exposure Percentage: 77%; Percentage of Informal Settlers: 2.55%; % Population living in dwelling units from light to salvageable materials: 7.82%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 38-D	Residential Area: 1.84; Barangay Population: 1,505; Population Density: 816.67; Affected Area (Has): 1.73; Exposed Population: 1,410; Exposure Percentage: 94%; Percentage of Informal Settlers: 19.00%; % Population living in dwelling units from light to salvageable materials: 15.48%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 39-D	Residential Area: 3.62; Barangay Population: 5,143; Population Density: 1,419.48; Affected Area (Has): 2.92; Exposed Population: 4,145; Exposure Percentage: 81%; Percentage of Informal Settlers: 6.79%; % Population living in dwelling units from light to salvageable materials: 3.25%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Brgy. 40-D	Residential Area: 1.38; Barangay Population: 2,437; Population Density: 1,763.80; Affected Area (Has): 1.34; Exposed Population: 2,363; Exposure Percentage: 97%; Percentage of Informal Settlers: 11.98%; % Population living in dwelling units from light to salvageable materials: 11.78%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction

Table PO – 28H. Climate Change Vulnerability Assessment Summary Matrix for Population, Liquefaction

Decision Areas	Technical Findings	Implications	Policy Interventions
Agdao Proper	Residential Area: 7.86; Barangay Population: 8,897; Population Density: 1,132.13; Affected Area (Has): 7.62; Exposed Population: 8,625; Exposure Percentage: 97%; Percentage of Informal Settlers: 21.30%; % Population living in dwelling units from light to salvageable materials: 19.13%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Centro	Residential Area: 24.77; Barangay Population: 13,652; Population Density: 551.21; Affected Area (Has): 22.37; Exposed Population: 12,331; Exposure Percentage: 90%; Percentage of Informal Settlers: 1.05%; % Population living in dwelling units from light to salvageable materials: 7.27%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Gov. Paciano Bangoy	Residential Area: 22.55; Barangay Population: 8,904; Population Density: 394.89; Affected Area (Has): 17.47; Exposed Population: 6,900; Exposure Percentage: 77%; Percentage of Informal Settlers: 5.35%; % Population living in dwelling units from light to salvageable materials: 8.77%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Gov. Vicente Duterte	Residential Area: 21.81; Barangay Population: 8,816; Population Density: 404.24; Affected Area (Has): 20.02; Exposed Population: 8,091; Exposure Percentage: 92%; Percentage of Informal Settlers: 16.16%; % Population living in dwelling units from light to salvageable materials: 11.74%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction

Table PO – 28I. Climate Change Vulnerability Assessment Summary Matrix for Population, Liquefaction

Decision Areas	Technical Findings	Implications	Policy Interventions
Tomas Monteverde	Residential Area: 2.36; Barangay Population: 5,716; Population Density: 2,427.02; Affected Area (Has): 2.09; Exposed Population: 5,081; Exposure Percentage: 89%; Percentage of Informal Settlers: 13.59%; % Population living in dwelling units from light to salvageable materials: 10.29%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Lapu-Lapu	Residential Area: 25.12; Barangay Population: 10,306; Population Density: 410.22; Affected Area (Has): 23.68; Exposed Population: 9,713; Exposure Percentage: 94%; Percentage of Informal Settlers: 8.06%; % Population living in dwelling units from light to salvageable materials: 3.83%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Leon Garcia Sr.	Residential Area: 12.47; Barangay Population: 5,783; Population Density: 463.86; Affected Area (Has): 12.04; Exposed Population: 5,586; Exposure Percentage: 97%; Percentage of Informal Settlers: 0.64%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Rafael Castillo	Residential Area: 13.18; Barangay Population: 11,738; Population Density: 890.76; Affected Area (Has): 11.86; Exposed Population: 10,567; Exposure Percentage: 90%; Percentage of Informal Settlers: 2.26%; % Population living in dwelling units from light to salvageable materials: 5.20%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction

Table PO – 28J. Climate Change Vulnerability Assessment Summary Matrix for Population, Liquefaction

Decision Areas	Technical Findings	Implications	Policy Interventions
Ubalde	Residential Area: 6.37; Barangay Population: 9,903; Population Density: 1,553.58; Affected Area (Has): 5.94; Exposed Population: 9,226; Exposure Percentage: 93%; Percentage of Informal Settlers: 1.51%; % Population living in dwelling units from light to salvageable materials: 1.40%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Tigatto	Residential Area: 273.57; Barangay Population: 36,387; Population Density: 133.01; Affected Area (Has): 156.38; Exposed Population: 20,800; Exposure Percentage: 57%; Percentage of Informal Settlers: 14.36%; % Population living in dwelling units from light to salvageable materials: 2.75%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Waan	Residential Area: 39.30; Barangay Population: 3,925; Population Density: 99.87; Affected Area (Has): 18.52; Exposed Population: 1,849; Exposure Percentage: 47%; Percentage of Informal Settlers: 24.61%; % Population living in dwelling units from light to salvageable materials: 12.51%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Lasang	Residential Area: 53.31; Barangay Population: 10,223; Population Density: 191.76; Affected Area (Has): 50.58; Exposed Population: 9,699; Exposure Percentage: 95%; Percentage of Informal Settlers: 9.33%; % Population living in dwelling units from light to salvageable materials: 14.60%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction

Table PO – 28K. Climate Change Vulnerability Assessment Summary Matrix for Population, Liquefaction

Decision Areas	Technical Findings	Implications	Policy Interventions
Bunawan Proper	Residential Area: 128.46; Barangay Population: 23,495; Population Density: 182.89; Affected Area (Has): 89.65; Exposed Population: 16,397; Exposure Percentage: 70%; Percentage of Informal Settlers: 0.45%; % Population living in dwelling units from light to salvageable materials: 10.75%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Panacan	Residential Area: 274.98; Barangay Population: 35,806; Population Density: 130.22; Affected Area (Has): 51.96; Exposed Population: 6,767; Exposure Percentage: 19%; Percentage of Informal Settlers: 4.92%; % Population living in dwelling units from light to salvageable materials: 6.28%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Bago Aplaya	Residential Area: 100.52; Barangay Population: 15,918; Population Density: 158.35; Affected Area (Has): 94.69; Exposed Population: 14,993; Exposure Percentage: 94%; Percentage of Informal Settlers: 0.37%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Bucana	Residential Area: 237.30; Barangay Population: 83,964; Population Density: 353.83; Affected Area (Has): 216.58; Exposed Population: 76,631; Exposure Percentage: 91%; Percentage of Informal Settlers: 9.05%; % Population living in dwelling units from light to salvageable materials: 14.46%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction

Table PO – 28L. Climate Change Vulnerability Assessment Summary Matrix for Population, Liquefaction

Decision Areas	Technical Findings	Implications	Policy Interventions
Dumoy	Residential Area: 324.06; Barangay Population: 18,622; Population Density: 57.47; Affected Area (Has): 82.31; Exposed Population: 4,730; Exposure Percentage: 25%; Percentage of Informal Settlers: 1.75%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Ma-a	Residential Area: 452.85; Barangay Population: 59,803; Population Density: 132.06; Affected Area (Has): 232.93; Exposed Population: 30,761; Exposure Percentage: 51%; Percentage of Informal Settlers: 5.01%; % Population living in dwelling units from light to salvageable materials: 6.25%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Matina Aplaya	Residential Area: 166.75; Barangay Population: 33,384; Population Density: 200.20; Affected Area (Has): 154.67; Exposed Population: 30,965; Exposure Percentage: 93%; Percentage of Informal Settlers: 7.58%; % Population living in dwelling units from light to salvageable materials: 8.37%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Matina Crossing	Residential Area: 261.39; Barangay Population: 32,436; Population Density: 124.09; Affected Area (Has): 170.46; Exposed Population: 21,152; Exposure Percentage: 65%; Percentage of Informal Settlers: 6.17%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction

Table PO – 28M. Climate Change Vulnerability Assessment Summary Matrix for Population, Liquefaction

Decision Areas	Technical Findings	Implications	Policy Interventions
Matina Pangi	Residential Area: 162.30; Barangay Population: 18,081; Population Density: 111.41; Affected Area (Has): 42.34; Exposed Population: 4,717; Exposure Percentage: 26%; Percentage of Informal Settlers: 3.03%; % Population living in dwelling units from light to salvageable materials: 9.49%; Degree of Impact: 2; Adaptive Capacity Score: 2; Vulnerability Index: 4; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Talomo Proper	Residential Area: 311.47; Barangay Population: 59,678; Population Density: 191.60; Affected Area (Has): 226.37; Exposed Population: 43,372; Exposure Percentage: 73%; Percentage of Informal Settlers: 7.09%; % Population living in dwelling units from light to salvageable materials: 38.16%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Binugao	Residential Area: 54.54; Barangay Population: 6,934; Population Density: 127.14; Affected Area (Has): 15.57; Exposed Population: 1,980; Exposure Percentage: 29%; Percentage of Informal Settlers: 0.06%; % Population living in dwelling units from light to salvageable materials: 11.93%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Daliao	Residential Area: 113.90; Barangay Population: 21,124; Population Density: 185.46; Affected Area (Has): 106.80; Exposed Population: 19,808; Exposure Percentage: 94%; Percentage of Informal Settlers: 0.33%; % Population living in dwelling units from light to salvageable materials: 5.52%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction

Table PO – 28N. Climate Change Vulnerability Assessment Summary Matrix for Population, Liquefaction

Decision Areas	Technical Findings	Implications	Policy Interventions
Lizada	Residential Area: 109.55; Barangay Population: 20,112; Population Density: 183.59; Affected Area (Has): 98.22; Exposed Population: 18,032; Exposure Percentage: 90%; Percentage of Informal Settlers: 6.96%; % Population living in dwelling units from light to salvageable materials: 7.58%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Sirawan	Residential Area: 88.24; Barangay Population: 7,140; Population Density: 80.91; Affected Area (Has): 24.35; Exposed Population: 1,970; Exposure Percentage: 28%; Percentage of Informal Settlers: 4.30%; % Population living in dwelling units from light to salvageable materials: 9.87%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
Toril	Residential Area: 72.35; Barangay Population: 12,140; Population Density: 167.78; Affected Area (Has): 48.61; Exposed Population: 8,155; Exposure Percentage: 67%; Percentage of Informal Settlers: 0.49%; % Population living in dwelling units from light to salvageable materials: 6.58%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction
New Carmen	Residential Area: 16.15; Barangay Population: 2,626; Population Density: 162.64; Affected Area (Has): 11.98; Exposed Population: 1,948; Exposure Percentage: 74%; Percentage of Informal Settlers: 4.34%; % Population living in dwelling units from light to salvageable materials: 15.35%; Degree of Impact: 3; Adaptive Capacity Score: 2; Vulnerability Index: 6; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Damage to properties (e.g., houses) • Displacement of settlers 	<ul style="list-style-type: none"> • Pursue proper mitigating designs/interventions to prevent liquefaction • Proper resting of aquifers to prevent destruction

Table PO – 29A. Climate Change Vulnerability Assessment Summary Matrix for Population, Storm Surge

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 1-A	Residential Area: 7.19; Barangay Population: 3,103; Population Density: 431.64; Affected Area (Has): 6.95; Exposed Population: 3,001; Exposure Percentage: 97%; Percentage of Informal Settlers: 11.44%; % Population living in dwelling units from light to salvageable materials: 11.18%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 2-A	Residential Area: 1.65; Barangay Population: 3,589; Population Density: 2,170.81; Affected Area (Has): 1.62; Exposed Population: 3,513; Exposure Percentage: 98%; Percentage of Informal Settlers: 11.90%; % Population living in dwelling units from light to salvageable materials: 10.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 4-A	Residential Area: 2.93; Barangay Population: 1,683; Population Density: 573.66; Affected Area (Has): 2.93; Exposed Population: 1,683; Exposure Percentage: 100%; Percentage of Informal Settlers: 20.38%; % Population living in dwelling units from light to salvageable materials: 14.56%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 5-A	Residential Area: 21.80; Barangay Population: 11,436; Population Density: 524.70; Affected Area (Has): 10.31; Exposed Population: 5,408; Exposure Percentage: 47%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 11.92%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Require the establishment of risk-resilient structures

Table PO – 29B. Climate Change Vulnerability Assessment Summary Matrix for Population, Storm Surge

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 10-A	Residential Area: 5.84; Barangay Population: 6,764; Population Density: 1,159.14; Affected Area (Has): 3.30; Exposed Population: 3,831; Exposure Percentage: 57%; Percentage of Informal Settlers: 4.95%; % Population living in dwelling units from light to salvageable materials: 2.96%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 11-B	Residential Area: 2.56; Barangay Population: 1,901; Population Density: 742.37; Affected Area (Has): 2.56; Exposed Population: 1,899; Exposure Percentage: 100%; Percentage of Informal Settlers: 11.31%; % Population living in dwelling units from light to salvageable materials: 10.36%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 12-B	Residential Area: 1.20; Barangay Population: 840; Population Density: 701.81; Affected Area (Has): 1.20; Exposed Population: 839; Exposure Percentage: 100%; Percentage of Informal Settlers: 3.69%; % Population living in dwelling units from light to salvageable materials: 74.17%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 13-B	Residential Area: 0.57; Barangay Population: 427; Population Density: 743.68; Affected Area (Has): 0.57; Exposed Population: 427; Exposure Percentage: 100%; Percentage of Informal Settlers: 8.43%; % Population living in dwelling units from light to salvageable materials: 6.56%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures

Table PO – 29C. Climate Change Vulnerability Assessment Summary Matrix for Population, Storm Surge

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 14-B	Residential Area: 3.10; Barangay Population: 1,175; Population Density: 379.49; Affected Area (Has): 3.09; Exposed Population: 1,173; Exposure Percentage: 100%; Percentage of Informal Settlers: 8.85%; % Population living in dwelling units from light to salvageable materials: 3.57%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 15-B	Residential Area: 1.47; Barangay Population: 2,891; Population Density: 1,973.02; Affected Area (Has): 1.46; Exposed Population: 2,890; Exposure Percentage: 100%; Percentage of Informal Settlers: 12.90%; % Population living in dwelling units from light to salvageable materials: 9.34%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 16-B	Residential Area: 0.44; Barangay Population: 840; Population Density: 1,901.91; Affected Area (Has): 0.43; Exposed Population: 810; Exposure Percentage: 96%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Require the establishment of risk-resilient structures
Brgy. 17-B	Residential Area: 0.54; Barangay Population: 810; Population Density: 1,509.12; Affected Area (Has): 0.53; Exposed Population: 793; Exposure Percentage: 98%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.86%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Require the establishment of risk-resilient structures

Table PO – 29D. Climate Change Vulnerability Assessment Summary Matrix for Population, Storm Surge

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 18-B	Residential Area: 0.42; Barangay Population: 1,832; Population Density: 4,346.06; Affected Area (Has): 0.40; Exposed Population: 1,760; Exposure Percentage: 96%; Percentage of Informal Settlers: 0.05%; % Population living in dwelling units from light to salvageable materials: 15.72%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 20-B	Residential Area: 14.69; Barangay Population: 4,581; Population Density: 311.90; Affected Area (Has): 8.94; Exposed Population: 2,789; Exposure Percentage: 61%; Percentage of Informal Settlers: 0.59%; % Population living in dwelling units from light to salvageable materials: 4.26%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 21-C	Residential Area: 7.15; Barangay Population: 7,478; Population Density: 1,046.30; Affected Area (Has): 5.18; Exposed Population: 5,422; Exposure Percentage: 73%; Percentage of Informal Settlers: 6.33%; % Population living in dwelling units from light to salvageable materials: 9.08%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy.22-C	Residential Area: 6.65; Barangay Population: 6,634; Population Density: 998.29; Affected Area (Has): 4.78; Exposed Population: 4,776; Exposure Percentage: 72%; Percentage of Informal Settlers: 1.37%; % Population living in dwelling units from light to salvageable materials: 8.83%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures

Table PO – 29E. Climate Change Vulnerability Assessment Summary Matrix for Population, Storm Surge

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 23-C	Residential Area: 14.60; Barangay Population: 16,489; Population Density: 1,129.15; Affected Area (Has): 12.79; Exposed Population: 14,444; Exposure Percentage: 88%; Percentage of Informal Settlers: 17.28%; % Population living in dwelling units from light to salvageable materials: 13.42%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 24-C	Residential Area: 2.52; Barangay Population: 2,602; Population Density: 1,034.44; Affected Area (Has): 2.51; Exposed Population: 2,601; Exposure Percentage: 100%; Percentage of Informal Settlers: 2.15%; % Population living in dwelling units from light to salvageable materials: 3.88%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 25-C	Residential Area: 1.73; Barangay Population: 1,967; Population Density: 1,137.04; Affected Area (Has): 1.73; Exposed Population: 1,966; Exposure Percentage: 100%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 6.61%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Require the establishment of risk-resilient structures
Brgy. 26-C	Residential Area: 2.26; Barangay Population: 2,510; Population Density: 1,111.51; Affected Area (Has): 2.23; Exposed Population: 2,484; Exposure Percentage: 99%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 3.98%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Require the establishment of risk-resilient structures

Table PO – 29F. Climate Change Vulnerability Assessment Summary Matrix for Population, Storm Surge

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 27-C	Residential Area: 0.66; Barangay Population: 2,152; Population Density: 3,241.36; Affected Area (Has): 0.64; Exposed Population: 2,088; Exposure Percentage: 97%; Percentage of Informal Settlers: 15.43%; % Population living in dwelling units from light to salvageable materials: 12.27%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 28-C	Residential Area: 1.65; Barangay Population: 2,270; Population Density: 1,375.96; Affected Area (Has): 1.65; Exposed Population: 2,269; Exposure Percentage: 100%; Percentage of Informal Settlers: 0.31%; % Population living in dwelling units from light to salvageable materials: 8.72%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 29-C	Residential Area: 1.07; Barangay Population: 1,557; Population Density: 1,460.89; Affected Area (Has): 1.07; Exposed Population: 1,557; Exposure Percentage: 100%; Percentage of Informal Settlers: 6.10%; % Population living in dwelling units from light to salvageable materials: 5.59%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 30-D	Residential Area: 1.38; Barangay Population: 1,608; Population Density: 1,166.94; Affected Area (Has): 1.37; Exposed Population: 1,595; Exposure Percentage: 99%; Percentage of Informal Settlers: 1.49%; % Population living in dwelling units from light to salvageable materials: 3.67%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures

Table PO – 29G. Climate Change Vulnerability Assessment Summary Matrix for Population, Storm Surge

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 31-D	Residential Area: 17.40; Barangay Population: 8,321; Population Density: 478.08; Affected Area (Has): 13.56; Exposed Population: 6,483; Exposure Percentage: 78%; Percentage of Informal Settlers: 5.70%; % Population living in dwelling units from light to salvageable materials: 4.98%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 32-D	Residential Area: 2.77; Barangay Population: 1,985; Population Density: 717.19; Affected Area (Has): 2.75; Exposed Population: 1,972; Exposure Percentage: 99%; Percentage of Informal Settlers: 4.23%; % Population living in dwelling units from light to salvageable materials: 3.88%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 33-D	Residential Area: 3.86; Barangay Population: 2,033; Population Density: 526.19; Affected Area (Has): 3.86; Exposed Population: 2,032; Exposure Percentage: 100%; Percentage of Informal Settlers: 2.80%; % Population living in dwelling units from light to salvageable materials: 9.05%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 34-D	Residential Area: 2.48; Barangay Population: 1,682; Population Density: 677.94; Affected Area (Has): 2.48; Exposed Population: 1,682; Exposure Percentage: 100%; Percentage of Informal Settlers: 22.41%; % Population living in dwelling units from light to salvageable materials: 0.89%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures

Table PO – 29H. Climate Change Vulnerability Assessment Summary Matrix for Population, Storm Surge

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 35-D	Residential Area: 0.35; Barangay Population: 578; Population Density: 1,666.45; Affected Area (Has): 0.35; Exposed Population: 578; Exposure Percentage: 100%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 18.69%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Require the establishment of risk-resilient structures
Brgy. 36-D	Residential Area: 2.39; Barangay Population: 1,581; Population Density: 661.51; Affected Area (Has): 2.39; Exposed Population: 1,581; Exposure Percentage: 100%; Percentage of Informal Settlers: 2.53%; % Population living in dwelling units from light to salvageable materials: 4.68%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Brgy. 40-D	Residential Area: 1.38; Barangay Population: 2,437; Population Density: 1,763.80; Affected Area (Has): 1.34; Exposed Population: 2,363; Exposure Percentage: 97%; Percentage of Informal Settlers: 11.98%; % Population living in dwelling units from light to salvageable materials: 11.78%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Agdao Proper	Residential Area: 7.86; Barangay Population: 8,897; Population Density: 1,132.13; Affected Area (Has): 7.62; Exposed Population: 8,625; Exposure Percentage: 97%; Percentage of Informal Settlers: 21.30%; % Population living in dwelling units from light to salvageable materials: 19.13%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures

Table PO – 29I. Climate Change Vulnerability Assessment Summary Matrix for Population, Storm Surge

Decision Areas	Technical Findings	Implications	Policy Interventions
Centro	Residential Area: 24.77; Barangay Population: 13,652; Population Density: 551.21; Affected Area (Has): 22.72; Exposed Population: 12,521; Exposure Percentage: 92%; Percentage of Informal Settlers: 1.05%; % Population living in dwelling units from light to salvageable materials: 7.27%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Gov. Paciano Bangoy	Residential Area: 22.55; Barangay Population: 8,904; Population Density: 394.89; Affected Area (Has): 14.39; Exposed Population: 5,681; Exposure Percentage: 64%; Percentage of Informal Settlers: 5.35%; % Population living in dwelling units from light to salvageable materials: 8.77%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Gov. Vicente Duterte	Residential Area: 21.81; Barangay Population: 8,816; Population Density: 404.24; Affected Area (Has): 20.34; Exposed Population: 8,221; Exposure Percentage: 93%; Percentage of Informal Settlers: 16.16%; % Population living in dwelling units from light to salvageable materials: 11.74%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Tomas Monteverde	Residential Area: 2.36; Barangay Population: 5,716; Population Density: 2,427.02; Affected Area (Has): 2.09; Exposed Population: 5,081; Exposure Percentage: 89%; Percentage of Informal Settlers: 13.59%; % Population living in dwelling units from light to salvageable materials: 10.29%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures

Table PO – 29J. Climate Change Vulnerability Assessment Summary Matrix for Population, Storm Surge

Decision Areas	Technical Findings	Implications	Policy Interventions
Lapu-Lapu	Residential Area: 25.12; Barangay Population: 10,306; Population Density: 410.22; Affected Area (Has): 23.68; Exposed Population: 9,713; Exposure Percentage: 94%; Percentage of Informal Settlers: 8.06%; % Population living in dwelling units from light to salvageable materials: 3.83%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Leon Garcia Sr.	Residential Area: 12.47; Barangay Population: 5,783; Population Density: 463.86; Affected Area (Has): 12.04; Exposed Population: 5,586; Exposure Percentage: 97%; Percentage of Informal Settlers: 0.64%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Rafael Castillo	Residential Area: 13.18; Barangay Population: 11,738; Population Density: 890.76; Affected Area (Has): 11.86; Exposed Population: 10,567; Exposure Percentage: 90%; Percentage of Informal Settlers: 2.26%; % Population living in dwelling units from light to salvageable materials: 5.20%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
San Antonio	Residential Area: 27.41; Barangay Population: 2,966; Population Density: 108.23; Affected Area (Has): 25.28; Exposed Population: 2,736; Exposure Percentage: 92%; Percentage of Informal Settlers: 5.90%; % Population living in dwelling units from light to salvageable materials: 12.98%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures

Table PO – 29K. Climate Change Vulnerability Assessment Summary Matrix for Population, Storm Surge

Decision Areas	Technical Findings	Implications	Policy Interventions
Ubalde	Residential Area: 6.37; Barangay Population: 9,903; Population Density: 1,553.58; Affected Area (Has): 5.94; Exposed Population: 9,226; Exposure Percentage: 93%; Percentage of Informal Settlers: 1.51%; % Population living in dwelling units from light to salvageable materials: 1.40%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Wilfredo Aquino	Residential Area: 27.58; Barangay Population: 15,586; Population Density: 565.04; Affected Area (Has): 8.59; Exposed Population: 4,855; Exposure Percentage: 31%; Percentage of Informal Settlers: 3.46%; % Population living in dwelling units from light to salvageable materials: 1.02%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Vicente Hizon	Residential Area: 124.53; Barangay Population: 11,265; Population Density: 90.46; Affected Area (Has): 34.45; Exposed Population: 3,116; Exposure Percentage: 28%; Percentage of Informal Settlers: 22.86%; % Population living in dwelling units from light to salvageable materials: 3.83%; Degree of Impact: 2; Adaptive Capacity Score: 2; Vulnerability Index: 4; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Lasang	Residential Area: 53.31; Barangay Population: 10,223; Population Density: 191.76; Affected Area (Has): 37.91; Exposed Population: 7,269; Exposure Percentage: 71%; Percentage of Informal Settlers: 9.33%; % Population living in dwelling units from light to salvageable materials: 14.60%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures

Table PO – 29L. Climate Change Vulnerability Assessment Summary Matrix for Population, Storm Surge

Decision Areas	Technical Findings	Implications	Policy Interventions
Bunawan	Residential Area: 128.46; Barangay Population: 23,495; Population Density: 182.89; Affected Area (Has): 73.00; Exposed Population: 13,350; Exposure Percentage: 57%; Percentage of Informal Settlers: 0.45%; % Population living in dwelling units from light to salvageable materials: 10.75%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Bago Aplaya	Residential Area: 100.52; Barangay Population: 15,918; Population Density: 158.35; Affected Area (Has): 83.51; Exposed Population: 13,223; Exposure Percentage: 83%; Percentage of Informal Settlers: 0.37%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Bucana	Residential Area: 237.30; Barangay Population: 83,964; Population Density: 353.83; Affected Area (Has): 189.27; Exposed Population: 66,970; Exposure Percentage: 80%; Percentage of Informal Settlers: 9.05%; % Population living in dwelling units from light to salvageable materials: 14.46%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Dumoy	Residential Area: 171.70; Barangay Population: 18,622; Population Density: 108.45; Affected Area (Has): 40.74; Exposed Population: 4,419; Exposure Percentage: 24%; Percentage of Informal Settlers: 1.75%; % Population living in dwelling units from light to salvageable materials: 0.00%; Degree of Impact: 2; Adaptive Capacity Score: 2; Vulnerability Index: 4; Vulnerability Category: Moderate; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures

Table PO – 29M. Climate Change Vulnerability Assessment Summary Matrix for Population, Storm Surge

Decision Areas	Technical Findings	Implications	Policy Interventions
Matina Aplaya	Residential Area: 166.75; Barangay Population: 33,384; Population Density: 200.20; Affected Area (Has): 131.23; Exposed Population: 26,272; Exposure Percentage: 79%; Percentage of Informal Settlers: 7.58%; % Population living in dwelling units from light to salvageable materials: 8.37%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Talomo Proper	Residential Area: 311.47; Barangay Population: 59,678; Population Density: 191.60; Affected Area (Has): 202.72; Exposed Population: 38,841; Exposure Percentage: 65%; Percentage of Informal Settlers: 7.09%; % Population living in dwelling units from light to salvageable materials: 38.16%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Daliao	Residential Area: 113.90; Barangay Population: 21,124; Population Density: 185.46; Affected Area (Has): 48.79; Exposed Population: 9,049; Exposure Percentage: 43%; Percentage of Informal Settlers: 0.33%; % Population living in dwelling units from light to salvageable materials: 5.52%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/ • Communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures
Lizada	Residential Area: 109.55; Barangay Population: 20,112; Population Density: 183.59; Affected Area (Has): 71.85; Exposed Population: 13,190; Exposure Percentage: 66%; Percentage of Informal Settlers: 6.96%; % Population living in dwelling units from light to salvageable materials: 7.58%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Due to increases in rainfall and temperature that may cause sea level rise, there would be displacement of families/communities, class suspension, decrease in food and water supply and generation of low income among communities living near coastal areas 	<ul style="list-style-type: none"> • There shall be proper implementation of solid waste management. • Strict implementation of environmental policies • Relocate informal settlers • Acquire lands, which are not prone to hazards, for informal settlers • Require the establishment of risk-resilient structures

Table PO –30. Climate Change Vulnerability Assessment Summary Matrix for Population, Fault Line

Decision Areas	Technical Findings	Implications	Policy Interventions
Catalunan Pequeño	Residential Area: 211.61; Barangay Population: 22,809; Population Density: 107.79; Affected Area (Has): 1.26; Exposed Population: 136; Exposure Percentage: 0.6%; Percentage of Informal Settlers: 0.89%; % Population living in dwelling units from light to salvageable materials: 3.73%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities and loss of lives • Communities may lose their income 	<ul style="list-style-type: none"> • Observe 5-meter easement from the fault line • Set up a building design that can withstand Intensity 8 jolt
Los Amigos	Residential Area: 43.65; Barangay Population: 9,722; Population Density: 222.74; Affected Area (Has): 0.16; Exposed Population: 35; Exposure Percentage: 0.36%; Percentage of Informal Settlers: 1.43%; % Population living in dwelling units from light to salvageable materials: 7.25%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities and loss of lives • Communities may lose their income 	<ul style="list-style-type: none"> • Observe 5-meter easement from the fault line • Set up a building design that can withstand Intensity 8 jolt
Mintal	Residential Area: 156.42; Barangay Population: 13,227; Population Density: 84.56; Affected Area (Has): 1.06; Exposed Population: 90; Exposure Percentage: 0.68%; Percentage of Informal Settlers: 1.93%; % Population living in dwelling units from light to salvageable materials: 7.39%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities and loss of lives • Communities may lose their income 	<ul style="list-style-type: none"> • Observe 5-meter easement from the fault line • Set up a building design that can withstand Intensity 8 jolt
Tugbok Proper	Residential Area: 125.40; Barangay Population: 15,115; Population Density: 120.53; Affected Area (Has): 0.75; Exposed Population: 91; Exposure Percentage: 0.6%; Percentage of Informal Settlers: 1.42%; % Population living in dwelling units from light to salvageable materials: 4.13%; Degree of Impact: 3; Adaptive Capacity Score: 3; Vulnerability Index: 9; Vulnerability Category: High; Disaster Thresholds and Acceptability Rating: Highly Unacceptable	<ul style="list-style-type: none"> • Displacement of communities and loss of lives • Communities may lose their income 	<ul style="list-style-type: none"> • Observe 5-meter easement from the fault line • Set up a building design that can withstand Intensity 8 jolt

Disaster Risk Assessment for Population

Almost all of the exposure units can be computed of their monetary value and possible replacement except population. To curb down the number of victims and fatalities during disaster incidents, the city government pursues Disaster Risk Assessment (DRA). The DRA will help determine risk areas and analyze adaptive capacities of identified risk areas. This intends to strengthen the capacities especially of people at risk to such hazards (e.g., floods, landslides).

Population Exposure Estimation

The following tables (see beginning next page) comprise data on areas where there are occurrences of hazards and population exposure estimation database. Below are the summary of results per hazard:

Flood – The areas with high susceptibility to floods have an estimated flood depth of more than one (1) meter. Those with moderate to low susceptibility to floods have below one (1) meter of flood depth. Table PO – 1 shows that there are occurrences of floods in 21 barangays in Poblacion District, five (5) in Agdao District, eight (8) in Buhangin District, five (5) in Bunawan District, eight (8) in Calinan District, seven (7) in Marilog District, four (4) in Paquibato District, 12 in Talomo District, 12 in Toril District, and nine (9) in Tugbok District. Of the affected areas, floods frequently hit Barangays 19-B, Mandug, Lasang, Gumitan, Tamugan, Ma-a, Matina Aplaya, Matina Crossing, Matina Pangí, Talomo Proper, Marapangi, and Tugbok Proper. This means that floods occur every one (1) to three (3) years. These areas also experience a flood depth of more than one (1) meter. Floods may potentially hit a large number of populace particularly in Ma-a, Matina Aplaya, Matina Crossing, Matina Pangí, and Talomo Proper. Talomo Proper, for instance, is estimated to have 35% of exposed population out of 59,678 persons living in the barangay.

Table PO – 31. Population Exposure Estimation to Flood, Davao City

Hazard				Exposure					
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage
Poblacion District									
1-A	High susceptibility area	3	≥ 1 meter	15.36	3,103	202	6.94	1,402.46	45%
2-A	High susceptibility area	4	≥ 1 meter	16.38	3,589	219	1.23	269.50	8%
3-A	High susceptibility area	3	≥ 1 meter	20.776	370	18	0.55	9.80	3%
4-A	High susceptibility area	3	≥ 1 meter	23.51	1,683	72	2.93	209.75	12%
5-A	High susceptibility area	4	≥ 1 meter	38.10	11,436	300	14.12	4,238.22	37%
6-A	High susceptibility area	3	≥ 1 meter	15.00	2,084	139	4.39	609.92	29%
7-A	High susceptibility area	3	≥ 1 meter	22.50	3,984	177	10.81	1,914.09	48%
8-A	High susceptibility area	4	≥ 1 meter	179.80	11,075	62	47.94	2,952.92	27%
9-A	High susceptibility area	4	≥ 1 meter	27.50	5,698	207	13.91	2,882.15	51%
10-A	High susceptibility area	5	≥ 1 meter	28.64	6,764	236	5.79	1,367.63	20%
11-B	High susceptibility area	3	≥ 1 meter	9.57	1,901	199	2.56	508.74	27%
12-B	High susceptibility area	3	≥ 1 meter	17.54	840	48	1.20	57.48	7%
13-B	High susceptibility area	3	≥ 1 meter	11.26	427	38	0.57	21.62	5%
14-B	High susceptibility area	3	≥ 1 meter	18.41	1,175	64	3.10	197.84	17%
15-B	High susceptibility area	3	≥ 1 meter	31.54	2,891	92	1.46	133.82	5%
16-B	High susceptibility area	3	≥ 1 meter	5.53	840	152	0.43	65.35	8%
17-B	High susceptibility area	3	≥ 1 meter	5.63	810	144	0.53	76.29	9%
18-B	High susceptibility area	3	≥ 1 meter	19.80	1,832	93	0.41	37.94	2%
19-B	High susceptibility area	6	≥ 1 meter	362.55	31,766	88	40.47	3,545.89	11%
20-B	High susceptibility area	4	≥ 1 meter	56.58	4,581	81	13.93	1,127.88	25%
28-C	Moderate to low susceptibility area	2	≥ 1 meter	15.71	2,270	144	1.65	238.38	11%
Agdao District									
Agdao Proper	High susceptibility area	3	> 1 meter	38.29	8,897	232	7.62	1,770.66	20%
Gov. Paciano Bangoy	High susceptibility area	3	> 1 meter	81.47	8,904	108	17.65	1,909.93	21%
San Antonio	High susceptibility area	3	> 1meter	89.88	2,966	115	0.01	1.15	0%
Ubalde	High susceptibility area	3	> 1meter	9.98	9,903	297	0.93	276.36	3%
Wilfredo Aquino	High susceptibility area	4	> 1meter	72.26	15,586	137	1.51	206.93	1%

Table PO – 31. Population Exposure Estimation to Flood, Davao City, cont.

Hazard				Exposure					
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage
Baguio District									
Baguio	High susceptibility area	3	≥ 1 meter	848.74	4,655	5	8.10	44.43	1%
Gumalang	High susceptibility area	4	≥ 1 meter	1,572.78	5,081	3	-	0.00	0%
Malagos	High susceptibility area	4	≥ 1 meter	1,210.59	6,524	5	4.89	26.35	0%
Tambobong	High susceptibility area	3	≥ 1 meter	1,230.05	5,993	5	-	0.00	0%
Tawan-Tawan	High susceptibility area	4	≥ 1 meter	974.39	3,889	4	-	0.00	0%
Buhangin District									
Buhangin	High susceptibility area	5	≥ 1 meter	672.24	65,461	97	9.41	916.32	1%
Cabantian	High susceptibility area	3	≥ 1 meter	757.62	43,758	58	5.47	315.93	1%
Communal	High susceptibility area	4	≥ 1 meter	584.65	16,740	29	7.08	202.72	1%
Mandug	High susceptibility area	6	≥ 1 meter	969.19	13,594	14	20.99	294.41	2%
Pampangang	High susceptibility area	3	≥ 1 meter	117.51	14,381	122	10.16	1,243.39	9%
Sasa	High susceptibility area	3	≥ 1 meter	767.66	52,386	68	47.18	3,219.62	6%
Tigatto	High susceptibility area	3	≥ 1 meter	761.31	36,387	48	102.74	4,910.48	13%
Waan	High susceptibility area	4	≥ 1 meter	436.97	3,925	9	21.29	191.23	5%
Bunawan District									
Lasang	High susceptibility area	6	≥ 1 meter	626.58	10,223	16	20.65	336.92	3%
Ilang	High susceptibility area	3	≥ 1 meter	570.60	24,947	44	7.03	307.36	1%
Mahayag	High susceptibility area	4	≥ 1 meter	803.81	6,307	8	0.74	5.81	0%
Panacan	High susceptibility area	5	≥ 1 meter	698.12	35,806	51	31.89	1,635.60	5%
Tibungco	High susceptibility area	3	≥ 1 meter	719.02	41,864	58	14.31	833.19	2%
Calinan District									
Calinan	High susceptibility area	5	≥ 1 meter	830.55	23,052	28	107.19	2,975.07	13%
Dominga	High susceptibility area	3	≥ 1 meter	602.11	1,607	3	1.73	4.62	0%
Inayangan	High susceptibility area	3	≥ 1 meter	1,420.54	4,832	3	0.01	0.03	0%
Lamanan	High susceptibility area	3	≥ 1 meter	2,094.88	4,538	2	0.06	0.13	0%
Pangyan	High susceptibility area	3	≥ 1 meter	708.97	2,035	3	1.99	5.71	0%
Riverside	High susceptibility area	4	≥ 1 meter	514.85	5,450	11	19.33	204.62	4%
Saloy	High susceptibility area	4	≥ 1 meter	2,291.36	2,112	1	0.01	0.01	0%
Tamayong	High susceptibility area	3	≥ 1 meter	1,925.20	7,273	4	-	0.00	0%

Table PO – 31. Population Exposure Estimation to Flood, Davao City, cont.

Hazard				Exposure					
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage
Marilog District									
Bantol	High susceptibility area	4	≥ 1 meter	1,403.54	2,324	2	-	0.00	0%
Gumitan	High susceptibility area	6	≥ 1 meter	5,727.67	1,756	0	0.03	0.01	0%
Malamba	High susceptibility area	5	≥ 1 meter	11,074.12	4,864	0	1.40	0.61	0%
Marilog	High susceptibility area	5	≥ 1 meter	18,031.84	16,188	1	0.10	0.09	0%
Salaysay	High susceptibility area	3	≥ 1 meter	4,467.69	4,431	1	0.03	0.03	0%
Suawan	High susceptibility area	3	≥ 1 meter	4,571.98	4,586	1	-	0.00	0%
Tamugan	High susceptibility area	6	≥ 1 meter	1,132.32	8,351	7	8.77	64.68	1%
Paquibato District									
Pañalum	High susceptibility area	3	≥ 1 meter	1,131.41	1,831	2	-	0.00	0%
Paquibato	High susceptibility area	3	≥ 1 meter	3,511.00	2,495	1	-	0.00	0%
Sumimao	High susceptibility area	3	≥ 1 meter	2,539.79	1,666	1	0.66	0.43	0%
Tapak	High susceptibility area	3	≥ 1 meter	10,406.75	5,258	1	1.93	0.98	0%
Talomo District									
Bago Aplaya	High susceptibility area	5	≥ 1 meter	217.35	15,918	73	28.28	2,071.13	13%
Bago Gallera	High susceptibility area	4	≥ 1 meter	717.82	17,378	24	49.25	1,192.31	7%
Baliok	High susceptibility area	3	≥ 1 meter	248.28	16,140	65	14.12	917.90	6%
Bucana	High susceptibility area	4	≥ 1 meter	410.51	83,964	205	86.42	17,675.99	21%
Catalunan Grande	High susceptibility area	3	≥ 1 meter	1,495.06	32,461	22	69.62	1,511.60	5%
Catalunan Pequeño	High susceptibility area	3	≥ 1 meter	594.49	22,809	38	26.64	1,022.11	4%
Dumoy	High susceptibility area	4	≥ 1 meter	530.77	18,622	35	28.49	999.57	5%
Ma-a	High susceptibility area	6	≥ 1 meter	999.38	59,803	60	136.31	8,156.80	14%
Matina Aplaya	High susceptibility area	6	≥ 1 meter	315.49	33,384	106	72.79	7,702.37	23%
Matina Crossing	High susceptibility area	6	≥ 1 meter	488.82	32,436	66	66.49	4,411.99	14%
Matina Pangi	High susceptibility area	6	≥ 1 meter	584.12	18,081	31	51.00	1,578.67	9%
Talomo	High susceptibility area	6	≥ 1 meter	642.95	59,678	93	226.76	21,047.64	35%

Table PO – 31. Population Exposure Estimation to Flood, Davao City, cont.

Hazard				Exposure					
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage
Toril District									
Bayabas	High susceptibility area	4	≥ 1 meter	1,201.36	2,989	2		0.00	0%
Binugao	High susceptibility area	3	≥ 1 meter	483.32	6,934	14	26.77	384.06	6%
Camansi	High susceptibility area	4	≥ 1 meter	363.18	1,189	3		0.00	0%
Crossing Bayabas	High susceptibility area	5	≥ 1 meter	223.35	11,490	51	21.61	1,111.70	10%
Daliao	High susceptibility area	3	≥ 1 meter	194.55	21,124	109	23.42	2,542.91	12%
Daliaon Plantation	High susceptibility area	3	≥ 1 meter	1,036.93	3,214	3	0.01	0.03	0%
Lizada	High susceptibility area	5	≥ 1 meter	436.16	20,112	46	19.82	913.93	5%
Lubogan	High susceptibility area	4	≥ 1 meter	208.96	12,156	58	32.08	1,866.22	15%
Marapangi	High susceptibility area	6	≥ 1 meter	703.76	6,889	10	12.97	126.96	2%
Sirawan	High susceptibility area	4	≥ 1 meter	963.70	7,140	7	22.25	164.85	2%
Tagluno	High susceptibility area	3	≥ 1 meter	564.16	1,391	2	0.09	0.22	0%
Toril	High susceptibility area	4	≥ 1 meter	131.60	12,140	92	69.46	6,407.63	53%
Tugbok District									
Bago Oshiro	High susceptibility area	3	≥ 1 meter	637.28	11,932	19	2.96	55.42	0%
Los Amigos	High susceptibility area	5	≥ 1 meter	445.49	9,722	22	38.62	842.81	9%
Manambulan	High susceptibility area	3	≥ 1 meter	768.50	2,661	3	9.10	31.51	1%
Mintal	High susceptibility area	5	≥ 1 meter	752.19	13,227	18	65.05	1,143.88	9%
Sto. Niño	High susceptibility area	4	≥ 1 meter	147.32	20,103	136	8.74	1,192.64	6%
Tacunan	High susceptibility area	3	≥ 1 meter	906.70	12,773	14	31.80	447.98	4%
Talandang	High susceptibility area	3	≥ 1 meter	1,333.40	3,392	3	3.19	8.11	0%
Tugbok	High susceptibility area	6	≥ 1 meter	989.79	15,115	15	107.98	1,648.95	11%
Ula	High susceptibility area	3	≥ 1 meter	941.30	4,130	4	7.04	30.89	1%

Landslide – Table PO – 2 bares the occurrences of landslides in two (2) barangays in Poblacion District, two (2) in Baguio District, three (3) in Buhangin District, three (3) in Bunawan District, two (2) in Calinan District, eight (8) in Marilog District, four (4) in Paquibato District, six (6) in Talomo District, and one (1) in Toril District. Out of the affected areas, Barangays Marilog Proper, Tamugan, Tapak, Matina Crossing, and Matina Pangi have frequent occurrences of landslides. Frequent occurrences of landslides, whether caused by heavy rains or tremors, may largely hit Matina Pangi and Matina Crossing, affecting an estimated number of 2,004 persons and 1,941 persons, respectively.

Table PO – 32. Population Exposure Estimation to Landslide, Davao City

Hazard		Exposure					
Barangay	Likelihood of Occurrence	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage
Poblacion District							
10-A	4	28.64	6,764	236	-	-	0.00
19-B	4	362.55	31,766	88	1.32	115	0.00
Baguio District							
Carmen	5	806.01	2,156	3	1.26	3	0.00
Tambobong	5	1,230.05	5,993	5	4.49	22	0.00
Buhangin District							
Buhangin	5	672.24	65,461	97	36.71	3,575	0.05
Callawa	4	1,354.75	3,553	3	0.68	2	0.00
Tigatto	5	761.31	36,387	48	39.43	1,885	0.05
Bunawan District							
Bunawan	4	769.18	23,495	31	7.75	237	0.01
Panacan	4	698.12	35,806	51	67.73	3,474	0.10
San Isidro	4	630.33	5,333	8	3.40	29	0.01
Calinan District							
Inayangan	5	1,420.54	4,832	3	1.89	6	0.00
Megkawayan	5	1,844.95	3,015	2	5.52	9	0.00
Marilog District							
Baganihan	5	1,062.62	1,295	1	0.16	-	0.00
Buda	5	4,292.76	1,885	0	4.07	2	0.00
Gumitan	5	5,727.67	1,756	0	6.63	2	0.00
Magsaysay	4	5,830.15	2,425	0	8.68	4	0.00
Marilog	6	18,031.84	16,188	1	91.12	82	0.01
Salaysay	5	4,467.69	4,431	1	10.06	10	0.00
Suawan	5	4,571.98	4,586	1	7.31	7	0.00
Tamugan	6	1,132.32	8,351	7	0.03	-	0.00

Table PO – 32. Population Exposure Estimation to Landslide, Davao City, cont.

Hazard		Exposure					
Barangay	Likelihood of Occurrence	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage
Paquibato District							
Fatima	4	3,093.73	3,502	1	7.61	9	0.00
Lumiad	5	3,206.09	1,553	0	8.62	4	0.00
Sumimao	4	2,539.79	1,666	1	1.78	1	0.00
Tapak	6	10,406.75	5,258	1	18.46	9	0.00
Talomo District							
Catalunan Grande	4	1,495.06	32,461	22	5.07	110	0.00
Catalunan Pequeño	4	594.49	22,809	38	-	-	0.00
Langub	4	853.20	2,883	3	13.48	46	0.02
Ma-a	4	999.38	59,803	60	101.76	6,089	0.10
Matina Crossing	6	488.82	32,436	66	29.25	1,941	0.06
Matina Pangi	6	584.12	18,081	31	64.73	2,004	0.11
Toril District							
Daliao	4	194.55	21,124	109	-	-	0.00

Severity of Consequence

The severity of consequence score shall be based on expected magnitude of the hazard, the extent of exposure, and the vulnerabilities of the exposed elements. With regards to population, the highest severity of consequence score is four (4) depicts that more than 20% of the population are affected and in need of immediate assistance. The score, three (3), means that 10 to below 20% of affected population are in need of immediate assistance. There are also records of one (1) to 10 deaths or 10 to 100 people with injuries. The moderate is two (2) where there are 5% to less than 10% of affected that need of immediate assistance and one (1) to 10 people with injuries. The least is one (1), where there are less than 5% of the affected population who need of immediate assistance. Those areas with the lowest scores have only cases of minor injuries.

Flood – The flood-affected areas with the highest severity of consequence score, four (4), are Barangays 1-A, 5-A, 6-A, 7-A, 8-A, 9-A, 10-A, 11-B, 20-B, Gov. Paciano Bangoy, Bucana, Matina Aplaya, Talomo Proper, and Toril Proper (Table PO – 3). These areas have exposed population of more than 20%, with need of immediate assistance during flood incidents.

Table PO – 33. Population Severity of Consequence Estimation to Floods, Davao City

Hazard				Exposure						Vulnerability						Severity of Consequence		
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density Per Hectare Of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living In Dwelling Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of Households Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score
Poblacion District																		
1-A	High susceptibility area	3	≥ 1 meter	15.36	3,103	202	6.94	1,402.46	45%	11.44	11.18	40.30%	19.30%	0.08%	0.70	6.32	0.00	4
2-A	High susceptibility area	4	≥ 1 meter	16.38	3,589	219	1.23	269.50	8%	11.90	10.00				0.84	1.68	0.00	2
3-A	High susceptibility area	3	≥ 1 meter	20.776	370	18	0.55	9.80	3%	0.00	0.00				25.00	0.00	0.00	1
4-A	High susceptibility area	3	≥ 1 meter	23.51	1,683	72	2.93	209.75	12%	20.38	14.56				5.28	8.54	3.66	3

Table PO – 33. Population Severity of Consequence Estimation to Floods, Davao City, cont.

Hazard				Exposure						Vulnerability						Severity of Consequence		
Baran-gay	Flood Suscepti-bility	Likelihood of Occur-rence	Flood Depth	Residen-tial Area	Baran-gay Popula-tion	Popula-tion Den-sity Per Hectare Of Resi-dential Area	Affect-ed Area	Exposed Popula-tion	Exposure Percent-age	Percent-age of Informal Settlers	Percentage of Popu-lation Living In Dwelling Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of House-holds Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score
5-A	High suscepti-bility area	4	≥ 1 meter	38.10	11,436	300	14.12	4,238.22	37%	0.00	11.92				5.84	10.65	0.81	4
6-A	High suscepti-bility area	3	≥ 1 meter	15.00	2,084	139	4.39	609.92	29%	16.27	16.70				4.48	7.46	0.37	4
7-A	High suscepti-bility area	3	≥ 1 meter	22.50	3,984	177	10.81	1,914.09	48%	2.28	6.93				5.44	6.49	0.18	4
8-A	High suscepti-bility area	4	≥ 1 meter	179.80	11,075	62	47.94	2,952.92	27%	4.41	5.64				4.98	7.07	0.98	4
9-A	High suscepti-bility area	4	≥ 1 meter	27.50	5,698	207	13.91	2,882.15	51%	0.44	4.41				3.70	4.97	0.77	4
10-A	High suscepti-bility area	5	≥ 1 meter	28.64	6,764	236	5.79	1,367.63	20%	4.95	2.96				4.26	6.68	0.00	4
11-B	High suscepti-bility area	3	≥ 1 meter	9.57	1,901	199	2.56	508.74	27%	11.31	10.36				0.66	3.29	1.97	4
12-B	High suscepti-bility area	3	≥ 1 meter	17.54	840	48	1.20	57.48	7%	3.69	74.17				4.84	9.60	0.80	2
13-B	High suscepti-bility area	3	≥ 1 meter	11.26	427	38	0.57	21.62	5%	8.43	6.56				11.63	18.18	15.91	2
14-B	High suscepti-bility area	3	≥ 1 meter	18.41	1,175	64	3.10	197.84	17%	8.85	3.57				3.67	2.75	11.01	3
15-B	High suscepti-bility area	3	≥ 1 meter	31.54	2,891	92	1.46	133.82	5%	12.90	9.34	40.30%	19.30%	0.08%	0.59	0.30	3.26	1
16-B	High suscepti-bility area	3	≥ 1 meter	5.53	840	152	0.43	65.35	8%	0.00	0.00				4.00	2.40	0.80	2
17-B	High suscepti-bility area	3	≥ 1 meter	5.63	810	144	0.53	76.29	9%	0.00	0.86				3.88	5.83	4.85	2

Table PO – 33. Population Severity of Consequence Estimation to Floods, Davao City, cont.

Hazard				Exposure						Vulnerability							Severity of Consequence	
Baran-gay	Flood Suscepti-bility	Likelihood of Occur-rence	Flood Depth	Residen-tial Area	Baran-gay Popula-tion	Popula-tion Den-sity Per Hectare Of Resi-dential Area	Affect-ed Area	Exposed Popula-tion	Exposure Percent-age	Percent-age of Informal Settlers	Percentage of Popu-lation Living In Dwelling Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of House-holds Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score
18-B	High suscepti-bility area	3	≥ 1 meter	19.80	1,832	93	0.41	37.94	2%	0.05	15.72				3.19	9.57	2.13	1
19-B	High suscepti-bility area	6	≥ 1 meter	362.55	31,766	88	40.47	3,545.89	11%	2.06	3.56				3.36	3.80	2.54	3
20-B	High suscepti-bility area	4	≥ 1 meter	56.58	4,581	81	13.93	1,127.88	25%	0.59	4.26				1.61	5.38	1.61	4
28-C	Moderate to low susceptibil-ity area	2	≥ 1 meter	15.71	2,270	144	1.65	238.38	11%	0.31	8.72				1.05	1.75	0.00	3
Agdao District																		
Agdao Proper	High suscepti-bility area	3	> 1 meter	38.29	8,897	232	7.62	1,770.66	20%	21.30	19.13				1.82	2.78	0.19	3
Gov. Pa-ciano Bangoy	High suscepti-bility area	3	> 1 meter	81.47	8,904	108	17.65	1,909.93	21%	5.35	8.77				4.14	7.89	1.87	4
San Anto-nio	High suscepti-bility area	3	> 1meter	89.88	2,966	115	0.01	1.15	0%	5.90	12.98	-DO-	-DO-	0.07%	3.66	3.24	0.00	1
Ubalde	High suscepti-bility area	3	> 1meter	9.98	9,903	297	0.93	276.36	3%	0.00	1.40				4.29	7.08	3.86	1
Wilfre-do Aquino	High suscepti-bility area	4	> 1meter	72.26	15,586	137	1.51	206.93	1%	3.46	1.02				1.26	3.05	1.41	1

Table PO – 33. Population Severity of Consequence Estimation to Floods, Davao City, cont.

Hazard				Exposure						Vulnerability							Severity of Consequence	
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density Per Hectare Of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living In Dwelling Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of Households Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score
Baguio District																		
Baguio	High susceptibility area	3	≥ 1 meter	848.74	4,655	5	8.10	44.43	1%	1.70	6.68	-DO-	-DO-	0.05%	2.03	4.21	2.34	1
Gumalang	High susceptibility area	4	≥ 1 meter	1,572.78	5,081	3	-	0.00	0%	0.41	12.04				4.50	6.33	0.42	1
Malagos	High susceptibility area	4	≥ 1 meter	1,210.59	6,524	5	4.89	26.35	0%	11.70	9.03	-DO-	-DO-	0.05%	4.20	7.97	2.91	1
Tambobong	High susceptibility area	3	≥ 1 meter	1,230.05	5,993	5	-	0.00	0%	0.00	18.42				6.79	19.72	0.26	1
Tawan-Tawan	High susceptibility area	4	≥ 1 meter	974.39	3,889	4	-	0.00	0%	0.36	11.70				5.04	5.22	0.00	1
Buhangin District																		
Buhangin	High susceptibility area	5	≥ 1 meter	672.24	65,461	97	9.41	916.32	1%	1.73	6.67	-DO-	-DO-	0.06%	1.03	0.92	0.69	1
Cabantian	High susceptibility area	3	≥ 1 meter	757.62	43,758	58	5.47	315.93	1%	0.46	2.13				0.39	0.14	0.00	1
Comunal	High susceptibility area	4	≥ 1 meter	584.65	16,740	29	7.08	202.72	1%	0.00	0.00				1.54	1.77	0.23	1
Mandug	High susceptibility area	6	≥ 1 meter	969.19	13,594	14	20.99	294.41	2%	3.32	6.14				5.81	14.53	2.14	1
Pampang	High susceptibility area	3	≥ 1 meter	117.51	14,381	122	10.16	1,243.39	9%	0.00	0.00				3.57	8.38	6.12	2
Sasa	High susceptibility area	3	≥ 1 meter	767.66	52,386	68	47.18	3,219.62	6%	2.93	6.49				4.43	8.24	1.03	2

Table PO – 33. Population Severity of Consequence Estimation to Floods, Davao City, cont.

Hazard				Exposure						Vulnerability							Severity of Consequence	
Baran-gay	Flood Suscepti-bility	Likelihood of Occur-rence	Flood Depth	Residen-tial Area	Baran-gay Popula-tion	Popula-tion Den-sity Per Hectare Of Resi-dential Area	Affect-ed Area	Exposed Popula-tion	Exposure Percent-age	Percent-age of Informal Settlers	Percentage of Popu-lation Living In Dwelling Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of House-holds Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score
Tigatto	High suscepti-bility area	3	≥ 1 meter	761.31	36,387	48	102.74	4,910.48	13%	0.15	2.75				3.30	2.67	0.72	3
Waan	High suscepti-bility area	4	≥ 1 meter	436.97	3,925	9	21.29	191.23	5%	0.15	12.51				3.19	4.13	1.50	1
Buna-wan District																		
Alejand ro Navar-ro (Lasang)	High suscepti-bility area	6	≥ 1 meter	626.58	10,223	16	20.65	336.92	3%	9.33	14.60				10.69	17.30	1.02	1
Ilang	High suscepti-bility area	3	≥ 1 meter	570.60	24,947	44	7.03	307.36	1%	0.00	8.09				3.86	4.61	0.22	1
Maha-yag	High suscepti-bility area	4	≥ 1 meter	803.81	6,307	8	0.74	5.81	0%	0.00	8.58	-DO-	-DO-	0.05%	3.95	5.41	0.00	1
Pana-can	High suscepti-bility area	5	≥ 1 meter	698.12	35,806	51	31.89	1,635.60	5%	4.92	6.28				12.05	22.89	4.22	1
Ti-bungco	High suscepti-bility area	3	≥ 1 meter	719.02	41,864	58	14.31	833.19	2%	5.83	14.08				4.48	6.96	0.07	1

Table PO – 33. Population Severity of Consequence Estimation to Floods, Davao City, cont.

Hazard				Exposure						Vulnerability						Severity of Consequence		
Baran-gay	Flood Suscepti-bility	Likelihood of Occur-rence	Flood Depth	Residen-tial Area	Baran-gay Popula-tion	Popula-tion Den-sity Per Hectare Of Resi-dential Area	Affect-ed Area	Exposed Popula-tion	Exposure Percent-age	Percent-age of Informal Settlers	Percentage of Popu-lation Living In Dwelling Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of House-holds Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score
Calinan District																		
Calinan	High suscepti-bility area	5	≥ 1 meter	830.55	23,052	28	107.19	2,975.07	13%	0.38	4.95	-DO-	-DO-	0.16%	2.71	2.71	0.31	3
Domin-ga	High suscepti-bility area	3	≥ 1 meter	602.11	1,607	3	1.73	4.62	0%	0.00	16.55				6.23	11.57	0.00	1
Inayan-gan	High suscepti-bility area	3	≥ 1 meter	1,420.54	4,832	3	0.01	0.03	0%	0.00	17.40				4.25	8.33	0.00	1
Laman-an	High suscepti-bility area	3	≥ 1 meter	2,094.88	4,538	2	0.06	0.13	0%	3.75	14.43				5.17	12.50	0.00	1
Pangya-n	High suscepti-bility area	3	≥ 1 meter	708.97	2,035	3	1.99	5.71	0%	0.00	9.24				1.98	7.14	0.00	1
River-side	High suscepti-bility area	4	≥ 1 meter	514.85	5,450	11	19.33	204.62	4%	16.07	8.31				3.41	5.56	2.14	1
Saloy	High suscepti-bility area	4	≥ 1 meter	2,291.36	2,112	1	0.01	0.01	0%	0.00	18.56				5.06	5.45	0.00	1
Tama-yong	High suscepti-bility area	3	≥ 1 meter	1,925.20	7,273	4		0.00	0%	2.45	14.82				10.93	25.18	1.29	1

Table PO – 33. Population Severity of Consequence Estimation to Floods, Davao City, cont.

Hazard				Exposure						Vulnerability						Severity of Consequence		
Baran-gay	Flood Suscepti-bility	Likelihood of Occur-rence	Flood Depth	Residen-tial Area	Baran-gay Popula-tion	Popula-tion Den-sity Per Hectare Of Resi-dential Area	Affect-ed Area	Exposed Popula-tion	Exposure Percent-age	Percent-age of Informal Settlers	Percentage of Popu-lation Living In Dwelling Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of House-holds Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score
Mari-log District																		
Bantol	High suscepti-bility area	4	≥ 1 meter	1,403.54	2,324	2		0.00	0%	0.04	18.93	-DO-	-DO-	0.09%	0.66	18.21	0.00	1
Gumita n	High suscepti-bility area	6	≥ 1 meter	5,727.67	1,756	0	0.03	0.01	0%	0.00	0.00				17.97	59.91	8.29	1
Malam ba	High suscepti-bility area	5	≥ 1 meter	11,074.12	4,864	0	1.40	0.61	0%	1.05	10.90				9.13	17.97	0.14	1
Mari-log	High suscepti-bility area	5	≥ 1 meter	18,031.84	16,188	1	0.10	0.09	0%	0.00	0.00				11.04	16.60	0.09	1
Sa-laysay	High suscepti-bility area	3	≥ 1 meter	4,467.69	4,431	1	0.03	0.03	0%	0.00	0.00				9.49	18.31	1.19	1
Sua-wan	High suscepti-bility area	3	≥ 1 meter	4,571.98	4,586	1		0.00	0%	2.73	20.15				9.90	14.65	0.40	1
Tamu-gan	High suscepti-bility area	6	≥ 1 meter	1,132.32	8,351	7	8.77	64.68	1%	0.00	0.00				1.64	8.11	0.00	1

Table PO – 33. Population Severity of Consequence Estimation to Floods, Davao City, cont.

Hazard				Exposure						Vulnerability							Severity of Consequence	
Baran-gay	Flood Suscepti-bility	Likelihood of Occur-rence	Flood Depth	Residen-tial Area	Baran-gay Popula-tion	Popula-tion Den-sity Per Hectare Of Resi-dential Area	Affect-ed Area	Exposed Popula-tion	Exposure Percent-age	Percent-age of Informal Settlers	Percentage of Popu-lation Living In Dwell-ing Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of House-holds Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score
Paqui-bato District																		
Pa-ñalum	High suscepti-bility area	3	≥ 1 meter	1,131.41	1,831	2		0.00	0%	0.00	0.00	-DO-	-DO-	0.09%	16.56	13.87	0.76	1
Paqui-bato	High suscepti-bility area	3	≥ 1 meter	3,511.00	2,495	1		0.00	0%	2.69	18.16				9.09	8.70	0.92	1
Sumim-ao	High suscepti-bility area	3	≥ 1 meter	2,539.79	1,666	1	0.66	0.43	0%	0.00	21.19				4.86	15.41	0.00	1
Tapak	High suscepti-bility area	3	≥ 1 meter	10,406.75	5,258	1	1.93	0.98	0%	0.97	20.88				17.11	12.29	0.00	1
Talo-mo District																		
Bago Aplaya	High suscepti-bility area	5	≥ 1 meter	217.35	15,918	73	28.28	2,071.13	13%	0.00	0.00	-DO-	-DO-	0.07%	5.57	11.79	3.31	3
Bago Gallera	High suscepti-bility area	4	≥ 1 meter	717.82	17,378	24	49.25	1,192.31	7%	1.59	4.25				1.78	1.82	0.08	2
Baliok	High suscepti-bility area	3	≥ 1 meter	248.28	16,140	65	14.12	917.90	6%	0.00	0.00				1.80	1.93	0.41	2
Bucana	High suscepti-bility area	4	≥ 1 meter	410.51	83,964	205	86.42	17,675.99	21%	8.82	14.46				2.11	2.57	2.14	4

Table PO – 33. Population Severity of Consequence Estimation to Floods, Davao City, cont.

Hazard				Exposure						Vulnerability							Severity of Consequence	
Baran-gay	Flood Suscepti-bility	Likelihood of Occur-rence	Flood Depth	Residen-tial Area	Baran-gay Popula-tion	Popula-tion Den-sity Per Hectare Of Resi-dential Area	Affect-ed Area	Exposed Popula-tion	Exposure Percent-age	Percent-age of Informal Settlers	Percentage of Popu-lation Living In Dwelling Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of House-holds Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score
Catalu-nan Grande	High suscepti-bility area	3	≥ 1 meter	1,495.06	32,461	22	69.62	1,511.60	5%	2.22	6.65				0.44	0.38	0.12	1
Catalu-nan Pequeño	High suscepti-bility area	3	≥ 1 meter	594.49	22,809	38	26.64	1,022.11	4%	0.89	3.73				1.57	4.23	0.00	1
Dumoy	High suscepti-bility area	4	≥ 1 meter	530.77	18,622	35	28.49	999.57	5%	0.00	0.00				3.46	4.24	0.09	2
Ma-a	High suscepti-bility area	6	≥ 1 meter	999.38	59,803	60	136.31	8,156.80	14%	5.01	6.25				5.78	20.87	2.40	3
Matina Aplaya	High suscepti-bility area	6	≥ 1 meter	315.49	33,384	106	72.79	7,702.37	23%	7.58	8.37				1.22	1.59	2.05	4
Matina Cross-ing	High suscepti-bility area	6	≥ 1 meter	488.82	32,436	66	66.49	4,411.99	14%	0.00	0.00	-DO-	-DO-	0.07%	2.69	2.64	0.88	3
Matina Pangí	High suscepti-bility area	6	≥ 1 meter	584.12	18,081	31	51.00	1,578.67	9%	3.03	9.49				1.10	0.20	0.24	2
Talomo	High suscepti-bility area	6	≥ 1 meter	642.95	59,678	93	226.76	21,047.64	35%	7.09	38.16				2.44	6.92	2.20	4

Table PO – 33. Population Severity of Consequence Estimation to Floods, Davao City, cont.

Hazard				Exposure						Vulnerability						Severity of Consequence		
Baran-gay	Flood Suscepti-bility	Likelihood of Occur-rence	Flood Depth	Residen-tial Area	Baran-gay Popula-tion	Popula-tion Den-sity Per Hectare Of Resi-dential Area	Affect-ed Area	Exposed Popula-tion	Exposure Percent-age	Percent-age of Informal Settlers	Percentage of Popu-lation Living In Dwelling Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of House-holds Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score
Toril District																		
Baya-bas	High suscepti-bility area	4	≥ 1 meter	1,201.36	2,989	2	-	0.00	0%	0.23	13.72	-DO-	-DO-	0.07%	2.43	6.68	0.00	1
Binuga-o	High suscepti-bility area	3	≥ 1 meter	483.32	6,934	14	26.77	384.06	6%	0.06	11.93				3.02	2.17	0.00	2
Ca-mansi	High suscepti-bility area	4	≥ 1 meter	363.18	1,189	3	-	0.00	0%	0.84	10.01				1.32	0.00	0.63	1
Cross-ing Baya-bas	High suscepti-bility area	5	≥ 1 meter	223.35	11,490	51	21.61	1,111.70	10%	2.21	7.30				2.99	2.18	1.00	2
Daliao	High suscepti-bility area	3	≥ 1 meter	194.55	21,124	109	23.42	2,542.91	12%	0.33	5.52				1.34	4.43	0.21	3
Daliaon Planta-tion	High suscepti-bility area	3	≥ 1 meter	1,036.93	3,214	3	0.01	0.03	0%	12.41	22.96				0.62	6.02	0.00	1
Lizada	High suscepti-bility area	5	≥ 1 meter	436.16	20,112	46	19.82	913.93	5%	6.96	7.58				2.19	1.83	0.16	1
Lubo-gan	High suscepti-bility area	4	≥ 1 meter	208.96	12,156	58	32.08	1,866.22	15%	0.00	0.00				0.57	0.06	0.00	3
Marap-angi	High suscepti-bility area	6	≥ 1 meter	703.76	6,889	10	12.97	126.96	2%	0.00	9.06				6.20	9.60	2.60	1

Table PO – 33. Population Severity of Consequence Estimation to Floods, Davao City, cont.

Hazard				Exposure						Vulnerability						Severity of Consequence		
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density Per Hectare Of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage of Informal Settlers	Percentage of Population Living In Dwelling Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of Households Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score
Sirawan	High susceptibility area	4	≥ 1 meter	963.70	7,140	7	22.25	164.85	2%	4.30	9.87	-DO-	-DO-	0.07%	4.36	3.82	2.36	1
Tagluno	High susceptibility area	3	≥ 1 meter	564.16	1,391	2	0.09	0.22	0%	0.00	8.91				1.61	7.69	0.00	1
Toril	High susceptibility area	4	≥ 1 meter	131.60	12,140	92	69.46	6,407.63	53%	0.49	6.58				7.13	8.50	0.39	4
Tugbok District																		
Bago Oshiro	High susceptibility area	3	≥ 1 meter	637.28	11,932	19	2.96	55.42	0%	11.41	6.55	-DO-	-DO-	0.04%	1.53	2.94	0.19	1
Los Amigos	High susceptibility area	5	≥ 1 meter	445.49	9,722	22	38.62	842.81	9%	1.43	7.25				5.89	11.10	0.00	2
Manambulan	High susceptibility area	3	≥ 1 meter	768.50	2,661	3	9.10	31.51	1%	0.04	8.08				5.56	8.61	0.00	1
Mintal	High susceptibility area	5	≥ 1 meter	752.19	13,227	18	65.05	1,143.88	9%	1.93	7.39				4.17	3.53	0.53	2
Sto. Niño	High susceptibility area	4	≥ 1 meter	147.32	20,103	136	8.74	1,192.64	6%	0.00	7.78				1.85	2.34	0.19	2
Tacunan	High susceptibility area	3	≥ 1 meter	906.70	12,773	14	31.80	447.98	4%	0.40	4.31				2.36	6.30	2.18	1

Table PO – 33. Population Severity of Consequence Estimation to Floods, Davao City, cont.

Hazard				Exposure						Vulnerability						Severity of Consequence		
Baran-gay	Flood Suscepti-bility	Likelihood of Occur-rence	Flood Depth	Residen-tial Area	Baran-gay Popula-tion	Popula-tion Den-sity Per Hectare Of Resi-dential Area	Affect-ed Area	Exposed Popula-tion	Exposure Percent-age	Percent-age of Informal Settlers	Percentage of Popu-lation Living In Dwelling Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of House-holds Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score
Talan-dang	High suscepti-bility area	3	≥ 1 meter	1,333.40	3,392	3	3.19	8.11	0%	0.06	15.45	-DO-	-DO-	0.04%	8.89	11.93	4.56	1
Tugbok	High suscepti-bility area	6	≥ 1 meter	989.79	15,115	15	107.98	1,648.95	11%	1.42	4.13				2.71	4.20	0.92	3
Ula	High suscepti-bility area	3	≥ 1 meter	941.30	4,130	4	7.04	30.89	1%	0.29	7.48				9.61	27.96	0.69	1

Landslide

None of the barangays in Table PO – 4 have a severity of consequence score of four (4). The next highest, which is three (3), is only given to Barangays Ma-a and Matina Pang, with less than 20% population which need of immediate assistance. The rest of the barangays have low severity of consequence scores of either

Table PO – 34. Population Severity of Consequence to Landslides, Davao City

Hazard		Exposure						Vulnerability						Severity Of Consequence		
Barangay	Likelihood of Occurrence	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage of Population Living In Dwelling Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of Households Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 Months)			Severity Of Consequence Score	
												Weight for Age	Height for Age	Length or Height for Weight		
Poblacion District																
10-A	4	28.64	6,764	236	-	-	0.00%	4.95	2.96	40.30%	19.30%	0.08%	4.26	6.68	0.00	1
19-B	4	362.55	31,766	88	1.32	115	0.36%	2.06	3.56				3.36	3.80	2.54	1
Baguio District																
Carmen	5	806.01	2,156	3	1.26	3	0.16%	4.59	19.02	-DO-	-DO-	0.05%	11.72	13.67	1.17	1
Tambobong	5	1,230.05	5,993	5	4.49	22	0.37%	0.00	18.42				6.79	19.72	0.26	1
Buhangin District																
Buhangin	5	672.24	65,461	97	36.71	3,575	5.46%	1.73	6.67	-DO-	-DO-	0.06%	1.03	0.92	0.69	2
Callawa	4	1,354.75	3,553	3	0.68	2	0.05%	0.00	9.85				3.31	3.31	0.74	1
Tigatto	5	761.31	36,387	48	39.43	1,885	5.18%	0.15	2.75				3.30	2.67	0.72	2
Bunawan District																
Bunawan	4	769.18	23,495	31	7.75	237	1.01%	0.45	10.75	-DO-	-DO-	0.05%	5.26	9.29	0.82	1
Panacan	4	698.12	35,806	51	67.73	3,474	9.70%	4.92	6.28				12.05	22.89	4.22	2
San Isidro	4	630.33	5,333	8	3.40	29	0.54%	0.00	3.21				5.18	5.76	0.33	1
Calinan District																
Inayangan	5	1,420.54	4,832	3	1.89	6	0.13%	0.00	17.40	-DO-	-DO-	0.16%	4.25	8.33	0.00	1
Megkawayan	5	1,844.95	3,015	2	5.52	9	0.30%	0.00	16.85				12.57	14.66	0.00	1
Marilog District																
Baganihan	5	1,062.62	1,295	1	0.16	0	0.02%	0.77	20.77	-DO-	-DO-	0.09%	10.78	12.08	0.98	1
Buda	5	4,292.76	1,885	0	4.07	2	0.09%	5.25	14.16				7.97	10.51	0.00	1

Table PO – 34. Population Severity of Consequence to Landslides, Davao City, cont.

Hazard		Exposure						Vulnerability							Severity Of Consequence	
Barangay	Likelihood of Occurrence	Residential Area	Barangay Population	Population Density Per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage Informal Settlers	Percentage of Population Living In Dwelling Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of Households Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 Months)			Severity Of Consequence Score
													Weight for Age	Height for Age	Length or Height for Weight	
Gumitan	5	5,727.67	1,756	0	6.63	2	0.12%	0.00	0.00	-DO-	-DO-	0.09%	17.97	59.91	8.29	1
Magsaysay	4	5,830.15	2,425	0	8.68	4	0.15%	0.00	19.84				2.45	9.17	0.31	1
Marilog	6	18,031.84	16,188	1	91.12	82	0.51%	0.00	0.00				11.04	16.60	0.09	1
Salaysay	5	4,467.69	4,431	1	10.06	10	0.23%	0.00	0.00				9.49	18.31	1.19	1
Suawan	5	4,571.98	4,586	1	7.31	7	0.16%	2.73	20.15				9.90	14.65	0.40	1
Tamugan	6	1,132.32	8,351	7	0.03	0	0.00%	0.00	0.00				1.64	8.11	0.00	1
Paquibato District																
Fatima	4	3,093.73	3,502	1	7.61	9	0.25%	3.51	23.99	-DO-	-DO-	0.09%	12.28	10.02	0.00	1
Lumiad	5	3,206.09	1,553	0	8.62	4	0.27%	0.00	20.35				20.29	10.36	0.84	1
Sumimao	4	2,539.79	1,666	1	1.78	1	0.07%	0.00	21.19				4.86	15.41	0.00	1
Tapak	6	10,406.75	5,258	1	18.46	9	0.18%	0.97	20.88				17.11	12.29	0.00	1
Talomo District																
Catalunan Grande	4	1,495.06	32,461	22	5.07	110	0.34%	2.22	6.65	-DO-	-DO-	0.07%	0.44	0.38	0.12	1
Catalunan Pequeño	4	594.49	22,809	38	-	-	0.00%	0.89	3.73				1.57	4.23	0.00	1
Langub	4	853.20	2,883	3	13.48	46	1.58%	0.00	11.48				0.26	0.67	0.09	1
Ma-a	4	999.38	59,803	60	101.76	6,089	10.18%	5.01	6.25				5.78	20.87	2.40	3
Matina Crossing	6	488.82	32,436	66	29.25	1,941	5.98%	0.00	0.00				2.69	2.64	0.88	2
Matina Pangí	6	584.12	18,081	31	64.73	2,004	11.08%	3.03	9.49				1.10	0.20	0.24	3
Toril District																
Daliao	4	194.55	21,124	109	-	-	0.00%	0.33	5.52	-DO-	-DO-	0.07%	1.34	4.43	0.21	1

Risk Estimation

Risk estimation is computed by multiplying the likelihood of occurrence score to the severity of consequence score. The areas with risk scores ranging from 12 to 24 are considered as high risk areas, which have very high to moderate of severity of consequence and frequent occurrences of such hazard. The score ranging from five (5) to below 12 are called as moderate risk areas, where their likelihood of occurrence of a hazard event is either improbable or rare event with very high to moderate severity of consequence. The least are those scores below five (5), which have very rare hazard events and pertain to moderate to low severity of consequence.

Flood – Results of the risk estimation show that Barangays 1-A, 5-A, 6-A, 7-A, 8-A, 9-A, 10-A, 11-B, 19-B, 20-B, Gov. Paciano Bangoy, Calinan Proper, Bago Aplaya, Bucana, Ma-a, Matina Aplaya, Matina Crossing, Matina Pang, Talomo Proper, Lubogan, Toril Proper, and Tugbok Proper have the highest risk scores ranging from 12 to 24, which depict that these are high risk areas to floods (Table PO – 5). Both likelihood of occurrence score and severity of consequence score are high in these areas, with a corresponding large number of population.

Table PO – 35. Population Risk to Flood, Davao City

Hazard				Exposure						Vulnerability						Severity Of Consequence	Risk			
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage Informal Settlers	Percentage of Population living in dwelling units with walls made from light to salvagable materials	Percentage of young and old dependents	Percentage of households living below the poverty threshold level	Percentage of persons with disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score	Risk Estimation	Risk Category
															Weight for Age	Height for Age	Length or Height for Weight			
Poblacion District																				
1-A	High susceptibility area	3	≥ 1 meter	15.36	3,103	202	6.94	1,401.46	45%	11.44	11.18	40.30%	19.30%	0.08%	0.70	6.32	0.00	4	12	High Risk Area
2-A	High susceptibility area	4	≥ 1 meter	16.38	3,589	219	1.23	269.50	8%	11.90	10.00				0.64	1.68	0.00	4	8	Moderate Risk Area
3-A	High susceptibility area	3	≥ 1 meter	20.776	370	18	0.55	9.80	3%	0.00	0.00				25.00	0.00	0.00	1	3	Low Risk Area
4-A	High susceptibility area	3	≥ 1 meter	23.51	1,633	72	2.93	209.75	12%	20.38	14.56				5.28	8.54	3.66	3	9	Moderate Risk Area
5-A	High susceptibility area	4	≥ 1 meter	38.10	11,438	300	14.12	4,231.22	37%	0.00	11.92				5.84	10.65	0.81	4	16	High Risk Area
6-A	High susceptibility area	3	≥ 1 meter	15.00	2,084	129	4.39	609.92	29%	16.27	15.70				4.48	7.46	0.37	4	12	High Risk Area
7-A	High susceptibility	3	≥ 1 meter	22.50	3,984	177	10.81	1,514.09	46%	2.21	6.93				5.44	6.45	0.18	4	12	High Risk Area

Table PO – 35. Population Risk to Flood, Davao City, cont.

Hazard				Exposure						Vulnerability						Severity Of Consequence	Risk			
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage Informal Settlers	Percentage of Population living in dwelling units with walls made from light to salvageable materials	Percentage of young and old dependents	Percentage of households living below the poverty threshold level	Percentage of persons with disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score	Risk Estimation	Risk Category
															Weight for Age	Height for Age	Length or Height for Weight			
8-A	High susceptibility area	4	≥ 1 meter	179.80	11,075	62	47.94	2,952.92	27%	4.41	5.64				4.98	7.07	0.98	4	16	High Risk Area
9-A	High susc. area	4	≥ 1 meter	27.50	5,698	207	13.91	2,882.15	51%	0.44	4.41				3.70	4.97	0.77	4	16	High Risk Area
10-A	High susceptibility area	5	≥ 1 meter	28.64	6,764	236	5.79	1,367.63	20%	4.95	2.96				4.26	6.68	0.00	4	20	High Risk Area
11-B	High susceptibility area	3	≥ 1 meter	9.57	1,901	199	2.56	508.74	27%	11.31	10.36				0.66	3.29	1.97	4	12	High Risk Area
12-B	High susceptibility area	3	≥ 1 meter	17.54	840	48	1.20	57.48	7%	3.69	74.17				4.84	9.60	0.80	2	6	Moderate Risk Area
13-B	High susceptibility area	3	≥ 1 meter	11.26	427	38	0.57	21.62	5%	8.43	6.56				11.63	18.18	15.91	2	6	Moderate Risk Area
14-B	High susceptibility area	3	≥ 1 meter	18.41	1,175	64	3.10	197.84	17%	8.85	3.57				3.67	2.75	11.01	3	9	Moderate Risk Area
15-B	High susceptibility area	3	≥ 1 meter	31.54	2,891	92	1.46	133.82	5%	12.90	9.34				0.59	0.30	3.26	1	3	Low Risk Area
16-B	High susceptibility area	3	≥ 1 meter	5.53	840	152	0.43	65.35	8%	0.00	0.00				4.00	2.40	0.80	2	6	Moderate Risk Area
17-B	High susceptibility	3	≥ 1 meter	5.63	810	144	0.53	76.29	9%	0.00	0.86				3.88	5.83	4.85	2	6	Moderate Risk Area

Table PO – 35. Population Risk to Flood, Davao City, cont.

Hazard				Exposure						Vulnerability						Severity Of Consequence	Risk			
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage Informal Settlers	Percentage of Population living in dwelling units with walls made from light to salvageable materials	Percentage of young and old dependents	Percentage of households living below the poverty threshold level	Percentage of persons with disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score	Risk Estimation	Risk Category
															Weight for Age	Height for Age	Length or Height for Weight			
	area																			
18-B	High susceptibility area	3	≥ 1 meter	19.80	1,832	93	0.41	37.94	2%	0.05	15.72				3.19	9.57	2.13	1	3	Low Risk Area
19-B	High susceptibility area	6	≥ 1 meter	362.55	31,766	88	40.47	3,545.89	11%	2.06	3.56				3.36	3.80	2.54	3	18	High Risk Area
20-B	High susceptibility area	4	≥ 1 meter	56.58	4,581	81	13.93	1,127.88	25%	0.59	4.26				1.61	5.38	1.61	4	16	High Risk Area
28-C	Moderate to low susceptibility area	2	≥ 1 meter	15.71	2,270	144	1.65	238.38	11%	0.31	8.72	40.30%	19.30%	0.08%	1.05	1.75	0.00	3	6	Moderate Risk Area
Agdao District																				
Agdao Proper	High susceptibility area	3	> 1 meter	38.29	8,897	232	7.62	1,770.66	20%	21.30	19.13				1.82	2.78	0.19	3	9	Moderate Risk Area
Gov. Paciano BANGAY	High susceptibility area	3	> 1 meter	81.47	8,904	108	17.65	1,909.93	21%	5.35	8.77				4.14	7.89	1.87	4	12	High Risk Area
San Antonio	High susceptibility area	3	> 1meter	89.88	2,966	115	0.01	1.15	0%	5.90	12.98	-DO-	-DO-	0.07%	3.66	3.24	0.00	1	3	Low Risk Area
Ubalde	High susceptibility area	3	> 1meter	9.98	9,903	297	0.93	276.36	3%	0.00	1.40				4.29	7.08	3.86	1	3	Low Risk Area
Wilfredo	High	4	>	72.26	15,586	137	1.51	206.93	1%	3.46	1.02				1.26	3.05	1.41	1	4	Low Risk

Table PO – 35. Population Risk to Flood, Davao City, cont.

Hazard				Exposure						Vulnerability						Severity Of Consequence	Risk			
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage Informal Settlers	Percentage of Population living in dwelling units with walls made from light to salvageable materials	Percentage of young and old dependents	Percentage of households living below the poverty threshold level	Percentage of persons with disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score	Risk Estimation	Risk Category
															Weight for Age	Height for Age	Length or Height for Weight			
Aquino	susceptibility area		1meter																	Area
Baguio District																				
Baguio	High susceptibility area	3	≥ 1 meter	848.74	4,655	5	8.10	44.43	1%	1.70	6.68	-DO-	-DO-	0.05%	2.03	4.21	2.34	1	3	Low Risk Area
Gumalang	High susceptibility area	4	≥ 1 meter	1,572.78	5,081	3		0.00	0%	0.41	12.04	-DO-	-DO-	0.05%	4.50	6.33	0.42	1	4	Low Risk Area
Malagos	High susceptibility area	4	≥ 1 meter	1,210.59	6,524	5	4.89	26.35	0%	11.70	9.03				4.20	7.97	2.91	1	4	Low Risk Area
Tambobong	High susceptibility area	3	≥ 1 meter	1,230.05	5,993	5		0.00	0%	0.00	18.42				6.79	19.72	0.26	1	3	Low Risk Area
Tawan-Tawan	High susceptibility area	4	≥ 1 meter	974.39	3,889	4		0.00	0%	0.36	11.70				5.04	5.22	0.00	1	4	Low Risk Area
Buhangin District																				
Buhangin	High susceptibility area	5	≥ 1 meter	672.24	65,461	97	9.41	916.32	1%	1.73	6.67	-DO-	-DO-	0.06%	1.03	0.92	0.69	1	5	Low Risk Area
Cabantian	High susceptibility area	3	≥ 1 meter	757.62	43,758	58	5.47	315.93	1%	0.46	2.13				0.39	0.14	0.00	1	3	Low Risk Area
Communal	High susceptibility area	4	≥ 1 meter	584.65	16,740	29	7.08	202.72	1%	0.00	0.00				1.54	1.77	0.23	1	4	Low Risk Area

Table PO – 35. Population Risk to Flood, Davao City, cont.

Hazard				Exposure						Vulnerability					Severity Of Consequence	Risk				
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage Informal Settlers	Percentage of Population living in dwelling units with walls made from light to salvageable materials	Percentage of young and old dependents	Percentage of households living below the poverty threshold level	Percentage of persons with disabilities	Percentage of Malnourished Individuals (0-12 months)			Severity of Consequence Score	Risk Estimation	Risk Category
															Weight for Age	Height for Age	Length or Height for Weight			
Maadag	High susceptibility area	6	≥ 1 meter	969.19	13,594	14	20.99	294.41	2%	3.31	6.14				5.81	14.53	2.14	1	6	Moderate Risk Area
Pampanga	High susceptibility area	3	≥ 1 meter	117.51	14,381	123	10.16	1,243.39	9%	0.00	0.00				3.57	8.38	6.11	2	6	Moderate Risk Area
Sasa	High susceptibility area	3	≥ 1 meter	767.65	52,386	68	47.18	3,219.62	6%	2.93	6.48				4.43	8.14	1.03	2	6	Moderate Risk Area
Tigetto	High susceptibility area	3	≥ 1 meter	761.31	36,387	48	102.74	4,910.48	13%	0.15	2.75	-DC-	-DC-	0.06%	3.30	2.67	0.71	3	9	Moderate Risk Area
Wasan	High susceptibility area	4	≥ 1	436.97	1,926	9	21.29	191.21	5%	0.15	12.51				2.19	4.12	1.90	1	4	Low Risk Area
Bunawan District																				
Alexandro Navarro (Lasing)	High susceptibility area	6	≥ 1 meter	626.58	10,223	16	20.65	336.91	3%	9.33	18.60				10.69	17.30	1.02	1	6	Moderate Risk Area
Itang	High susceptibility area	3	≥ 1 meter	570.60	24,947	44	7.03	307.36	1%	0.00	8.09				3.86	4.61	0.21	1	3	Low Risk Area
Mahayag	High susceptibility area	4	≥ 1 meter	803.81	6,307	8	0.74	5.81	0%	0.00	8.58				3.95	5.41	0.00	1	4	Low Risk Area
Panacan	High susceptibility area	5	≥ 1 meter	680.12	35,806	51	31.89	1,635.60	5%	4.91	6.28				11.05	21.89	4.21	1	5	Low Risk Area

Table PO – 35. Population Risk to Flood, Davao City, cont.

Hazard				Exposure						Vulnerability						Severity Of Consequence	Risk			
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage Informal Settlers	Percentage of Population living in dwelling units with walls made from light to salvagable materials	Percentage of young and old dependents	Percentage of households living below the poverty threshold level	Percentage of persons with disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score	Risk Estimation	Risk Category
															Weight for Age	Height for Age	Length or Height for Weight			
Tibungco	High susceptibility area	3	≥1 meter	719.02	41,864	58	14.31	833.19	2%	5.83	14.08				4.48	6.96	0.07	1	3	Low Risk Area
Calinan District																				
Calinan	High susc. area	5	≥1 meter	830.55	23,052	28	107.19	1,975.07	13%	0.38	4.95	-DO-	-DO-	0.16%	2.71	2.71	0.31	3	15	High Risk Area
Dominga	High susceptibility area	3	≥1 meter	602.11	1,687	3	1.73	4.62	0%	0.00	16.55	-DO-	-DO-	0.16%	6.23	11.57	0.00	1	3	Low Risk Area
Inoyangan	High susceptibility area	3	≥1 meter	1,420.54	4,832	3	0.01	0.08	0%	0.00	17.40				4.25	8.33	0.00	1	3	Low Risk Area
Lemunan	High susceptibility area	3	≥1 meter	2,094.88	4,538	2	0.06	0.33	0%	3.75	14.43				5.17	12.50	0.00	1	3	Low Risk Area
Pangyan	High susceptibility area	3	≥1 meter	708.97	2,015	3	1.99	5.71	0%	0.00	9.24				1.98	7.14	0.00	1	3	Low Risk Area
Riverside	High susceptibility area	4	≥1 meter	514.85	5,450	11	19.33	204.62	4%	16.07	8.31				3.41	5.56	2.14	1	4	Low Risk Area
Saly	High susceptibility area	4	≥1 meter	2,291.36	2,112	1	0.01	0.01	0%	0.00	18.56				5.06	5.45	0.00	1	4	Low Risk Area
Tamayong	High susceptibility area	3	≥1 meter	1,925.20	7,273	4	-	0.00	0%	2.45	14.82				10.93	25.18	1.29	1	3	Low Risk Area
Marilog District																				

Table PO – 35. Population Risk to Flood, Davao City, cont.

Hazard				Exposure						Vulnerability						Severity Of Consequence	Risk									
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage Informal Settlers	Percentage of Population living in dwelling units with walls made from light to salvageable materials	Percentage of young and old dependents	Percentage of households living below the poverty threshold level	Percentage of persons with disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score	Risk Estimation	Risk Category						
															Weight for Age	Height for Age	Length or Height for Weight									
Bental	High susceptibility area	4	≥ 1 meter	1,403.54	2,324	2		0.00	0%	0.04	18.93	-DO-	-DO-	0.05%	0.66	18.21	0.00	1	4	Low Risk Area						
Gumitan	High susceptibility area	6	≥ 1 meter	5,727.67	1,756	0	0.03	0.01	0%	0.00	0.00				17.97	59.91	8.29				1	6	Moderate Risk Area			
Melambn	High susceptibility area	5	≥ 1 meter	11,074.12	4,864	0	1.40	0.61	0%	1.05	10.90	-DO-	-DO-	0.05%	9.13	17.97	0.14	1	5	Low Risk Area						
Marilog	High susceptibility area	5	≥ 1 meter	18,031.84	16,168	1	0.10	0.09	0%	0.00	0.00				11.04	16.60	0.09				1	5	Low Risk Area			
Salaysay	High susceptibility area	3	≥ 1 meter	4,467.69	4,431	1	0.03	0.03	0%	0.00	0.00				9.49	18.31	1.19				1	3	Low Risk Area			
Suawan	High susceptibility area	3	≥ 1 meter	4,571.98	4,586	1		0.00	0%	2.73	20.15				9.90	14.65	0.40				1	3	Low Risk Area			
Tanugon	High susceptibility area	6	≥ 1 meter	1,132.32	8,351	7	8.77	64.68	1%	0.00	0.00				1.64	8.11	0.00				1	6	Moderate Risk Area			
Paqubato District																										
Pañalam	High susceptibility area	3	≥ 1 meter	1,131.41	1,831	2	-	0.00	0%	0.00	0.00				-DO-	-DO-	0.05%				16.56	13.87	0.76	1	3	Low Risk Area
Paqubato	High susceptibility area	3	≥ 1 meter	3,511.00	2,495	1	-	0.00	0%	2.69	18.16	9.09	8.70	0.92				1	3	Low Risk Area						

Table PO – 35. Population Risk to Flood, Davao City, cont.

Hazard				Exposure						Vulnerability						Severity Of Consequence	Risk			
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage Informal Settlers	Percentage of Population living in dwelling units with walls made from light to salvageable materials	Percentage of young and old dependents	Percentage of households living below the poverty threshold level	Percentage of persons with disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score	Risk Estimation	Risk Category
															Weight for Age	Height for Age	Length or Height for Weight			
Sumitao	High susceptibility area	3	≥ 1 meter	2,539.79	1,666	1	0.66	0.43	0%	0.00	21.19				4.86	15.41	0.00	1	3	Low Risk Area
Tapak	High susceptibility area	3	≥ 1 meter	10,406.75	5,258	1	1.93	0.98	0%	0.97	20.88				17.11	12.09	0.00	1	3	Low Risk Area
Talomo District																				
Bago Aplaya	High susceptibility area	5	≥ 1 meter	217.35	15,918	73	38.28	1,071.13	13%	0.00	0.00				5.57	11.79	3.31	3	15	High Risk Area
Bago Galeria	High susceptibility area	4	≥ 1 meter	717.82	17,378	24	49.25	1,193.31	7%	1.59	4.25				1.78	1.82	0.08	2	8	Moderate Risk Area
Balok	High susceptibility area	3	≥ 1 meter	248.28	16,140	65	14.12	917.90	6%	0.00	0.00				1.80	1.99	0.41	2	6	Moderate Risk Area
Bucina	High susceptibility area	4	≥ 1 meter	410.51	83,969	205	86.42	17,675.99	21%	8.82	14.46	-00-	-00-	0.07%	2.11	2.57	2.14	4	16	High Risk Area
Catibunan Grande	High susceptibility area	3	≥ 1 meter	1,485.06	32,461	22	69.62	1,511.60	5%	1.22	6.65				0.44	0.38	0.11	1	3	Low Risk Area
Catibunan Pookaño	High susceptibility area	3	≥ 1 meter	594.49	12,809	38	16.64	1,023.11	4%	0.89	3.73				1.57	4.23	0.00	1	3	Low Risk Area
Dumoy	High susceptibility area	4	≥ 1 meter	530.77	18,622	35	18.49	999.57	5%	0.00	0.00				3.46	4.24	0.08	2	8	Moderate Risk Area

Table PO – 35. Population Risk to Flood, Davao City, cont.

Hazard				Exposure							Vulnerability						Severity Of Consequence	Risk		
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage Informal Settlers	Percentage of Population living in dwelling units with walls made from light to salvageable materials	Percentage of young and old dependents	Percentage of households living below the poverty threshold level	Percentage of persons with disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score	Risk Estimation	Risk Category
															Weight for Age	Height for Age	Length or Height for Weight			
Ma-a	High susceptibility area	6	≥1 meter	999.38	59,803	60	136.31	8,156.80	14%	5.01	6.25				5.78	20.87	2.40	3	18	High Risk Area
Matina Aplaya	High susceptibility area	6	≥1 meter	315.49	33,384	106	72.79	7,701.37	23%	7.58	8.37				1.22	1.59	2.05	4	24	High Risk Area
Matina Crossing	High susceptibility area	6	≥1 meter	488.82	31,436	66	66.49	4,411.99	14%	0.00	0.00				1.69	2.64	0.88	3	18	High Risk Area
Matina Pangl	High susceptibility area	6	≥1 meter	584.12	18,081	31	51.00	1,578.67	9%	3.03	9.49	-00-	-00-	0.07%	1.10	0.20	0.24	2	12	High Risk Area
Talomo	High susceptibility area	6	≥1 meter	642.95	59,678	93	226.76	21,047.64	35%	7.09	38.16				2.44	6.92	2.20	4	24	High Risk Area
Toil District																				
Bayabas	High susceptibility area	4	≥1 meter	1,201.36	2,989	2	-	0.00	0%	0.23	13.72				1.43	6.68	0.00	1	4	Low Risk Area
Binugao	High susceptibility area	3	≥1 meter	483.32	6,934	14	26.77	384.06	6%	0.06	11.93				3.02	2.17	0.00	2	6	Moderate Risk Area
Canand	High susceptibility area	4	≥1 meter	363.18	1,189	3	-	0.00	0%	0.84	10.01	-00-	-00-	0.07%	1.32	0.00	0.63	1	4	Low Risk Area
Crossing Bayabas	High susceptibility area	5	≥1 meter	223.35	11,490	51	21.61	1,111.70	10%	2.21	7.30				2.99	2.18	1.00	2	10	Moderate Risk Area
Davao	High	3	≥1	194.55	21,124	109	23.42	2,542.91	12%	0.33	5.52				1.34	4.43	0.21	3	9	Moderate

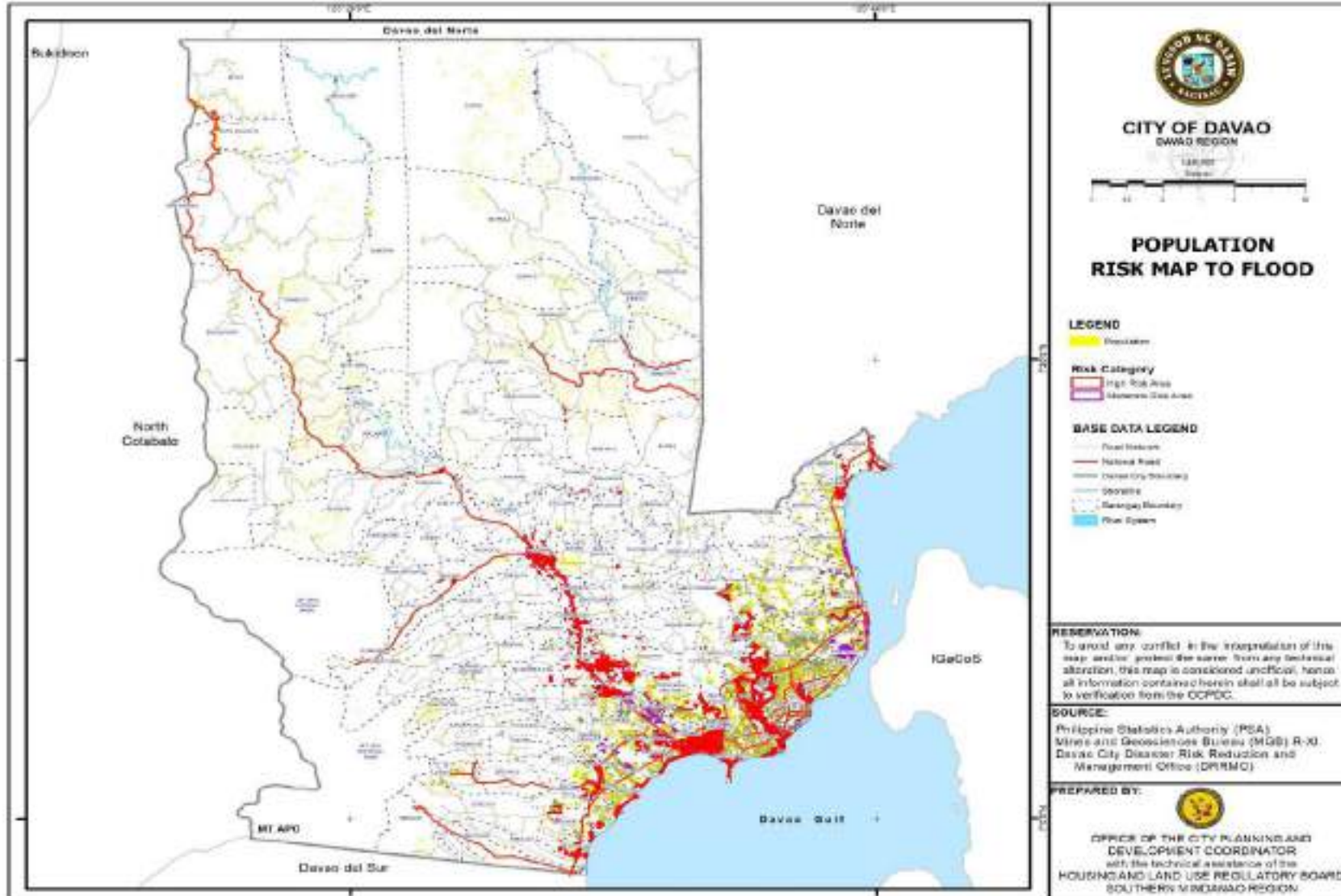
Table PO – 35. Population Risk to Flood, Davao City, cont.

Hazard				Exposure						Vulnerability						Severity Of Consequence	Risk			
Barangay	Flood Susceptibility	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage Informal Settlers	Percentage of Population living in dwelling units with walls made from light to salvageable materials	Percentage of young and old dependents	Percentage of households living below the poverty threshold level	Percentage of persons with disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score	Risk Estimation	Risk Category
															Weight for Age	Height for Age	Length or Height for Weight			
	susceptibility area		meter																Risk Area	
Dalicon Plantation	High susc. area	3	≥1 meter	1,036.93	3,214	3	0.01	0.03	0%	12.41	22.96				0.62	6.02	0.00	1	3	Low Risk Area
Lizada	High susc. area	5	≥1 meter	436.16	20,112	46	19.82	913.93	5%	6.96	7.58				2.19	1.83	0.16	1	5	Low Risk Area
Lubogan	High susceptibility area	4	≥1 meter	208.96	12,156	58	31.08	1,866.22	15%	0.00	0.00				0.57	0.06	0.00	3	12	High Risk Area
Narapangit	High susceptibility area	6	≥1 meter	703.76	6,889	10	12.97	126.96	2%	0.00	9.06				6.20	9.60	2.60	1	6	Moderate Risk Area
Sarwan	High susceptibility area	4	≥1 meter	963.70	7,140	7	22.25	164.85	2%	4.30	9.87	-00-	-00-	0.07%	4.36	3.82	1.36	1	4	Low Risk Area
Taglano	High susceptibility area	3	≥1 meter	564.16	1,391	2	0.09	0.12	0%	0.00	8.91				1.61	7.69	0.00	1	3	Low Risk Area
Toril	High susceptibility area	4	≥1 meter	131.60	12,140	92	69.46	6,407.63	53%	0.49	6.58				7.13	8.50	0.39	4	16	High Risk Area
Tugbok District																				
Bago Oshino	High susceptibility area	3	≥1 meter	637.28	11,933	19	2.96	55.42	0%	11.41	6.55				1.53	2.94	0.19	1	3	Low Risk Area
Los Amigos	High susceptibility area	5	≥1 meter	445.49	9,722	12	38.62	842.81	9%	1.43	7.15	-00-	-00-	0.04%	5.89	11.10	0.00	2	10	Moderate Risk Area

Table PO – 35. Population Risk to Flood, Davao City, cont.

Hazard				Exposure						Vulnerability						Severity Of Consequence	Risk			
Barangay	Flood Susceptibility Area	Likelihood of Occurrence	Flood Depth	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage Informal Settlers	Percentage of Population living in dwelling units with walls made from light to salvagable materials	Percentage of young and old dependents	Percentage of households living below the poverty threshold level	Percentage of persons with disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score	Risk Estimation	Risk Category
															Weight for Age	Height for Age	Length or Height for Weight			
Marambun	High susceptibility area	3	≥ 1 meter	768.50	2,661	3	9.10	31.51	1%	0.09	8.08				5.56	8.61	0.00	1	3	Low Risk Area
Mintal	High susceptibility area	5	≥ 1 meter	752.19	13,227	18	65.05	1,143.88	9%	1.93	7.39				4.17	3.53	0.53	2	10	Moderate Risk Area
Sito Nino	High susceptibility area	4	≥ 1 meter	147.31	20,103	136	8.74	1,192.64	6%	0.00	7.78				1.85	2.34	0.19	2	9	Moderate Risk Area
Tecoman	High susceptibility area	3	≥ 1 meter	506.20	12,773	14	31.80	447.98	4%	0.40	4.31				2.36	6.30	2.18	1	3	Low Risk Area
Talandang	High susceptibility area	3	≥ 1 meter	1,333.40	3,393	3	3.15	8.11	0%	0.06	15.45	-00-	-00-	0.04%	8.89	11.93	4.56	1	3	Low Risk Area
Tugbok	High susceptibility area	6	≥ 1 meter	989.79	15,115	15	107.98	1,648.95	11%	1.42	4.13				1.71	4.20	0.92	3	18	High Risk Area
Ula	High susceptibility area	3	≥ 1 meter	941.30	4,130	4	7.04	30.89	1%	0.29	7.48				9.61	27.96	0.69	1	3	Low Risk Area

Map 2.9. Population Risk Map to Flood, Davao City



Landslide

Results of the risk estimation bare that Barangays Ma-a, Matina Crossing, and Matina Pangli have been identified as high risk areas. Vulnerable sectors including informal settlers are present in these barangays, thereby, making these highly at risk whenever there are occurrences of landslides.

Table PO – 36. Population Risk to Landslide, Davao City

Hazard		Exposure						Vulnerability						Severity Of Consequence	Risk			
Barangay	Likelihood of Occurrence	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage Informal Settlers	Percentage of Population Living in Dwelling Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of Households Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score	Risk Estimation	Risk Category
													Weight for Age	Height for Age	Length or Height for Weight			
Pobladon District																		
10-A	4	28.64	6,764	236	-	-	0.00%	4.95	2.96	40.30%	19.30%	0.00%	4.25	6.68	0.00	1	4	Low Risk Area
15-B	4	362.55	31,756	88	1.32	115	0.36%	2.06	3.56				3.35	3.80	2.54	1	4	Low Risk Area
Baguio District																		
Carmen	5	806.01	2,156	3	1.26	3	0.16%	4.59	19.02	-DO-	-DO-	0.05%	11.72	13.67	1.17	1	5	Low Risk Area
Tambobong	5	1,230.05	5,993	5	4.49	22	0.37%	0.00	18.42				6.79	19.22	0.26	1	5	Low Risk Area
Buhangin District																		
Buhangin	5	672.24	65,461	97	35.71	3,575	5.46%	1.73	6.67	-DO-	-DO-	0.06%	1.03	0.92	0.69	2	10	Moderate Risk Area
Cellewa	4	1,354.75	3,553	3	0.68	2	0.05%	0.00	9.85				3.31	3.31	0.74	1	4	Low Risk Area
Tigatto	5	761.31	36,387	48	39.43	1,885	5.18%	0.15	2.75				3.30	2.67	0.72	2	10	Moderate Risk Area
Bunawan District																		
Bunawan	4	769.18	23,495	31	7.75	237	1.01%	0.45	10.75	-DO-	-DO-	0.05%	5.26	9.29	0.82	1	4	Low Risk

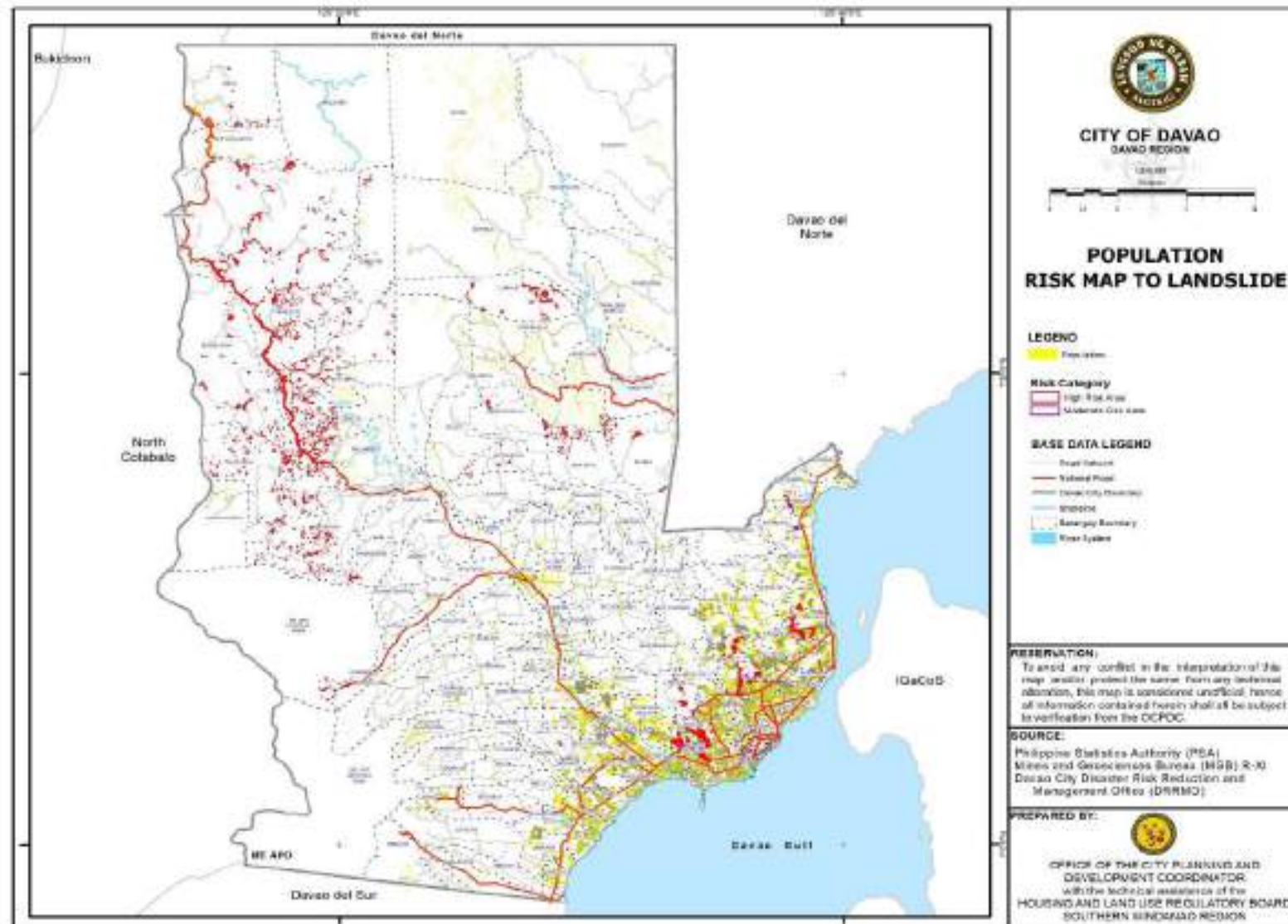
Table PO – 36. Population Risk to Landslide, Davao City, cont.

Hazard		Exposure						Vulnerability						Severity Of Consequence	Risk			
Barangay	Likelihood of Occurrence	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage Informal Settlers	Percentage of Population Living in Dwelling Units With Walls Made from Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of Households Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score	Risk Estimation	Risk Category
													Weight for Age	Height for Age	Length or Height for Weight			
																	Area	
Panacan	4	698.12	35,806	51	67.73	3,474	9.70%	4.92	6.28				12.05	22.89	4.22	2	8	Moderate Risk Area
San Isidro	4	630.33	5,333	8	3.40	29	0.54%	0.00	3.21				5.18	5.76	0.33	1	4	Low Risk Area
Calinan District																		
Inayangan	5	1,410.54	4,832	3	1.89	6	0.13%	0.00	17.40	-DO-	-DO-	0.16%	4.15	8.33	0.00	1	5	Low Risk Area
Mogkawaayan	5	1,844.95	3,035	2	5.52	9	0.30%	0.00	16.85				12.57	14.66	0.00	1	5	Low Risk Area
Marilog District																		
Begonihan	5	1,062.62	1,295	1	0.16	-	0.00%	0.77	20.77	-DO-	-DO-	0.09%	10.78	12.08	0.98	1	5	Low Risk Area
Buda	5	4,292.76	1,885	-	4.07	2	0.09%	5.25	14.16				7.97	10.51	0.00	1	5	Low Risk Area
Gumitan	5	5,727.67	1,756	-	6.63	2	0.12%	0.00	0.00				17.97	59.91	8.29	1	5	Low Risk Area
Magpaytay	4	5,830.15	2,425	-	8.68	4	0.15%	0.00	19.84				2.45	9.17	0.31	1	4	Low Risk Area
Marilog	6	18,031.84	16,188	1	91.12	82	0.51%	0.00	0.00	-DO-	-DO-	0.09%	11.04	16.60	0.09	1	6	Moderate Risk Area
Salaytay	5	4,467.69	4,431	1	10.06	10	0.23%	0.00	0.00				9.49	18.31	1.19	1	5	Low Risk Area
Suawan	5	4,571.98	4,586	1	7.31	7	0.16%	2.73	20.15				9.90	14.65	0.40	1	5	Low Risk Area
Tamagan	6	1,132.32	8,351	7	0.03	-	0.00%	0.00	0.00				1.64	8.11	0.00	1	6	Moderate

Table PO – 36. Population Risk to Landslide, Davao City, cont.

Hazard		Exposure						Vulnerability						Severity Of Consequence	Risk			
Barangay	Likelihood of Occurrence	Residential Area	Barangay Population	Population Density per Hectare of Residential Area	Affected Area	Exposed Population	Exposure Percentage	Percentage Informal Settlers	Percentage of Population Living In Dwelling Units With Walls Made From Light To Salvageable Materials	Percentage of Young And Old Dependents	Percentage of Households Living Below The Poverty Threshold Level	Percentage of Persons With Disabilities	Percentage of Malnourished Individuals (0-72 months)			Severity of Consequence Score	Risk Estimation	Risk Category
													Weight for Age	Height for Age	Length or Height for Weight			
																		Risk Area
Paqibato District																		
Parina	4	3,093.73	3,502	1	7.61	9	0.25%	3.51	23.99	-00-	-00-	0.09%	12.28	10.02	0.00	1	4	Low Risk Area
Lunad	5	3,206.09	1,553	-	8.62	4	0.27%	0.00	20.35	-00-	-00-	0.09%	20.29	10.36	0.84	1	5	Low Risk Area
Sumiao	4	2,539.79	1,666	1	1.78	1	0.07%	0.00	21.19				4.86	15.41	0.00	1	4	Low Risk Area
Tapak	6	10,406.75	5,258	1	18.46	9	0.18%	0.97	20.68				17.11	12.29	0.00	1	6	Moderate Risk Area
Talomo District																		
Catukunan Grande	4	1,495.06	32,461	22	5.07	110	0.34%	2.22	6.65	-00-	-00-	0.07%	0.44	0.38	0.12	1	4	Low Risk Area
Catukunan Pequeño	4	594.49	22,809	38	-	-	0.00%	0.89	3.73				1.57	4.23	0.00	1	4	Low Risk Area
Langub	4	853.20	2,883	3	13.48	46	1.58%	0.00	11.48				0.16	0.67	0.09	1	4	Low Risk Area
Mawa	4	999.38	59,803	60	101.76	6,089	10.18%	5.01	6.25				5.78	30.87	2.40	3	12	High Risk Area
Matina Crossing	5	488.82	32,436	66	29.25	1,541	5.98%	0.00	0.00				2.69	2.64	0.88	2	12	High Risk Area
Matina Pangaj	5	584.12	18,081	31	64.73	2,004	11.00%	3.03	9.49	1.10	0.20	0.24	3	18	High Risk Area			
Toril District																		
Dalao	4	194.55	21,124	109	-	-	0.00%	0.33	5.52	-00-	-00-	0.07%	1.34	4.43	0.21	1	0	Low Risk Area

Map 2.10. Population Risk Map to Landslide



Disaster Risk Assessment Summary Matrix for Population

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 1-A	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 15.36; Barangay Population: 3,103; Population Density: 202.08; Affected Area (Has): 6.94; Exposed Population: 6.94; Exposure Percentage: 1,402; Percentage of Informal Settlers: 45%; % Population living in dwelling units from light to salvageable materials: 11.44%; Severity of Consequence: 11.18%; Risk Estimation: 4; Risk Category: 12; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • The barangay is at risk to floods as it is near Davao River • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Brgy. 2-A	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 4; Flood Depth: > 1 meter; Residential Area: 16.38; Barangay Population: 3,589; Population Density: 219.11; Affected Area (Has): 1.23; Exposed Population: 1.23; Exposure Percentage: 270; Percentage of Informal Settlers: 8%; % Population living in dwelling units from light to salvageable materials: 11.90%; Severity of Consequence: 10.00%; Risk Estimation: 2; Risk Category: 8; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • The barangay is at risk to floods as it is near Davao River • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Brgy. 4-A	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 23.51; Barangay Population: 1,683; Population Density: 71.59; Affected Area (Has): 2.93; Exposed Population: 2.93; Exposure Percentage: 210; Percentage of Informal Settlers: 12%; % Population living in dwelling units from light to salvageable materials: 20.38%; Severity of Consequence: 14.56%; Risk Estimation: 3; Risk Category: 9; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • The barangay is at risk to floods as it is near Davao River • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Brgy. 5-A	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 4; Flood Depth: > 1 meter; Residential Area: 38.10; Barangay Population: 11,436; Population Density: 300.16; Affected Area (Has): 14.12; Exposed Population: 14.12; Exposure Percentage: 4,238; Percentage of Informal Settlers: 37%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 11.92%; Risk Estimation: 4; Risk Category: 16; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • The barangay is at risk to floods as it is near Davao River • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 6-A	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 15.00; Barangay Population: 2,084; Population Density: 138.93; Affected Area (Has): 4.39; Exposed Population: 4.39; Exposure Percentage: 610; Percentage of Informal Settlers: 29%; % Population living in dwelling units from light to salvageable materials: 16.27%; Severity of Consequence: 16.70%; Risk Estimation: 4; Risk Category: 12; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • The barangay is at risk to floods as it is near Davao River • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Brgy. 7-A	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 22.50; Barangay Population: 3,984; Population Density: 177.07; Affected Area (Has): 10.81; Exposed Population: 10.81; Exposure Percentage: 1,914; Percentage of Informal Settlers: 48%; % Population living in dwelling units from light to salvageable materials: 2.28%; Severity of Consequence: 6.93%; Risk Estimation: 4; Risk Category: 12; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • The barangay is at risk to floods as it is near Davao River • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Brgy. 8-A	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 4; Flood Depth: > 1 meter; Residential Area: 179.80; Barangay Population: 11,075; Population Density: 61.60; Affected Area (Has): 47.94; Exposed Population: 47.94; Exposure Percentage: 2,953; Percentage of Informal Settlers: 27%; % Population living in dwelling units from light to salvageable materials: 4.41%; Severity of Consequence: 5.64%; Risk Estimation: 4; Risk Category: 16; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • The barangay is at risk to floods as it is near Davao River • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 9-A	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 4; Flood Depth: > 1 meter; Residential Area: 27.50; Barangay Population: 5,698; Population Density: 207.20; Affected Area (Has): 13.91; Exposed Population: 13.91; Exposure Percentage: 2,882; Percentage of Informal Settlers: 51%; % Population living in dwelling units from light to salvageable materials: 0.44%; Severity of Consequence: 4.41%; Risk Estimation: 4; Risk Category: 16; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • The barangay is at risk to floods as it is near Davao River • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Brgy. 10-A	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 5; Flood Depth: > 1 meter; Residential Area: 28.64; Barangay Population: 6,764; Population Density: 236.21; Affected Area (Has): 5.79; Exposed Population: 5.79; Exposure Percentage: 1,368; Percentage of Informal Settlers: 20%; % Population living in dwelling units from light to salvageable materials: 4.95%; Severity of Consequence: 2.96%; Risk Estimation: 4; Risk Category: 20; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • The barangay is at risk to floods as it is near Davao River • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 11-B	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 9.57; Barangay Population: 1,901; Population Density: 198.72; Affected Area (Has): 2.56; Exposed Population: 2.56; Exposure Percentage: 509; Percentage of Informal Settlers: 27%; % Population living in dwelling units from light to salvageable materials: 11.31%; Severity of Consequence: 10.36%; Risk Estimation: 4; Risk Category: 12; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Brgy. 12-B	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 17.54; Barangay Population: 840; Population Density: 47.90; Affected Area (Has): 1.20; Exposed Population: 1.20; Exposure Percentage: 57; Percentage of Informal Settlers: 7%; % Population living in dwelling units from light to salvageable materials: 3.69%; Severity of Consequence: 74.17%; Risk Estimation: 2; Risk Category: 6; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Brgy. 13-B	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 11.26; Barangay Population: 427; Population Density: 37.93; Affected Area (Has): 0.57; Exposed Population: 0.57; Exposure Percentage: 22; Percentage of Informal Settlers: 5%; % Population living in dwelling units from light to salvageable materials: 8.43%; Severity of Consequence: 6.56%; Risk Estimation: 2; Risk Category: 6; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Brgy. 14-B	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 18.41; Barangay Population: 1,175; Population Density: 63.82; Affected Area (Has): 3.10; Exposed Population: 3.10; Exposure Percentage: 198; Percentage of Informal Settlers: 17%; % Population living in dwelling units from light to salvageable materials: 8.85%; Severity of Consequence: 3.57%; Risk Estimation: 3; Risk Category: 9; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 16-B	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 5.53; Barangay Population: 840; Population Density: 151.98; Affected Area (Has): 0.43; Exposed Population: 0.43; Exposure Percentage: 65; Percentage of Informal Settlers: 8%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 0.00%; Risk Estimation: 2; Risk Category: 6; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Brgy. 17-B	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 5.63; Barangay Population: 810; Population Density: 143.95; Affected Area (Has): 0.53; Exposed Population: 0.53; Exposure Percentage: 76; Percentage of Informal Settlers: 9%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 0.86%; Risk Estimation: 2; Risk Category: 6; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Brgy. 19-B	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 6; Flood Depth: > 1 meter; Residential Area: 362.55; Barangay Population: 31,766; Population Density: 87.62; Affected Area (Has): 40.47; Exposed Population: 40.47; Exposure Percentage: 3,546; Percentage of Informal Settlers: 11%; % Population living in dwelling units from light to salvageable materials: 2.06%; Severity of Consequence: 3.56%; Risk Estimation: 3; Risk Category: 18; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Brgy. 20-B	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 4; Flood Depth: > 1 meter; Residential Area: 56.58; Barangay Population: 4,581; Population Density: 80.97; Affected Area (Has): 13.93; Exposed Population: 13.93; Exposure Percentage: 1,128; Percentage of Informal Settlers: 25%; % Population living in dwelling units from light to salvageable materials: 0.59%; Severity of Consequence: 4.26%; Risk Estimation: 4; Risk Category: 16; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • The barangay is at risk to floods as it is near Davao Gulf • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Brgy. 28-C	Flood Susceptibility: Moderate to low susceptibility area; Likelihood of Occurrence: 2; Flood Depth: > 1 meter; Residential Area: 15.71; Barangay Population: 2,270; Population Density: 144.48; Affected Area (Has): 1.65; Exposed Population: 1.65; Exposure Percentage: 238; Percentage of Informal Settlers: 11%; % Population living in dwelling units from light to salvageable materials: 0.31%; Severity of Consequence: 8.72%; Risk Estimation: 3; Risk Category: 6; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • The barangay is at risk to floods as it is near Davao Gulf • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Agdao Proper	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 38.29; Barangay Population: 8,897; Population Density: 232.37; Affected Area (Has): 7.62; Exposed Population: 7.62; Exposure Percentage: 1,771; Percentage of Informal Settlers: 20%; % Population living in dwelling units from light to salvageable materials: 21.30%; Severity of Consequence: 19.13%; Risk Estimation: 3; Risk Category: 9; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Displacement of communities and eventually, loss of lives when there are no proper early warning systems • Communities may lose their income 	<ul style="list-style-type: none"> • Relocation program for informal settlers shall be implemented • Pursue flood control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center • Set up state-of-the-art early warning device system

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Gov. Paciano Bangoy	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 81.47; Barangay Population: 8,904; Population Density: 108.21; Affected Area (Has): 17.65; Exposed Population: 17.65; Exposure Percentage: 1,910; Percentage of Informal Settlers: 21%; % Population living in dwelling units from light to salvageable materials: 5.35%; Severity of Consequence: 8.77%; Risk Estimation: 4; Risk Category: 12; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • Displacement of communities and eventually, loss of lives when there are no proper early warning systems • Communities may lose their income 	<ul style="list-style-type: none"> • Relocation program for informal settlers shall be implemented • Pursue flood control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center • Set up state-of-the-art early warning device system
Mandug	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 6; Flood Depth: > 1 meter; Residential Area: 969.19; Barangay Population: 13,594; Population Density: 14.03; Affected Area (Has): 20.99; Exposed Population: 20.99; Exposure Percentage: 294; Percentage of Informal Settlers: 2%; % Population living in dwelling units from light to salvageable materials: 3.32%; Severity of Consequence: 6.14%; Risk Estimation: 1; Risk Category: 6; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Pampanga	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 117.51; Barangay Population: 14,381; Population Density: 122.38; Affected Area (Has): 10.16; Exposed Population: 10.16; Exposure Percentage: 1,243; Percentage of Informal Settlers: 9%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 0.00%; Risk Estimation: 2; Risk Category: 6; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Displacement of communities and eventually, loss of lives when there are no proper early warning systems • Communities may lose their income 	<ul style="list-style-type: none"> • Relocation program for informal settlers shall be implemented • Pursue flood control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center • Set up state-of-the-art early warning device system

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Sasa	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 767.66; Barangay Population: 52,386; Population Density: 68.24; Affected Area (Has): 47.18; Exposed Population: 47.18; Exposure Percentage: 3,220; Percentage of Informal Settlers: 6%; % Population living in dwelling units from light to salvageable materials: 2.93%; Severity of Consequence: 6.49%; Risk Estimation: 2; Risk Category: 6; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Displacement of communities and eventually, loss of lives when there are no proper early warning systems • Communities may lose their income 	<ul style="list-style-type: none"> • Relocation program for informal settlers shall be implemented • Pursue flood control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center • Set up state-of-the-art early warning device system •
Tigatto	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 761.31; Barangay Population: 36,387; Population Density: 47.80; Affected Area (Has): 102.74; Exposed Population: 102.74; Exposure Percentage: 4,910; Percentage of Informal Settlers: 13%; % Population living in dwelling units from light to salvageable materials: 0.15%; Severity of Consequence: 2.75%; Risk Estimation: 3; Risk Category: 9; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • The barangay is classified as a floodPLAIN area • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Pursue flood control measures • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Lasang	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 6; Flood Depth: > 1 meter; Residential Area: 626.58; Barangay Population: 10,223; Population Density: 16.32; Affected Area (Has): 20.65; Exposed Population: 20.65; Exposure Percentage: 337; Percentage of Informal Settlers: 3%; % Population living in dwelling units from light to salvageable materials: 9.33%; Severity of Consequence: 14.60%; Risk Estimation: 1; Risk Category: 6; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Displacement of communities and eventually, loss of lives when there are no proper early warning systems • Communities may lose their income 	<ul style="list-style-type: none"> • Relocation program for informal settlers shall be implemented • Pursue flood control measures • The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded • Establish evacuation center • Set up state-of-the-art early warning device system •

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Calinan	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 5; Flood Depth: > 1 meter; Residential Area: 830.55; Barangay Population: 23,052; Population Density: 27.76; Affected Area (Has): 107.19; Exposed Population: 107.19; Exposure Percentage: 2,975; Percentage of Informal Settlers: 13%; % Population living in dwelling units from light to salvageable materials: 0.38%; Severity of Consequence: 4.95%; Risk Estimation: 3; Risk Category: 15; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Gumitan	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 6; Flood Depth: > 1 meter; Residential Area: 5,727.67; Barangay Population: 1,756; Population Density: 0.31; Affected Area (Has): 0.03; Exposed Population: 0.03; Exposure Percentage: 0; Percentage of Informal Settlers: 0%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 0.00%; Risk Estimation: 1; Risk Category: 6; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Tamugan	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 6; Flood Depth: > 1 meter; Residential Area: 1,132.32; Barangay Population: 8,351; Population Density: 7.38; Affected Area (Has): 8.77; Exposed Population: 8.77; Exposure Percentage: 65; Percentage of Informal Settlers: 1%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 0.00%; Risk Estimation: 1; Risk Category: 6; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Bago Aplaya	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 5; Flood Depth: > 1 meter; Residential Area: 217.35; Barangay Population: 15,918; Population Density: 73.24; Affected Area (Has): 28.28; Exposed Population: 28.28; Exposure Percentage: 2,071; Percentage of Informal Settlers: 13%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 0.00%; Risk Estimation: 3; Risk Category: 15; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • The barangay is at risk to floods as it is near Davao Gulf and has presence of creeks • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Strictly enforce “no habitation zone” near waterways • Pursue flood control measures • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Bago Gallera	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 4; Flood Depth: > 1 meter; Residential Area: 717.82; Barangay Population: 17,378; Population Density: 24.21; Affected Area (Has): 49.25; Exposed Population: 49.25; Exposure Percentage: 1,192; Percentage of Informal Settlers: 7%; % Population living in dwelling units from light to salvageable materials: 1.59%; Severity of Consequence: 4.25%; Risk Estimation: 2; Risk Category: 8; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Baliok	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 248.28; Barangay Population: 16,140; Population Density: 65.01; Affected Area (Has): 14.12; Exposed Population: 14.12; Exposure Percentage: 918; Percentage of Informal Settlers: 6%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 0.00%; Risk Estimation: 2; Risk Category: 6; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Bucana	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 4; Flood Depth: > 1 meter; Residential Area: 410.51; Barangay Population: 83,964; Population Density: 204.54; Affected Area (Has): 86.42; Exposed Population: 86.42; Exposure Percentage: 17,676; Percentage of Informal Settlers: 21%; % Population living in dwelling units from light to salvageable materials: 8.82%; Severity of Consequence: 14.46%; Risk Estimation: 4; Risk Category: 16; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • The barangay is near Davao River and Davao Gulf, which makes it at risk to floods • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Dumoy	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 4; Flood Depth: > 1 meter; Residential Area: 530.77; Barangay Population: 18,622; Population Density: 35.08; Affected Area (Has): 28.49; Exposed Population: 28.49; Exposure Percentage: 1,000; Percentage of Informal Settlers: 5%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 0.00%; Risk Estimation: 2; Risk Category: 8; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • The barangay is at risk to floods as it is near Davao Gulf • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Strictly enforce “no habitation zone” near waterways • Pursue flood control measures • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Ma-a	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 6; Flood Depth: > 1 meter; Residential Area: 999.38; Barangay Population: 59,803; Population Density: 59.84; Affected Area (Has): 136.31; Exposed Population: 136.31; Exposure Percentage: 8,157; Percentage of Informal Settlers: 14%; % Population living in dwelling units from light to salvageable materials: 5.01%; Severity of Consequence: 6.25%; Risk Estimation: 3; Risk Category: 18; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Matina Aplaya	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 6; Flood Depth: > 1 meter; Residential Area: 315.49; Barangay Population: 33,384; Population Density: 105.82; Affected Area (Has): 72.79; Exposed Population: 72.79; Exposure Percentage: 7,702; Percentage of Informal Settlers: 23%; % Population living in dwelling units from light to salvageable materials: 7.58%; Severity of Consequence: 8.37%; Risk Estimation: 4; Risk Category: 24; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • The barangay is near Davao River and Davao Gulf, which makes it at risk to floods • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Matina Crossing	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 6; Flood Depth: > 1 meter; Residential Area: 488.82; Barangay Population: 32,436; Population Density: 66.36; Affected Area (Has): 66.49; Exposed Population: 66.49; Exposure Percentage: 4,412; Percentage of Informal Settlers: 14%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 0.00%; Risk Estimation: 3; Risk Category: 18; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Matina Pangí	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 6; Flood Depth: > 1 meter; Residential Area: 584.12; Barangay Population: 18,081; Population Density: 30.95; Affected Area (Has): 51.00; Exposed Population: 51.00; Exposure Percentage: 1,579; Percentage of Informal Settlers: 9%; % Population living in dwelling units from light to salvageable materials: 3.03%; Severity of Consequence: 9.49%; Risk Estimation: 2; Risk Category: 12; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Talomo Proper	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 6; Flood Depth: > 1 meter; Residential Area: 642.95; Barangay Population: 59,678; Population Density: 92.82; Affected Area (Has): 226.76; Exposed Population: 226.76; Exposure Percentage: 21,048; Percentage of Informal Settlers: 35%; % Population living in dwelling units from light to salvageable materials: 7.09%; Severity of Consequence: 38.16%; Risk Estimation: 4; Risk Category: 24; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Binugao	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 483.32; Barangay Population: 6,934; Population Density: 14.35; Affected Area (Has): 26.77; Exposed Population: 26.77; Exposure Percentage: 384; Percentage of Informal Settlers: 6%; % Population living in dwelling units from light to salvageable materials: 0.06%; Severity of Consequence: 11.93%; Risk Estimation: 2; Risk Category: 6; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Crossing Bayabas	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 5; Flood Depth: > 1 meter; Residential Area: 223.35; Barangay Population: 11,490; Population Density: 51.44; Affected Area (Has): 21.61; Exposed Population: 21.61; Exposure Percentage: 1,112; Percentage of Informal Settlers: 10%; % Population living in dwelling units from light to salvageable materials: 2.21%; Severity of Consequence: 7.30%; Risk Estimation: 2; Risk Category: 10; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Daliao	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 3; Flood Depth: > 1 meter; Residential Area: 194.55; Barangay Population: 21,124; Population Density: 108.58; Affected Area (Has): 23.42; Exposed Population: 23.42; Exposure Percentage: 2,543; Percentage of Informal Settlers: 12%; % Population living in dwelling units from light to salvageable materials: 0.33%; Severity of Consequence: 5.52%; Risk Estimation: 3; Risk Category: 9; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • The barangay is at risk to floods as it is near Davao Gulf • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Strictly enforce “no habitation zone” near waterways • Pursue flood control measures • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Lubogan	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 4; Flood Depth: > 1 meter; Residential Area: 208.96; Barangay Population: 12,156; Population Density: 58.17; Affected Area (Has): 32.08; Exposed Population: 32.08; Exposure Percentage: 1,866; Percentage of Informal Settlers: 15%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 0.00%; Risk Estimation: 3; Risk Category: 12; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Marapangi	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 6; Flood Depth: > 1 meter; Residential Area: 703.76; Barangay Population: 6,889; Population Density: 9.79; Affected Area (Has): 12.97; Exposed Population: 12.97; Exposure Percentage: 127; Percentage of Informal Settlers: 2%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 9.06%; Risk Estimation: 1; Risk Category: 6; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Toril Proper	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 4; Flood Depth: > 1 meter; Residential Area: 131.60; Barangay Population: 12,140; Population Density: 92.25; Affected Area (Has): 69.46; Exposed Population: 69.46; Exposure Percentage: 6,408; Percentage of Informal Settlers: 53%; % Population living in dwelling units from light to salvageable materials: 0.49%; Severity of Consequence: 6.58%; Risk Estimation: 4; Risk Category: 16; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> Floods occur due to the barangay's lack of proper drainage systems 	<ul style="list-style-type: none"> Establish proper drainage system Pursue/strengthen flood control measures
Los Amigos	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 5; Flood Depth: > 1 meter; Residential Area: 445.49; Barangay Population: 9,722; Population Density: 21.82; Affected Area (Has): 38.62; Exposed Population: 38.62; Exposure Percentage: 843; Percentage of Informal Settlers: 9%; % Population living in dwelling units from light to salvageable materials: 1.43%; Severity of Consequence: 7.25%; Risk Estimation: 2; Risk Category: 10; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> Increase vegetative cover through the implementation of massive reforestation in upland areas Pursue flood control measures Strictly enforce “no habitation zone” near waterways Enforce eminent domain to have buffer areas/easements Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Mintal	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 5; Flood Depth: > 1 meter; Residential Area: 752.19; Barangay Population: 13,227; Population Density: 17.58; Affected Area (Has): 65.05; Exposed Population: 65.05; Exposure Percentage: 1,144; Percentage of Informal Settlers: 9%; % Population living in dwelling units from light to salvageable materials: 1.93%; Severity of Consequence: 7.39%; Risk Estimation: 2; Risk Category: 10; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> Increase vegetative cover through the implementation of massive reforestation in upland areas Pursue flood control measures Strictly enforce “no habitation zone” near waterways Enforce eminent domain to have buffer areas/easements Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas

Table PO – 37. Disaster Risk Assessment Summary Matrix for Population, Flood, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Sto. Niño	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 4; Flood Depth: > 1 meter; Residential Area: 147.32; Barangay Population: 20,103; Population Density: 136.46; Affected Area (Has): 8.74; Exposed Population: 8.74; Exposure Percentage: 1,193; Percentage of Informal Settlers: 6%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 7.78%; Risk Estimation: 2; Risk Category: 8; Vulnerability Category: Moderate Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas
Tugbok Proper	Flood Susceptibility: High susceptibility area; Likelihood of Occurrence: 6; Flood Depth: > 1 meter; Residential Area: 989.79; Barangay Population: 15,115; Population Density: 15.27; Affected Area (Has): 107.98; Exposed Population: 107.98; Exposure Percentage: 1,649; Percentage of Informal Settlers: 11%; % Population living in dwelling units from light to salvageable materials: 1.42%; Severity of Consequence: 4.13%; Risk Estimation: 3; Risk Category: 18; Vulnerability Category: High Risk Area	<ul style="list-style-type: none"> • Floods occur when waterways (e.g., rivers, creeks) overflow due siltation and soil erosion from higher grounds • The Informal Settler Families (ISFs), especially those living near waterways, are directly affected whenever there are floods 	<ul style="list-style-type: none"> • Increase vegetative cover through the implementation of massive reforestation in upland areas • Pursue flood control measures • Strictly enforce “no habitation zone” near waterways • Enforce eminent domain to have buffer areas/easements • Relocate the affected settlers and establish tenement housing for the affected settlers, especially the ISFs, provided that it shall be built away from the waterways/risk areas

Table PO – 38 Disaster Risk Assessment Summary Matrix for Population, Landslide

Decision Areas	Technical Findings	Implications	Policy Interventions
Buhangin Proper	Likelihood of Occurrence: 5; Residential Area: 672.24; Barangay Population: 65,461; Population Density: 97.38; Affected Area (Has): 36.71; Exposed Population: 3,575; Exposure Percentage: 5.46%; Percentage of Informal Settlers: 1.73%; % Population living in dwelling units from light to salvageable materials: 6.67%; Severity of Consequence: 2; Risk Estimation: 10; Risk Category: Moderate Risk Area	<ul style="list-style-type: none"> ● Displacement of communities and eventually, loss of lives ● Communities may lose their income 	<ul style="list-style-type: none"> ● Implement slope protection measures (e.g., installation of geo-nets in slopes) ● Landslide mitigation design shall be included in the local and national budgets ● Enforce the National Greening Program
Tigatto	Likelihood of Occurrence: 5; Residential Area: 761.31; Barangay Population: 36,387; Population Density: 47.80; Affected Area (Has): 39.43; Exposed Population: 1,885; Exposure Percentage: 5.18%; Percentage of Informal Settlers: 0.15%; % Population living in dwelling units from light to salvageable materials: 2.75%; Severity of Consequence: 2; Risk Estimation: 10; Risk Category: Moderate Risk Area	<ul style="list-style-type: none"> ● Displacement of communities and eventually, loss of lives ● Communities may lose their income 	<ul style="list-style-type: none"> ● Implement slope protection measures (e.g., installation of geo-nets in slopes) ● Landslide mitigation design shall be included in the local and national budgets ● Enforce the National Greening Program
Panacan	Likelihood of Occurrence: 4; Residential Area: 698.12; Barangay Population: 35,806; Population Density: 51.29; Affected Area (Has): 67.73; Exposed Population: 3,474; Exposure Percentage: 9.7%; Percentage of Informal Settlers: 4.92%; % Population living in dwelling units from light to salvageable materials: 6.28%; Severity of Consequence: 2; Risk Estimation: 8; Risk Category: Moderate Risk Area	<ul style="list-style-type: none"> ● Displacement of communities and eventually, loss of lives ● Communities may lose their income 	<ul style="list-style-type: none"> ● Implement slope protection measures (e.g., installation of geo-nets in slopes) ● Landslide mitigation design shall be included in the local and national budgets ● Enforce the National Greening Program
Marilog Proper	Likelihood of Occurrence: 6; Residential Area: 18,031.84; Barangay Population: 16,188; Population Density: 0.90; Affected Area (Has): 91.12; Exposed Population: 82; Exposure Percentage: 0.51%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 1; Risk Estimation: 6; Risk Category: Moderate Risk Area	<ul style="list-style-type: none"> ● Displacement of communities and eventually, loss of lives ● Communities may lose their income 	<ul style="list-style-type: none"> ● Implement slope protection measures (e.g., installation of geo-nets in slopes) ● Landslide mitigation design shall be included in the local and national budgets ● Enforce the National Greening Program

Table PO – 38 Disaster Risk Assessment Summary Matrix for Population, Landslide, cont.

Decision Areas	Technical Findings	Implications	Policy Interventions
Tamugan	Likelihood of Occurrence: 6; Residential Area: 1,132.32; Barangay Population: 8,351; Population Density: 7.38; Affected Area (Has): 0.03; Exposed Population: 0; Exposure Percentage: 0%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 1; Risk Estimation: 6; Risk Category: Moderate Risk Area	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their income 	<ul style="list-style-type: none"> Implement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Tapak	Likelihood of Occurrence: 6; Residential Area: 10,406.75; Barangay Population: 5,258; Population Density: 0.51; Affected Area (Has): 18.46; Exposed Population: 9; Exposure Percentage: 0.18%; Percentage of Informal Settlers: 0.97%; % Population living in dwelling units from light to salvageable materials: 20.88%; Severity of Consequence: 1; Risk Estimation: 6; Risk Category: Moderate Risk Area	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their income 	<ul style="list-style-type: none"> Implement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Ma-a	Likelihood of Occurrence: 4; Residential Area: 999.38; Barangay Population: 59,803; Population Density: 59.84; Affected Area (Has): 101.76; Exposed Population: 6,089; Exposure Percentage: 10.18%; Percentage of Informal Settlers: 5.01%; % Population living in dwelling units from light to salvageable materials: 6.25%; Severity of Consequence: 3; Risk Estimation: 12; Risk Category: High Risk Area	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their income 	<ul style="list-style-type: none"> Implement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Matina Crossing	Likelihood of Occurrence: 6; Residential Area: 488.82; Barangay Population: 32,436; Population Density: 66.36; Affected Area (Has): 29.25; Exposed Population: 1,941; Exposure Percentage: 5.98%; Percentage of Informal Settlers: 0.00%; % Population living in dwelling units from light to salvageable materials: 0.00%; Severity of Consequence: 2; Risk Estimation: 12; Risk Category: High Risk Area	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their income 	<ul style="list-style-type: none"> Implement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Matina Pangri	Likelihood of Occurrence: 6; Residential Area: 584.12; Barangay Population: 18,081; Population Density: 30.95; Affected Area (Has): 64.73; Exposed Population: 2,004; Exposure Percentage: 11.08%; Percentage of Informal Settlers: 3.03%; % Population living in dwelling units from light to salvageable materials: 9.49%; Severity of Consequence: 3; Risk Estimation: 18; Risk Category: High Risk Area	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their income 	<ul style="list-style-type: none"> Implement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program

Major Decision Areas for Population

The succeeding tables show the Major Decision Areas (MDAs) population, which shall be given with utmost priority by the city government. The prioritization varies per level. Those under MDA I shall be the top areas of concern where there are a large number of population. The areas in MDA II shall be the next areas of concern. The last, though shall be also given with priority, are those in MDA III.

Table PO – 39A. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOlications	Policy Interventions
MDA I				
Brgy. 1-A	<ul style="list-style-type: none"> The barangay is near Davao River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council
Brgy. 2-A	<ul style="list-style-type: none"> The barangay is near Davao River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council

Table PO – 39B. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOLications	Policy Interventions
Brgy. 5-A	<ul style="list-style-type: none"> The barangay is near Davao River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council
Brgy. 8-A	<ul style="list-style-type: none"> The barangay is near Davao River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council

Table PO – 39C. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOLications	Policy Interventions
Brgy. 19-B	<ul style="list-style-type: none"> The barangay is near Davao River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council
Brgy. 21-C	<ul style="list-style-type: none"> The barangay is near Davao Gulf 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of storm surge and floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council

Table PO – 39D. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOLications	Policy Interventions
22-C	<ul style="list-style-type: none"> The barangay is near Davao Gulf 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as Dengue and Leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council
23-C	<ul style="list-style-type: none"> The barangay is near Davao Gulf 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council

Table PO – 39E. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOLications	Policy Interventions
31-D	<ul style="list-style-type: none"> The barangay is near Davao Gulf 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council
Bago Aplaya	<ul style="list-style-type: none"> The barangay is near Davao Gulf 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council

Table PO – 39F. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOLications	Policy Interventions
Matina Crossing	<ul style="list-style-type: none"> The barangay is near Matina River. Part of the barangay is an elevated area 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods in the lower ground and landslide in elevated area 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council
Matina Pangí	<ul style="list-style-type: none"> The barangay is traversed by Matina Pangí River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council

Table PO – 39G. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOLications	Policy Interventions
Matina Aplaya	<ul style="list-style-type: none"> The barangay is traversed by Matina River and Talomo River. It is also near Davao Gulf 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council
Bucana	<ul style="list-style-type: none"> The barangay is near Davao Gulf 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council

Table PO – 39H. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOLications	Policy Interventions
Ma-a	<ul style="list-style-type: none"> The barangay is near Davao River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council
Catalunan Pequeño	<ul style="list-style-type: none"> The barangay is within the fault-line 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence earthquake 	<ul style="list-style-type: none"> Displacement of communities and loss of lives Communities may lose their income 	<ul style="list-style-type: none"> Observe 5-meter easement from the fault line Set up a building design that can withstand Intensity 8 jolt
Talomo Proper	<ul style="list-style-type: none"> The barangay is traversed by Talomo River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue disaster control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council

Table PO – 39I. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOLications	Policy Interventions
Agdao Centro	<ul style="list-style-type: none"> The barangay is near Davao Gulf 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council
Leon Garcia Sr.	<ul style="list-style-type: none"> The barangay is near Davao Gulf 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council

Table PO – 39J. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOLications	Policy Interventions
Tigatto	<ul style="list-style-type: none"> The barangay is near Davao River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council
Waan	<ul style="list-style-type: none"> The barangay is near Davao River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council

Table PO – 39K. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOLications	Policy Interventions
Bunawan Proper	<ul style="list-style-type: none"> The barangay is near Davao Gulf, Bunawan River and Lasang River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue disaster control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council
Lasang	<ul style="list-style-type: none"> The barangay is near Davao Gulf, Bunawan River and Lasang River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue disaster control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council

Table PO – 39L. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOLications	Policy Interventions
Panacan	<ul style="list-style-type: none"> The barangay is near Davao Gulf, Bunawan River and Lasang River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue disaster control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council
Los Amigos	<ul style="list-style-type: none"> The barangay is near rivers and creeks. It is also situated within the fault line 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods, storm surge and earthquake 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue disaster control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council

Table PO – 39M. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOLications	Policy Interventions
Mintal	<ul style="list-style-type: none"> The barangay is near rivers and creeks. It is also situated within the fault line 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods, storm surge and earthquake 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue disaster control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council
Tugbok Proper	<ul style="list-style-type: none"> The barangay is near rivers and creeks. It is also situated within the fault line 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods, storm surge and earthquake 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue disaster control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council

Table PO – 39N. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOlications	Policy Interventions
MDA II				
Toril	<ul style="list-style-type: none"> The barangay is a floodplain with no proper drainage system 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented Pursue disaster control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system
Marapangi	<ul style="list-style-type: none"> The barangay is traversed by Marapangi River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue disaster control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Equip the Barangay Disaster Risk Reduction and Management Council
Lizada	<ul style="list-style-type: none"> The barangay is traversed by Lizada River and is near the coastline 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue disaster control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council

Table PO – 390. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOlications	Policy Interventions
Daliao	<ul style="list-style-type: none"> The barangay is near the coastline 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Strict iPOlementation of Urban Development and Housing Act, which mandates that there shall be no dwelling units in danger areas like waterways, riverbanks, and shorelines The informal settlers shall be relocated in tenement housing building, which should be set up within the barangay but observe an easement from the waterway Pursue disaster control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center equipped with utilities and other amenities like comfort rooms, and conjugal rooms Set up state-of-the-art early warning device system Strengthen the Barangay Disaster Risk Reduction and Management Council
Marilog Proper	<ul style="list-style-type: none"> The barangay is situated in mountainous areas 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of landslide 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> IPOlement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Salaysay	<ul style="list-style-type: none"> The barangay is situated in mountainous areas 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of landslide 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> IPOlement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Buhangin	<ul style="list-style-type: none"> The barangay is a floodplain 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system

Table PO – 39P. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOlications	Policy Interventions
MDA III				
Fatima	<ul style="list-style-type: none"> The barangay is situated in mountainous areas 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of landslide 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> IPOlement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Lumiad	<ul style="list-style-type: none"> The barangay is situated in mountainous areas 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of landslide 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> IPOlement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Sumimao	<ul style="list-style-type: none"> The barangay is situated in mountainous areas 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of landslide 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> IPOlement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Tapak	<ul style="list-style-type: none"> The barangay is situated in mountainous areas 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of landslide 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> IPOlement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Baganihan	<ul style="list-style-type: none"> The barangay is situated in mountainous areas 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of landslide 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> IPOlement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Buda	<ul style="list-style-type: none"> The barangay is situated in mountainous areas 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of landslide 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> IPOlement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Gumitan	<ul style="list-style-type: none"> The barangay is situated in mountainous areas 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of landslide 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> IPOlement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program

Table PO –39Q. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOlications	Policy Interventions
Magsaysay	<ul style="list-style-type: none"> The barangay is situated in mountainous areas 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of landslide 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> IPOlement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Malamba	<ul style="list-style-type: none"> The barangay is situated in mountainous areas 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of landslide 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> IPOlement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Suawan	<ul style="list-style-type: none"> The barangay is situated in mountainous areas 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of landslide 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> IPOlement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Tamugan	<ul style="list-style-type: none"> The barangay is traversed by Tamugan River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system
Baliok	<ul style="list-style-type: none"> The barangay is traversed by creeks 	<ul style="list-style-type: none"> The barangay is observed to be moderate risk area with occurrence of more than 1 meter flood depth 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system

Table PO – 39R. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOlications	Policy Interventions
Catalunan Grande	<ul style="list-style-type: none"> The barangay is situated in elevated area 	<ul style="list-style-type: none"> There is occurrence of landslide 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> IPolement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Dumoy	<ul style="list-style-type: none"> The barangay is near the gulf 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of storm surge and liquefaction 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented Pursue disaster control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system
Langub	<ul style="list-style-type: none"> The barangay is an elevated area 	<ul style="list-style-type: none"> There is occurrence of landslide 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> IPolement slope protection measures (e.g., installation of geo-nets in slopes) Landslide mitigation design shall be included in the local and national budgets Enforce the National Greening Program
Crossing Bayabas	<ul style="list-style-type: none"> The barangay is near Lipadas River and Marapangi River 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system

Table PO – 39S. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOlications	Policy Interventions
Binugao	<ul style="list-style-type: none"> The barangay is near the coastline 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented Pursue disaster control measures Observe 30 meter-easement from the shore The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system
Lubogan	<ul style="list-style-type: none"> The barangay is traversed by a river 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income Evacuation is difficult during night time Potential outbreak of diseases such as dengue and leptospirosis 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system
Sirawan	<ul style="list-style-type: none"> The barangay is near the coastline 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented Pursue disaster control measures Observe 30 meter-easement from the shore The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system
Manambulan	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Potential submergence of settlement areas that may result to the displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system

Table PO – 39T. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOlications	Policy Interventions
Sto. Niño	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system
Tacunan	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system
Talandang	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system
Ula	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented Pursue flood control measures The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system

Table PO – 39U. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOlications	Policy Interventions
Agdao Proper	<ul style="list-style-type: none"> The barangay is near the coastline 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be implemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue disaster control measures
Wilfredo Aquino	<ul style="list-style-type: none"> The barangay is near the coastline 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be implemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue disaster control measures
Paciano Bangoy	<ul style="list-style-type: none"> The barangay is near the coastline 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be implemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue disaster control measures
Ubalde	<ul style="list-style-type: none"> The barangay is near the coastline 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods and storm surge 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be implemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue disaster control measures

Table PO – 39V. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOlications	Policy Interventions
Baguio Proper	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be implemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue disaster control measures
Callawa	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be implemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue disaster control measures
Mandug	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be implemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue flood control measures
PaPOanga	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be implemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue flood control measures

Table PO – 39W. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOlications	Policy Interventions
Sasa	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue flood control measures
Ilang	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue flood control measures
San Isidro	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue flood control measures
Tibungco	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue flood control measures
Dominga	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue flood control measures

Table PO – 39X. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOlications	Policy Interventions
Inayangan	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue flood control measures
Megkawayan	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue flood control measures
Pangyan	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue flood control measures
Riverside	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue flood control measures

Table PO – 39Y. Major Decision Areas Matrix for Population, Davao City

Major Decision Areas	Description	Problems/Hazards	IPOacts/IPOlications	Policy Interventions
Wangan	<ul style="list-style-type: none"> The barangay is traversed by rivers and creeks 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue flood control measures
Brgy. 15-B	<ul style="list-style-type: none"> The barangay has issues on drainage system 	<ul style="list-style-type: none"> The barangay is vulnerable to the occurrence of floods 	<ul style="list-style-type: none"> Displacement of communities and eventually, loss of lives when there are no proper early warning systems Communities may lose their source of livelihood and income 	<ul style="list-style-type: none"> Relocation program for informal settlers shall be iPOlemented The National Greening Program, which is targeted to prevent soil erosion and flooding, shall be expanded Establish evacuation center Set up state-of-the-art early warning device system Pursue flood control measures

Map 2.11. Population Decision Areas Map, Davao City

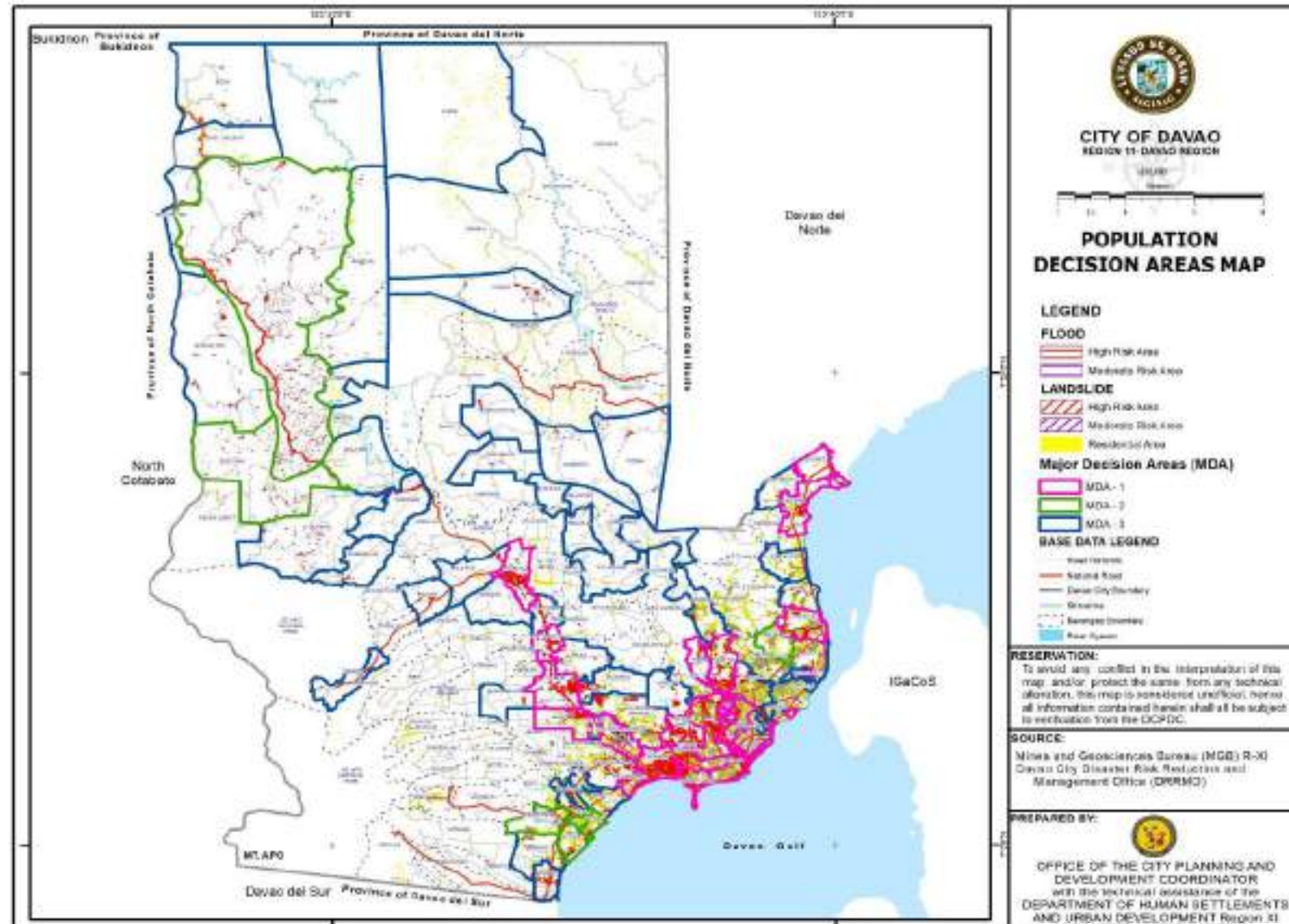


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URBAN USE

CLIMATE CHANGE VULNERABILITY ASSESSMENT

The tables below show an assessment of the exposure of urban land use areas such as residential, agri-industrial, commercial, parks and recreation, commercial, tourism, industrial, and cemetery, to flood, landslide, liquefaction, fault line, storm surge, and liquefaction.

On the exposure column are data on the land uses, total area allocation per land use per barangay, and replacement cost computed per square meter.

The sensitivity column enumerates the variables used to determine conditions of structures in terms of proportion of buildings with walls made of light to salvageable materials, proportion of buildings in dilapidated/condemned condition, structure not employing hazard resistant building design, no access/area coverage to infrastructure related hazard mitigation measures and measured from residual, low, moderate, high, very high ratings.

Another element considered is the adaptive capacity of these structures which is determined by the capacity and willingness to retrofit, relocate, or conform to new regulations, insurance coverage, available alternative sites, government resources and local government capacity to impose/implement zoning regulations.

ON EXPOSURE ATTRIBUTE

FLOOD

A total of 122 barangays have a land area of 7,852.1 hectares for residential use, 51 barangays with a land area of 818.13 hectares for commercial use, 45 barangays with 894.22 hectares utilized for industrial use, 37 barangays covering 535.65 hectares used for agri-industrial purposes, 19 barangays with 168.78 hectares for tourism use, eight (8) barangays with 59.99 hectares used as cemetery, and parks and recreation. From these data, a total of 161.40 hectares from 46 barangays are all exposed to flood.

Taking into account sensitivity, the proportion of buildings in dilapidated/condemned condition was considered as a measure. Data below reveal that there are 39 residential areas rated very high, 38 residential areas with high, 27 residential areas moderate, 18 residential areas with residual, 212 barangays with the following uses: commercial (51), parks and recreation and industrial at 45 each, residential 38, agri-industrial 37, tourism 19, and cemetery eight (8) with low ratings are all exposed to again with moderate, residential 21 mostly agri-industrial areas with low, and four (4) residential areas again with residual ratings.

All 122 residential areas do not have the capacity and willingness to retrofit or relocate or conform with new regulations though there are identified alternative sites. The rest of the land uses are all capable and are willing to retrofit, relocate and conform to new regulations, though for most there are no available alternative sites yet.

Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
1-A	Residential	6.95	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
1-A	Parks and Recreational	0.08	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
1-A	Commercial	1.41	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
2-A	Residential	1.62	10,000	Low	Low	Moderate	Very High	NO	NO	YES	YES	YES
2-A	Commercial	11.32	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
5-A	Residential	20.41	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
5-A	Parks and Recreational	0.01	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
5-A	Commercial	4.34	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
8-A	Residential	82.83	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
8-A	Industrial	3.84	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
8-A	Commercial	5.65	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
8-A	Cemetery	18.90	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
8-A	Parks and Recreational	1.17	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
15-B	Residential	1.46	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
15-B	Commercial	24.46	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
19-B	Residential	179.82	10,000	Moderate	Moderate	Moderate	Very High	NO	NO	YES	YES	YES
19-B	Parks and Recreational	0.36	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
19-B	Commercial	28.23	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
19-B	Industrial	2.48	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
21-C	Residential	5.18	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
22-C	Residential	4.78	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
22-C	Parks and Recreational	0.05	15,000	Low	Low	Moderate	Very High	YES	YES	NO	YES	YES
23-C	Residential	12.79	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES

Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replace-ment Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employ- ing hazard resistant building de- sign	No access/ area coverage to infrastruc- ture related hazard mitiga- tion measures	Capacity and willingness to retrofit or relo- cate or conform with new regula- tions	Insurance Coverage	Available Alternative Sites	Govern- ment Re- sources	Local Govern- ment Capacity to impose/ implement zoning regula- tions
23-C	Parks and Rec- reational	0.72	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
27-C	Tourism	0.04	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
27-C	Parks and Rec- reational	4.10	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
31-D	Residential	13.56	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
31-D	Parks and Rec- reational	0.13	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
37-D	Residential	3.55	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
39-D	Residential	2.93	10,000	Low	Low	Moderate	Very High	NO	NO	YES	YES	YES
39-D	Commercial	5.35	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
39-D	Parks and Rec- reational	0.89	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
40-D	Residential	1.34	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
40-D	Commercial	6.05	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
AGDAO PROPER	Residential	7.62	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
AGDAO PROPER	Parks and Rec- reational	0.01	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
AGDAO PROPER	Industrial	1.29	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
AGDAO PROPER	Commercial	22.65	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
WILFREDO AQUINO	Residential	26.11	10,000	Low	Low	High	Very High	NO	NO	YES	YES	YES
WILFREDO AQUINO	Commercial	23.80	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
WILFREDO AQUINO	Industrial	0.12	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES

Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replace-ment Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employ- ing hazard resistant building de- sign	No access/ area coverage to infrastruc- ture related hazard mitiga- tion measures	Capacity and willingness to retrofit or relo- cate or conform with new regula- tions	Insurance Coverage	Available Alternative Sites	Govern- ment Re- sources	Local Govern- ment Capacity to impose/ implement zoning regula- tions
PACIANO BANGOY	Residential	21.36	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
PACIANO BANGOY	Industrial	0.67	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
PACIANO BANGOY	Commercial	37.06	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
RAFAEL CAS- TILLO	Residential	11.87	10,000	Moderate	Moderate	High	Very High	NO	NO	YES	YES	YES
RAFAEL CAS- TILLO	Commercial	16.42	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
RAFAEL CAS- TILLO	Industrial	9.33	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CENTRO	Residential	22.72	10,000	Low	Low	Moderate	Very High	NO	NO	YES	YES	YES
CENTRO	Parks and Rec- reational	0.04	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CENTRO	Industrial	10.73	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CENTRO	Commercial	1.14	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
GOV. VICEN- TE DUTERTE	Residential	20.34	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
GOV. VICEN- TE DUTERTE	Commercial	4.95	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
GOV. VICEN- TE DUTERTE	Industrial	12.57	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LEON GARCIA SR.	Residential	12.04	10,000	Residual	Residual	High	Very High	NO	NO	YES	YES	YES
LEON GARCIA SR.	Parks and Rec- reational	0.08	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LEON GARCIA SR.	Industrial	0.29	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES

Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replace-ment Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employ- ing hazard resistant building de- sign	No access/ area coverage to infrastruc- ture related hazard mitiga- tion measures	Capacity and willingness to retrofit or relo- cate or conform with new regula- tions	Insurance Coverage	Available Alternative Sites	Govern- ment Re- sources	Local Govern- ment Capacity to impose/ implement zoning regula- tions
LEON GARCIA SR.	Commercial	1.06	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LAPU - LAPU	Residential	23.68	10,000	Moderate	Moderate	Moderate	Very High	NO	NO	YES	YES	YES
LAPU - LAPU	Parks and Rec- reational	0.04	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LAPU - LAPU	Commercial	1.61	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LAPU - LAPU	Industrial	22.95	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TOMAS MONTE- VERDE	Residential	2.09	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES
TOMAS MONTE- VERDE	Industrial	0.83	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TOMAS MONTE- VERDE	Commercial	11.83	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
SAN ANTO- NIO	Residential	25.28	10,000	Moderate	Moderate	High	Very High	NO	NO	YES	YES	YES
SAN ANTO- NIO	Commercial	43.27	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
UBALDE	Residential	5.94	10,000	Moderate	Moderate	High	Very High	NO	NO	YES	YES	YES
UBALDE	Commercial	1.53	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BAGUIO	Residential	12.03	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
BAGUIO	Agri-Industrial	6.17	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
GUMALANG	Parks and Rec- reational	0.05	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
GUMALANG	Agri-Industrial	21.28	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MALAGOS	Residential	18.01	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
MALAGOS	Industrial	3.05	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES

Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
MALAGOS	Tourism	13.49	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
MALAGOS	Agri-Industrial	7.82	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BUHANGIN	Industrial	4.40	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BUHANGIN	Residential	335.40	10,000	Moderate	Moderate	Moderate	Very High	NO	NO	YES	YES	YES
BUHANGIN	Commercial	52.91	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BUHANGIN	Cemetery	8.84	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CABANTIAN	Residential	305.58	10,000	Low	Low	Moderate	Very High	NO	NO	YES	YES	YES
CABANTIAN	Industrial	26.47	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CABANTIAN	Commercial	23.17	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CALLAWA	Residential	7.91	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
COMMUNAL	Tourism	20.16	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
COMMUNAL	Residential	162.84	10,000	Residual	Residual	Moderate	Very High	NO	NO	YES	YES	YES
COMMUNAL	Commercial	11.99	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
INDANGAN	Tourism	0.01	15,000	Low	Low	Moderate	Very High	YES	YES	NO	YES	YES
INDANGAN	Commercial	1.71	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
INDANGAN	Residential	247.61	10,000	Residual	Residual	Moderate	Very High	NO	NO	YES	YES	YES
MANDUG	Agri-Industrial	6.55	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MANDUG	Residential	168.40	10,000	Moderate	Moderate	High	Very High	NO	NO	YES	YES	YES
PAMPANGA	Tourism	2.99	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
PAMPANGA	Industrial	26.69	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
PAMPANGA	Commercial	11.31	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
PAMPANGA	Residential	50.90	10,000	Residual	Residual	High	Very High	NO	NO	YES	YES	YES
SASA	Residential	227.28	10,000	Moderate	Moderate	High	Very High	NO	NO	YES	YES	YES
SASA	Industrial	93.80	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
SASA	Commercial	58.11	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
SASA	Parks and Recreational	0.21	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TIGATTO	Residential	256.32	10,000	Moderate	Moderate	High	Very High	NO	NO	YES	YES	YES
TIGATTO	Commercial	3.25	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES

Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replace-ment Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employ- ing hazard resistant building de- sign	No access/ area coverage to infrastruc- ture related hazard mitiga- tion measures	Capacity and willingness to retrofit or relo- cate or conform with new regula- tions	Insurance Coverage	Available Alternative Sites	Govern- ment Re- sources	Local Govern- ment Capacity to impose/ implement zoning regula- tions
TIGATTO	Industrial	13.03	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
WAAN	Residential	38.48	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES
WAAN	Parks and Rec- reational	0.08	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
A. ANGLI- ONGTO	Residential	155.73	10,000	Low	Low	Moderate	Very High	NO	NO	YES	YES	YES
A. ANGLI- ONGTO	Industrial	17.16	15,000	Low	Low	Moderate	Very High	YES	YES	NO	YES	YES
A. ANGLI- ONGTO	Commercial	38.75	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
V. HIZON	Tourism	1.52	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
V. HIZON	Commercial	25.25	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
V. HIZON	Residential	118.71	10,000	Moderate	Moderate	High	Very High	NO	NO	YES	YES	YES
V. HIZON	Industrial	6.31	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BUNAWAN	Residential	124.56	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
BUNAWAN	Parks and Rec- reational	0.24	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BUNAWAN	Commercial	11.86	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BUNAWAN	Industrial	115.63	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BUNAWAN	Agri-Industrial	1.86	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
GATUNGAN	Parks and Rec- reational	0.01	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
GATUNGAN	Residential	1.99	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
ILANG	Residential	125.68	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
ILANG	Industrial	90.12	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LASANG	Residential	50.73	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES

Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
LASANG	Parks and Recreational	0.07	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LASANG	Agri-Industrial	9.39	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LASANG	Industrial	38.20	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LASANG	Commercial	2.13	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MAHAYAG	Residential	57.77	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
MAHAYAG	Industrial	26.18	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MUDIANG	Agri-Industrial	1.89	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MUDIANG	Residential	67.96	10,000	Moderate	Moderate	High	Very High	NO	NO	YES	YES	YES
PANACAN	Tourism	0.96	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
PANACAN	Residential	261.47	10,000	Moderate	Moderate	High	Very High	NO	NO	YES	YES	YES
PANACAN	Parks and Recreational	6.97	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
PANACAN	Industrial	120.52	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
PANACAN	Commercial	7.48	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
SAN ISIDRO	Residential	26.47	10,000	Moderate	Moderate	High	Very High	NO	NO	YES	YES	YES
SAN ISIDRO	Industrial	4.21	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TIBUNGCO	Residential	131.99	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES
TIBUNGCO	Industrial	41.74	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TIBUNGCO	Commercial	9.88	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TIBUNGCO	Agri-Industrial	4.17	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BIAO JOAQUIN	Residential	3.20	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
BIAO JOAQUIN	Agri-Industrial	20.15	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CALINAN	Residential	107.32	10,000	Moderate	Moderate	Moderate	Very High	NO	NO	YES	YES	YES

Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replace-ment Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employ- ing hazard resistant building de- sign	No access/ area coverage to infrastruc- ture related hazard mitiga- tion measures	Capacity and willingness to retrofit or relo- cate or conform with new regula- tions	Insurance Coverage	Available Alternative Sites	Govern- ment Re- sources	Local Govern- ment Capacity to impose/ implement zoning regula- tions
CALINAN	Parks and Rec- recreational	0.75	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CALINAN	Industrial	2.17	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CALINAN	Commercial	19.53	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CALINAN	Cemetery	5.97	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CALINAN	Agri-Industrial	3.12	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CAWAYAN	Residential	1.84	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
DACUDAO	Agri-Industrial	37.73	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
DACUDAO	Residential	7.13	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
DALAGDAG	Residential	2.54	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
DOMINGA	Residential	1.77	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
INAYANGAN	Residential	30.20	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
LACSON	Residential	5.16	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
LACSON	Agri-Industrial	11.02	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LAMANAN	Residential	4.54	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
LAMPIANAO	Residential	2.14	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
MEGKA- WAYAN	Residential	5.52	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES
PANGYAN	Residential	5.09	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
RIVERSIDE	Residential	21.17	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
RIVERSIDE	Parks and Rec- recreational	0.07	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
RIVERSIDE	Industrial	1.20	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
RIVERSIDE	Commercial	1.11	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
RIVERSIDE	Agri-Industrial	8.21	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES

Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
RIVERSIDE	Cemetery	15.93	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
SALOY	Residential	1.79	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES
SIRIB	Residential	7.56	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES
SUBASTA	Residential	9.56	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES
SUBASTA	Agri-Industrial	13.45	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TALOMO RIVER	Residential	21.82	10,000	Moderate	Moderate	High	Very High	NO	NO	YES	YES	YES
TALOMO RIVER	Industrial	0.67	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TALOMO RIVER	Commercial	0.30	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TALOMO RIVER	Agri-Industrial	18.34	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
WANGAN	Residential	3.33	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
WANGAN	Cemetery	0.71	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
WANGAN	Agri-Industrial	4.70	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
GUMITAN	Residential	8.23	10,000	Residual	Residual	Moderate	Very High	NO	NO	YES	YES	NO
MALAMBA	Residential	13.12	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	NO
MARILOG	Residential	92.61	10,000	Residual	Residual	High	Very High	NO	NO	YES	YES	NO
SALAYSAY	Residential	10.06	10,000	Residual	Residual	High	Very High	NO	NO	YES	YES	NO
SUAWAN	Agri-Industrial	19.11	15,000	Low	Low	High	Very High	YES	YES	NO	YES	NO
TAMUGAN	Residential	10.19	10,000	Residual	Residual	High	Very High	NO	NO	YES	YES	NO
TAMUGAN	Agri-Industrial	21.51	15,000	Low	Low	High	Very High	YES	YES	NO	YES	NO
MALABOG	Residential	18.22	10,000	Residual	Residual	High	Very High	NO	NO	YES	YES	NO
SALAPAWAN	Residential	3.04	10,000	Residual	Residual	High	Very High	NO	NO	YES	YES	NO
SUMIMAO	Residential	1.78	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	NO

Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
TAPAK	Residential	18.67	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	NO
BAGO APLA-YA	Residential	95.45	10,000	Residual	Residual	Moderate	Very High	NO	NO	YES	YES	YES
BAGO APLA-YA	Industrial	16.24	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BAGO APLA-YA	Commercial	12.91	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BAGO APLA-YA	Parks and Recreational	5.45	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BAGO GAL-LERA	Residential	129.96	10,000	Moderate	Moderate	Moderate	Very High	NO	NO	YES	YES	YES
BAGO GAL-LERA	Industrial	0.12	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BAGO GAL-LERA	Commercial	0.65	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BAGO GAL-LERA	Parks and Recreational	63.48	15,000	Low	Moderate	Moderate	Very High	YES	YES	NO	YES	YES
BALIOK	Residential	77.41	10,000	Residual	Residual	Moderate	Very High	NO	NO	YES	YES	YES
BALIOK	Parks and Recreational	0.35	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BUCANA	Tourism	0.67	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
BUCANA	Residential	216.99	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
BUCANA	Parks and Recreational	1.92	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BUCANA	Commercial	63.45	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CATALUNAN GRANDE	Residential	301.77	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES

Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replace-ment Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employ- ing hazard resistant building de- sign	No access/ area coverage to infrastruc- ture related hazard mitiga- tion measures	Capacity and willingness to retrofit or relo- cate or conform with new regula- tions	Insurance Coverage	Available Alternative Sites	Govern- ment Re- sources	Local Govern- ment Capacity to impose/ implement zoning regula- tions
CATALUNAN GRANDE	Agri-Industrial	21.25	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CATALUNAN GRANDE	Parks and Rec- reational	5.80	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CATALUNAN GRANDE	Commercial	6.03	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CATALUNAN PEQUEÑO	Tourism	1.32	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
CATALUNAN PEQUEÑO	Residential	197.40	10,000	Moderate	Moderate	Moderate	Very High	NO	NO	YES	YES	YES
CATALUNAN PEQUEÑO	Industrial	2.15	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CATALUNAN PEQUEÑO	Commercial	3.55	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CATALUNAN PEQUEÑO	Agri-Industrial	13.65	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
DUMOY	Tourism	5.83	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
DUMOY	Parks and Rec- reational	8.33	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
DUMOY	Residential	162.79	10,000	Residual	Residual	Moderate	Very High	NO	NO	YES	YES	YES
DUMOY	Industrial	32.56	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LANGUB	Residential	13.62	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
MA-A	Residential	428.30	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
MA-A	Parks and Rec- reational	12.99	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MA-A	Industrial	22.55	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MA-A	Tourism	16.56	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
MA-A	Commercial	90.17	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES

Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replace-ment Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employ- ing hazard resistant building de- sign	No access/ area coverage to infrastruc- ture related hazard mitiga- tion measures	Capacity and willingness to retrofit or relo- cate or conform with new regula- tions	Insurance Coverage	Available Alternative Sites	Govern- ment Re- sources	Local Govern- ment Capacity to impose/ implement zoning regula- tions
MAGTUOD	Residential	53.99	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES
MAGTUOD	Parks and Rec- reational	10.49	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MAGTUOD	Commercial	0.77	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MATINA APLAYA	Residential	155.55	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
MATINA APLAYA	Parks and Rec- reational	2.27	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MATINA APLAYA	Commercial	20.48	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MATINA APLAYA	Tourism	2.35	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
MATINA APLAYA	Industrial	2.92	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MATINA CROSSING	Residential	250.42	10,000	Low	Low	High	Very High	NO	NO	YES	YES	YES
MATINA CROSSING	Commercial	50.86	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MATINA CROSSING	Industrial	5.73	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MATINA CROSSING	Parks and Rec- reational	18.39	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MATINA PANGI	Residential	152.20	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES
MATINA PANGI	Industrial	0.04	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MATINA PANGI	Parks and Rec- reational	0.54	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TALOMO	Tourism	1.55	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES

Table U-1. Urban Use Area Exposure to Flood, Davao City

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Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
TALOMO	Residential	297.68	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
TALOMO	Industrial	15.85	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TALOMO	Commercial	20.65	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TALOMO	Parks and Recreational	5.46	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
ALAMBRE	Residential	7.87	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
ALAMBRE	Agri-Industrial	12.70	15,000	Low	Low	Moderate	Very High	YES	YES	NO	YES	YES
BANKAS HEIGHTS	Residential	29.39	10,000	Residual	Residual	Moderate	Very High	NO	NO	YES	YES	YES
BANKAS HEIGHTS	Agri-Industrial	1.67	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BATO	Commercial	0.47	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BATO	Residential	44.81	10,000	Residual	Residual	Moderate	Very High	NO	NO	YES	YES	YES
CROSSING BAYABAS	Residential	92.31	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
BINUGAO	Residential	52.80	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
BINUGAO	Parks and Recreational	1.34	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BINUGAO	Industrial	63.36	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BINUGAO	Commercial	3.44	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BINUGAO	Agri-Industrial	13.50	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
CATIGAN	Residential	6.31	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
DALIAO	Tourism	1.79	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
DALIAO	Residential	107.79	15,000	Moderate	Moderate	Moderate	Very High	NO	NO	YES	YES	YES
DALIAO	Parks and Recreational	0.16	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES

Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
DALIAO	Industrial	14.75	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
EDEN	Tourism	98.41	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
EDEN	Residential	51.49	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
KILATE	Residential	2.61	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
LIZADA	Agri-Industrial	5.18	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LIZADA	Residential	100.96	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
LIZADA	Industrial	13.44	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LUBOGAN	Residential	90.18	15,000	Residual	Residual	High	Very High	NO	NO	YES	YES	YES
LUBOGAN	Parks and Recreational	1.10	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LUBOGAN	Cemetery	5.67	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MARAPANGI	Tourism	0.02	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
MARAPANGI	Agri-Industrial	9.85	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MARAPANGI	Residential	76.92	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
SIBULAN	Residential	2.14	10,000	Residual	Residual	High	Very High	NO	NO	YES	YES	YES
SIRAWAN	Residential	83.94	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
SIRAWAN	Parks and Recreational	0.04	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
SIRAWAN	Agri-Industrial	85.28	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TAGAKPAN	Residential	9.67	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES
TAGAKPAN	Parks and Recreational	2.42	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TAGAKPAN	Agri-Industrial	0.61	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TAGLUNO	Residential	2.27	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
TIBULOY	Agri-Industrial	7.75	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES

Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replace-ment Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employ- ing hazard resistant building de- sign	No access/ area coverage to infrastruc- ture related hazard mitiga- tion measures	Capacity and willingness to retrofit or relo- cate or conform with new regula- tions	Insurance Coverage	Available Alternative Sites	Govern- ment Re- sources	Local Govern- ment Capacity to impose/ implement zoning regula- tions
TUNGKALAN	Residential	3.85	15,000	Residual	Residual	High	Very High	NO	NO	YES	YES	YES
ANGALAN	Agri-Industrial	12.30	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
ANGALAN	Residential	11.73	10,000	High	High	Moderate	Very High	NO	NO	YES	YES	YES
ANGALAN	Parks and Rec- reational	0.06	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BAGO OSHI- RO	Residential	138.55	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
BALENGAENG	Agri-Industrial	35.49	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BALENGAENG	Residential	2.27	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES
BALENGAENG	Parks and Rec- reational	0.05	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BIAO ES- CUELA	Parks and Rec- reational	0.04	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BIAO ES- CUELA	Agri-Industrial	36.45	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BIAO ES- CUELA	Residential	8.59	10,000	Very High	Very High	Moderate	Very High	NO	NO	YES	YES	YES
BIAO GUI- ANGA	Agri-Industrial	6.20	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
BIAO GUI- ANGA	Residential	3.83	10,000	Moderate	Moderate	Moderate	Very High	NO	NO	YES	YES	YES
MATINA BIAO	Tourism	0.41	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
MATINA BIAO	Residential	2.77	10,000	Moderate	Moderate	High	Very High	NO	NO	YES	YES	YES
MATINA BIAO	Parks and Rec- reational	0.06	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES

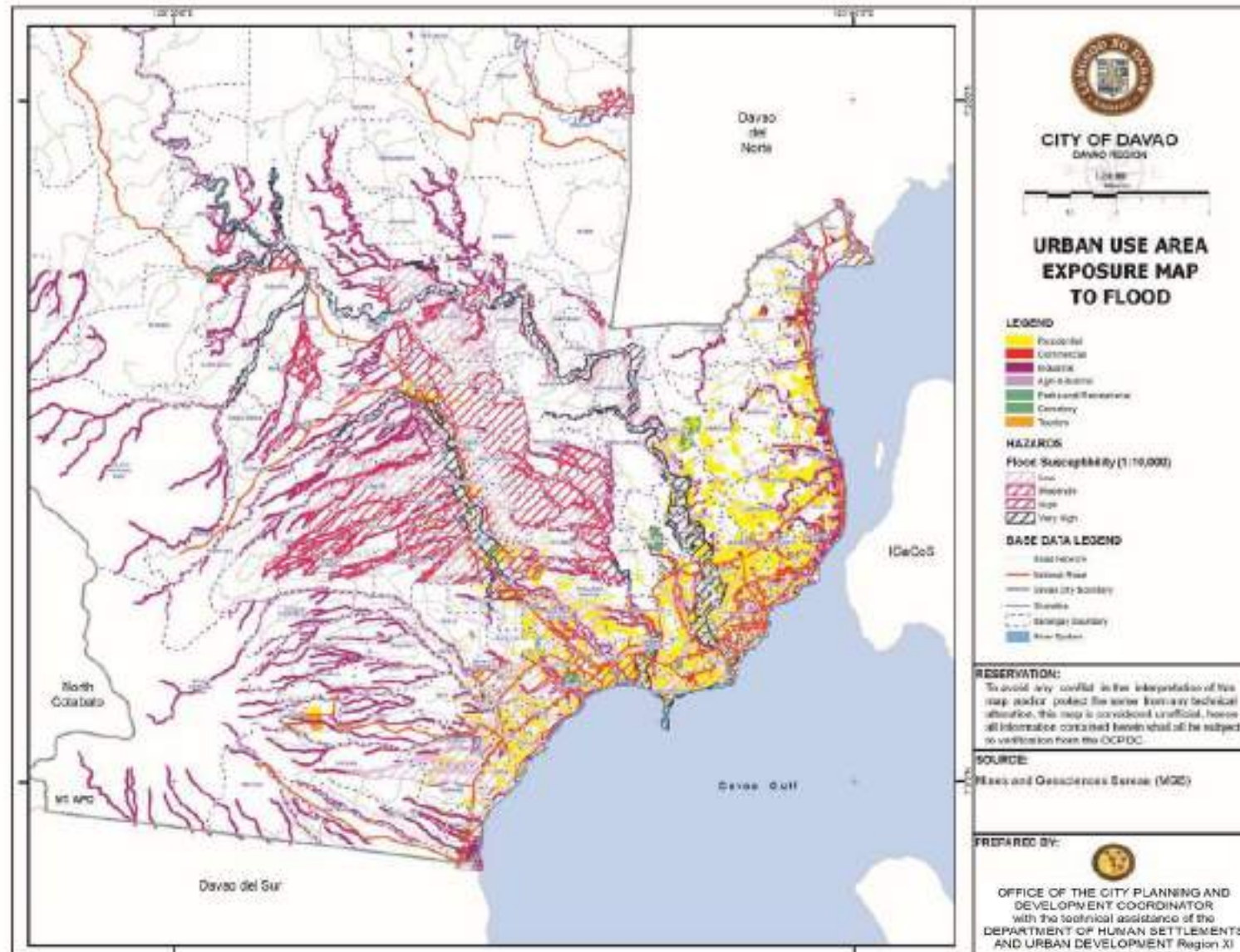
Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
MATINA BIAO	Agri-Industrial	6.90	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LOS AMIGOS	Tourism	0.63	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
LOS AMIGOS	Residential	39.99	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
LOS AMIGOS	Industrial	3.31	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
LOS AMIGOS	Commercial	1.03	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MANAMBU-LAN	Residential	9.65	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
MANUEL GUI-ANGA	Agri-Industrial	4.52	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MANUEL GUI-ANGA	Residential	7.31	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES
MINTAL	Residential	150.19	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
MINTAL	Parks and Recreational	0.41	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MINTAL	Commercial	6.08	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
MINTAL	Industrial	1.42	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
NEW CARMEN	Residential	15.64	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES
NEW VALENCIA	Residential	4.94	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES
STO. NIÑO	Commercial	4.13	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
STO. NIÑO	Residential	80.85	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
TACUNAN	Residential	52.76	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
TACUNAN	Parks and Recreational	4.02	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TACUNAN	Cemetery	0.003	15,000	Low	Low	Moderate	Very High	NO	NO	NO	YES	YES

Table U-1. Urban Use Area Exposure to Flood, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replace-ment Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employ- ing hazard resistant building de- sign	No access/ area coverage to infrastruc- ture related hazard mitiga- tion measures	Capacity and willingness to retrofit or relo- cate or conform with new regula- tions	Insurance Coverage	Available Alternative Sites	Govern- ment Re- sources	Local Govern- ment Capacity to impose/ implement zoning regula- tions
TALANDANG	Residential	7.96	10,000	Very High	Very High	High	Very High	NO	NO	YES	YES	YES
TALANDANG	Agri-Industrial	24.66	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TUGBOK	Tourism	0.07	15,000	Low	Low	High	Very High	YES	NO	YES	YES	YES
TUGBOK	Residential	114.41	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
TUGBOK	Industrial	0.75	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TUGBOK	Commercial	2.59	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TUGBOK	Cemetery	3.97	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
TUGBOK	Agri-Industrial	4.70	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
ULA	Residential	14.19	10,000	High	High	High	Very High	NO	NO	YES	YES	YES
ULA	Parks and Rec- reational	0.10	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
ULA	Industrial	2.38	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES
ULA	Agri-Industrial	16.52	15,000	Low	Low	High	Very High	YES	YES	NO	YES	YES

Map 4.1 Urban Use Area Exposure Map to Flood



LANDSLIDE

A total of 90 barangays with 5,276.99 hectares for residential use, 14 barangays with 297.32 hectares utilized for commercial purposes, 20 barangays with 635.05 hectares for industrial use, 18 barangays with combined land area of 315.02 hectares for agri-industrial use, 16 barangays with 200.75 hectares for tourism use, five (5) barangays with 130.23 hectares of land for cemetery, and 12 barangays with 122.19 hectares used as parks and recreation areas are all exposed to landslide.

Taking into account sensitivity, there are 44 barangays mainly residential with very high sensitivity rating, 24 barangays with high sensitivity rating, 61 with moderate sensitivity rating, mostly for tourism use, 35 barangays with low sensitivity rating, majority is for industrial use, and nine (9) barangays with residual rating, mostly for residential use.

As with the other hazards, most if not all residential areas are not capable and are not willing to retrofit and relocate or conform with new regulations even if there are available alternative sites; while most parks and recreation, commercial, industrial, agri-industrial, tourism are willing to retrofit and relocate. The downside though is there are still no available alternative sites.

Table U-2. Urban Use Area Exposure to Landslide, Davao City

Barangay	EXPOSURE			SENSITIVITY				ADAPTIVE CAPACITY				
	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
19-B	Commercial	28.23	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
19-B	Residential	179.82	10,000.00	moderate	moderate	low	very high	No	No	Yes	Yes	Yes
CARMEN	Residential	1.49	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
GUMALANG	Agri-Industrial	21.27	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
GUMALANG	Residential	4.56	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
MALAGOS	Agri-Industrial	7.18	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
MALAGOS	Tourism	13.48	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
TAMBOBONG	Residential	4.49	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes

Table U-2. Urban Use Area Exposure to Landslide, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
TAWAN-TAWAN	Residential	2.60	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
ACACIA	Residential	15.14	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
ACACIA	Parks and Recreational	0.04	15,000.00	low	low	low	very high	Yes	Yes	No	Yes	Yes
BUHANGIN	Cemetery	8.84	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
BUHANGIN	Industrial	4.40	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
BUHANGIN	Parks and Recreational	0.96	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
BUHANGIN	Residential	335.29	10,000.00	moderate	moderate	moderate	very high	No	No	Yes	Yes	Yes
BUHANGIN	Commercial	52.90	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
CABANTIAN	Cemetery	0.28	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
CABANTIAN	Residential	304.36	10,000.00	low	low	low	very high	No	No	Yes	Yes	Yes
CABANTIAN	Commercial	23.10	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
CABANTIAN	Industrial	26.46	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
CALLAWA	Residential	7.90	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
COMMUNAL	Tourism	20.15	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
COMMUNAL	Residential	161.79	10,000.00	low	low	low	very high	No	No	Yes	Yes	Yes
COMMUNAL	Commercial	11.99	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
COMMUNAL	Industrial	4.48	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
INDANGAN	Tourism	0.01	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
INDANGAN	Commercial	1.70	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
INDANGAN	Parks and Recreational	56.26	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
INDANGAN	Industrial	11.16	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
INDANGAN	Residential	247.61	10,000.00	residual	residual	low	very high	No	No	Yes	Yes	Yes
MANDUG	Parks and Recreational	32.36	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
MANDUG	Residential	168.39	10,000.00	moderate	moderate	low	very high	No	No	Yes	Yes	Yes

Table U-2. Urban Use Area Exposure to Landslide, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
MANDUG	Agri-Industrial	6.55	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
MANDUG	Industrial	19.99	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
SASA	Residential	223.79	10,000.00	moderate	moderate	low	very high	No	No	Yes	Yes	Yes
TIGATTO	Industrial	13.02	15,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
TIGATTO	Residential	256.29	10,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
WAAN	Cemetery	3.83	15,000.00	residual	residual	low	very high	No	No	Yes	Yes	Yes
WAAN	Residential	38.48	10,000.00	high	high	low	very high	Yes	Yes	No	Yes	Yes
A. ANGLI-ONGTO	Residential	155.67	10,000.00	low	low	moderate	very high	No	No	Yes	Yes	Yes
A. ANGLI-ONGTO	Industrial	17.15	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
BUNAWAN	Industrial	115.60	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
BUNAWAN	Residential	123.76	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
GATUNGAN	Agri-Industrial	2.17	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
GATUNGAN	Industrial	0.38	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
GATUNGAN	Parks and Recreational	0.01	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
GATUNGAN	Residential	1.98	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
ILANG	Residential	125.67	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
ILANG	Industrial	90.12	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
MAHAYAG	Agri-Industrial	26.18	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
MAHAYAG	Industrial	70.08	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
MAHAYAG	Residential	57.77	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
MAHAYAG	Commercial	8.62	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
MUDIANG	Residential	67.96	10,000.00	high	high	moderate	very high	Yes	Yes	No	Yes	Yes
MUDIANG	Industrial	6.42	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes

Table U-2. Urban Use Area Exposure to Landslide, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
MUDIANG	Agri-Industrial	1.88	15,000.00				very high	No	No	Yes	Yes	Yes
PANACAN	Residential	256.99	10,000.00	high	high	moderate	very high	Yes	Yes	No	Yes	Yes
PANACAN	Industrial	120.37	15,000.00	low	low	low	very high	No	No	Yes	Yes	Yes
SAN ISIDRO	Residential	26.46	10,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
SAN ISIDRO	Industrial	4.21	15,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
TIBUNGCO	Agri-Industrial	4.17	15,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
TIBUNGCO	Industrial	41.73	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
TIBUNGCO	Residential	131.99	10,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
BIAO JOAQUIN	Residential	3.19	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
BIAO JOAQUIN	Agri-Industrial	20.15	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
CALINAN	Residential	107.30	10,000.00	moderate	moderate	low	very high	No	No	Yes	Yes	Yes
DACUDAO	Agri-Industrial	37.72	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
DALAGDAG	Residential	2.54	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
DOMINGA	Residential	1.76	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
INAYANGAN	Residential	3.02	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
LACSON	Agri-Industrial	11.02	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
LACSON	Residential	5.16	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
LAMANAN	Residential	4.53	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
LAMPINANAO	Residential	2.13	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
MEGKA-WAYAN	Residential	5.51	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
MEGKA-WAYAN	Tourism	1.93	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes

Table U-2. Urban Use Area Exposure to Landslide, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
PANGYAN	Residential	5.09	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
SALOY	Residential	1.78	10,000.00	residual	residual	low	very high	No	No	Yes	Yes	Yes
SIRIB	Residential	7.56	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
TALOMO RIVER	Agri-Industrial	18.30	15,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
TALOMO RIVER	Residential	21.81	10,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
TAMAYONG	Residential	4.57	10,000.00	moderate	moderate	low	very high	No	No	Yes	Yes	Yes
BAGANIHAN	Tourism	3.95	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
BAGANIHAN	Residential	3.08	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
BANTOL	Residential	2.61	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
BUDA	Residential	19.63	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
DALAG LUMOT	Residential	9.86	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
DATU SALUMAY	Residential	21.30	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
DATU SALUMAY	Tourism	8.83	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
GUMITAN	Residential	8.82	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
MAGSAYSAY	Residential	8.68	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
MAGSAYSAY	Tourism	0.99	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
MALAMBA	Residential	13.13	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
MARILOG	Residential	92.60	10,000.00	residual	residual	low	very high	No	No	Yes	Yes	No
MARILOG	Tourism	29.99	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	No
SALAYSAY	Residential	10.06	10,000.00	residual	residual	low	very high	No	No	Yes	Yes	Yes
SUAWAN	Residential	7.31	10,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
SUAWAN	Agri-Industrial	19.10	15,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
COLOSAS	Residential	9.67	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes

Table U-2. Urban Use Area Exposure to Landslide, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
FATIMA	Residential	9.80	15,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
LUMIAD	Residential	8.61	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
MABUHAY	Residential	7.35	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
MALABOG	Residential	18.21	10,000.00	residual	residual	low	very high	No	No	Yes	Yes	Yes
MALABOG	Tourism	4.34	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
MAPULA	Residential	14.69	10,000.00	residual	residual	low	very high	No	No	Yes	Yes	Yes
PANDAITAN	Residential	9.35	10,000.00	moderate	moderate	moderate	very high	No	No	Yes	Yes	Yes
PAÑALUM	Residential	2.07	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
PAQUIBATO	Residential	12.53	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
PAQUIBATO	Tourism	0.99	15,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
PARADISE EMBAC	Residential	1.90	10,000.00	high	high	low	very high	Yes	Yes	No	Yes	Yes
SALAPAWAN	Residential	3.04	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
SUMIMAO	Residential	1.77	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
TAPAK	Residential	18.67	10,000.00	residual	residual	low	very high	No	No	Yes	Yes	Yes
CATALUNAN GRANDE	Residential	301.75	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
CATALUNAN GRANDE	Parks and Recreational	5.79	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
LANGUB	Parks and Recreational	2.13	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
LANGUB	Tourism	0.32	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
LANGUB	Commercial	0.01	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
LANGUB	Residential	13.61	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
MA-A	Tourism	16.55	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
MA-A	Parks and Recreational	12.99	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
MA-A	Residential	428.26	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes

Table U-2. Urban Use Area Exposure to Landslide, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
MA-A	Commercial	90.16	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
MA-A	Cemetery	25.41	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
MA-A	Industrial	22.53	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
MAGTUOD	Parks and Recreational	10.48	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
MAGTUOD	Cemetery	91.87	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
MAGTUOD	Residential	53.99	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
MAGTUOD	Commercial	0.77	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
MATINA CROSSING	Industrial	5.72	15,000.00	low	low	low	very high	Yes	Yes	No	Yes	Yes
MATINA CROSSING	Residential	250.40	10,000.00	low	low	low	very high	No	No	Yes	Yes	Yes
MATINA CROSSING	Commercial	50.80	15,000.00	low	low	low	very high	Yes	Yes	No	Yes	Yes
MATINA PANGI	Commercial	4.88	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
MATINA PANGI	Parks and Recreational	0.53	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
MATINA PANGI	Tourism	0.55	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
MATINA PANGI	Residential	152.49	15,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
MATINA PANGI	Industrial	0.03	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
TALOMO	Industrial	15.84	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
TALOMO	Commercial	20.65	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
TALOMO	Residential	297.55	10,000.00	low	low	moderate	very high	No	No	Yes	Yes	Yes
ALAMBRE	Residential	7.80	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes

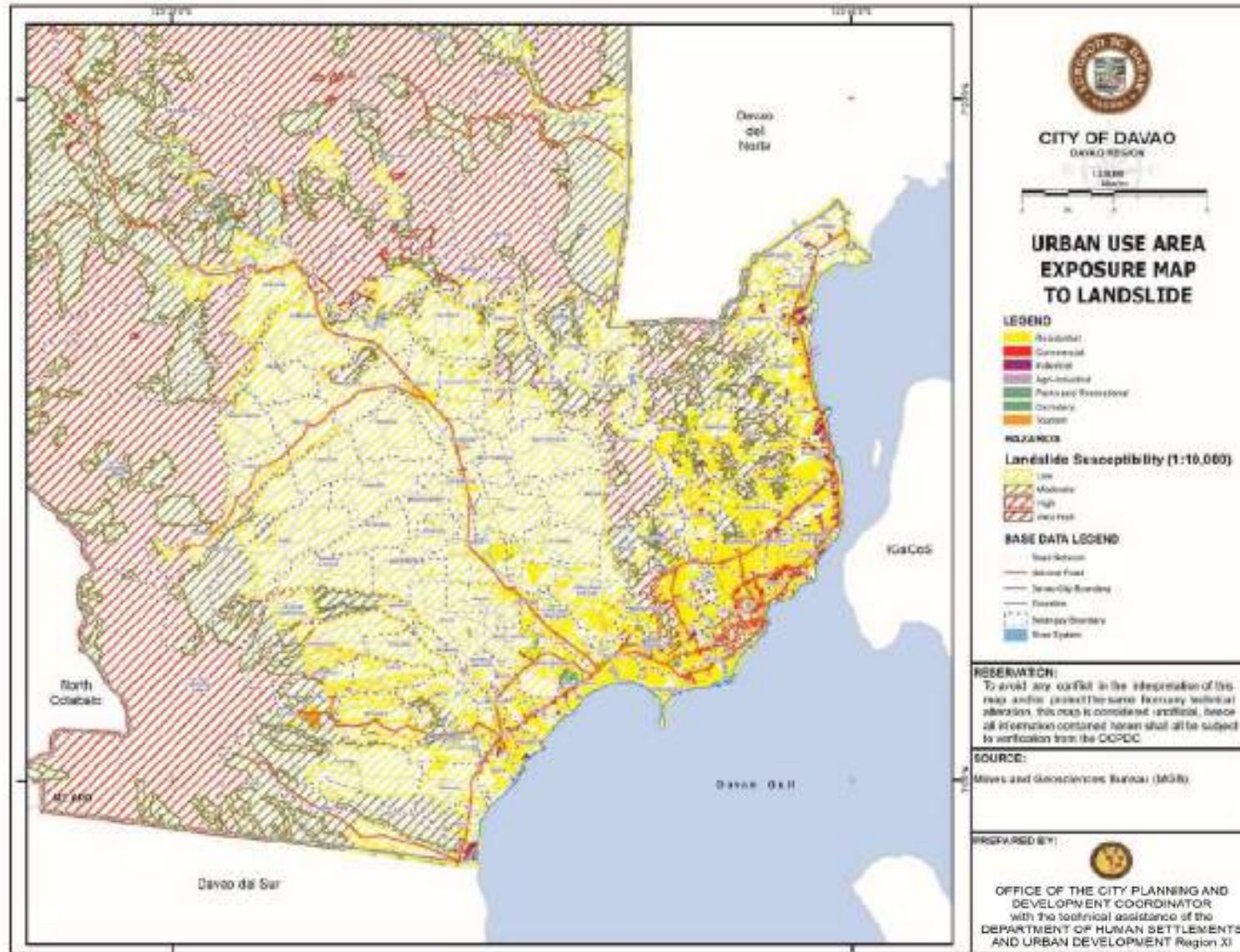
Table U-2. Urban Use Area Exposure to Landslide, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
ATAN-AWE	Residential	0.88	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
BARACATAN	Residential	4.30	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
BATO	Residential	44.80	10,000.00	low	low	low	very high	No	No	Yes	Yes	Yes
BAYABAS	Tourism	0.08	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
BAYABAS	Residential	3.34	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
BINUGAO	Agri-Industrial	13.50	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
BINUGAO	Residential	52.79	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
BINUGAO	Industrial	63.36	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
BINUGAO	Commercial	3.43	15,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
CAMANSI	Residential	2.44	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
CATIGAN	Residential	6.30	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
DALIAON PLANTATION	Residential	5.55	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
EDEN	Residential	51.48	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
EDEN	Agri-Industrial	1.27	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
EDEN	Parks and Recreational	0.55	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
EDEN	Commercial	0.08	15,000.00	low	low	low	very high	Yes	Yes	No	Yes	Yes
EDEN	Tourism	98.40	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
KILATE	Residential	2.60	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
MARAPANGI	Tourism	0.19	15,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
MARAPANGI	Residential	76.91	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
SIBULAN	Residential	2.13	10,000.00	moderate	moderate	low	very high	No	No	Yes	Yes	Yes

Table U-2. Urban Use Area Exposure to Landslide, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
SIRAWAN	Agri-Industrial	85.27	15,000.00	residual	residual	low	very high	No	No	Yes	Yes	Yes
SIRAWAN	Residential	83.94	10,000.00	low	low	moderate	very high	Yes	Yes	No	Yes	Yes
TAGURANO	Residential	1.66	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
TIBULOY	Agri-Industrial	7.75	15,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
TIBULOY	Residential	3.76	10,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
TUNGKALAN	Residential	3.84	10,000.00	moderate	moderate	low	very high	No	No	Yes	Yes	Yes
MATINA BIAO	Agri-Industrial	6.89	15,000.00	moderate	moderate	moderate	very high	Yes	Yes	No	Yes	Yes
MATINA BIAO	Residential	2.76	10,000.00	moderate	high	low	very high	No	No	Yes	Yes	Yes
MANAMBU-LAN	Residential	9.65	10,000.00	high	high	low	very high	No	No	Yes	Yes	Yes
NEW CARMEN	Parks and Recreational	0.09	15,000.00	moderate	moderate	low	very high	No	No	Yes	Yes	Yes
NEW CARMEN	Residential	15.64	10,000.00	moderate	moderate	low	very high	Yes	Yes	No	Yes	Yes
NEW VALEN-CIA	Residential	4.93	10,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes
TALANDANG	Agri-Industrial	24.65	15,000.00	very high	very high	low	very high	No	No	Yes	Yes	Yes

Map 4.2 Urban Use Area Exposure Map to Landslide



LIQUEFACTION

Residential areas in 84 barangays with a total land area of 5,554.45 hectares, commercial areas of 66 barangays with 990.73 hectares, industrial areas of 49 barangays with land area totalling 792.15 hectares, agri-industrial areas of 7 barangays with 123.15 hectares, tourism areas of 13 barangays with a land area of 34.92, three (3) barangays with a land area of 45.63 hectares used as cemetery, and parks and recreation areas of 27 barangays with a land area of 36.07 hectares are all exposed to liquefaction.

For sensitivity, residential areas in 19 barangays have very high rating, 26 have high rating; 71 have moderate rating; 161 barangays have low rating with commercial as the dominant use.

In terms of adaptive capacity, residential areas exposed have no capacity and are not willing to retrofit or relocate or conform with new regulations though there are identified relocation sites. Exposed commercial, agri-industrial, tourism, and parks and recreation areas have the capacity to retrofit and relocate but areas for relocation are yet to be identified.

Table U-3. Urban Use Area Exposure to Liquefaction, Davao City

Barangay	EXPOSURE			SENSITIVITY				ADAPTIVE CAPACITY				
	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
1-A	Residential	6.95	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
1-A	Commercial	1.40	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
1-A	Parks and Recreational	0.08	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
2-A	Residential	1.62	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
2-A	Commercial	11.32	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
2-A	Parks and Recreational	0.44	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
3-A	Residential	0.55	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
3-A	Commercial	14.90	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES

Table U-3. Urban Use Area Exposure to Liquefaction, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
3-A	Parks and Recreational	0.10	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
4-A	Residential	2.93	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
4-A	Commercial	9.55	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
4-A	Parks and Recreational	4.00	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
4-A	Industrial	0.08	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
5-A	Residential	20.41	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
5-A	Parks and Recreational	0.01	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
5-A	Commercial	4.34	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
6-A	Residential	4.39	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
6-A	Industrial	0.06	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
6-A	Commercial	5.66	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
7-A	Residential	10.18	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
7-A	Commercial	6.79	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
8-A	Residential	82.83	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
8-A	Industrial	3.84	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
8-A	Commercial	5.65	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
8-A	Parks and Recreational	1.17	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
8-A	Cemetery	18.90	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
9-A	Residential	13.91	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
9-A	Industrial	0.22	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
9-A	Commercial	7.49	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
10-A	Residential	5.79	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
10-A	Industrial	0.26	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
10-A	Commercial	7.70	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
11-B	Residential	2.56	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES

Table U-3. Urban Use Area Exposure to Liquefaction, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
11-B	Commercial	4.52	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
11-B	Industrial	0.61	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
12-B	Residential	1.20	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
12-B	Commercial	12.43	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
12-B	Parks and Recreational	0.06	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
12-B	Industrial	0.01	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
13-B	Residential	0.57	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
13-B	Commercial	8.52	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
14-B	Residential	3.09	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
14-B	Commercial	7.52	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
14-B	Industrial	0.30	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
15-B	Residential	1.46	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
15-B	Commercial	24.46	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
15-B	Parks and Recreational	0.19	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
15-B	Industrial	0.00011	15,000.00					YES	YES	NO	YES	YES
16-B	Residential	0.43	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
16-B	Commercial	3.38	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
17-B	Residential	0.53	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
17-B	Commercial	3.89	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
18-B	Residential	0.40	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
18-B	Commercial	8.95	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
18-B	Parks and Recreational	0.42	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
19-B	Residential	179.81	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
19-B	Tourism	0.23	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
19-B	Commercial	28.23	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES

Table U-3. Urban Use Area Exposure to Liquefaction, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
19-B	Parks and Recreational	0.36	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
19-B	Industrial	2.48	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
20-B	Residential	13.93	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
20-B	Commercial	28.61	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
20-B	Industrial	0.28	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
21-C	Residential	5.18	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
21-C	Commercial	0.30	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
21-C	Parks and Recreational	0.07	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
22-C	Residential	4.78	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
22-C	Commercial	0.50	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
22-C	Parks and Recreational	0.05	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
23-C	Residential	12.79	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
23-C	Commercial	0.87	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
23-C	Parks and Recreational	0.72	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
24-C	Residential	2.51	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
24-C	Commercial	3.60	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
24-C	Parks and Recreational	0.05	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
25-C	Residential	1.73	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
25-C	Commercial	2.24	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
26-C	Residential	2.23	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
26-C	Commercial	4.32	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
27-C	Residential	0.64	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
27-C	Commercial	18.61	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
27-C	Industrial	0.69	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES

Table U-3. Urban Use Area Exposure to Liquefaction, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
27-C	Parks and Recreational	4.10	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
27-C	Tourism	0.04	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
28-C	Residential	1.65	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
28-C	Commercial	3.95	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
29-C	Residential	1.07	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
29-C	Commercial	6.88	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
30-C	Residential	1.37	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
30-C	Commercial	14.96	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
30-C	Industrial	0.29	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
31-D	Residential	13.56	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
31-D	Commercial	0.61	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
31-D	Parks and Recreational	0.13	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
32-D	Residential	2.75	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
32-D	Commercial	5.17	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
32-D	Parks and Recreational	0.20	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
33-D	Residential	3.86	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
33-D	Commercial	2.89	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
34-D	Residential	0.37	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
34-D	Commercial	12.70	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
34-D	Parks and Recreational	0.00	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
35-D	Residential	0.04	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
35-D	Parks and Recreational	4.13	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
35-D	Commercial	2.48	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
36-D	Residential	2.39	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES

Table U-3. Urban Use Area Exposure to Liquefaction, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
36-D	Commercial	3.33	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
36-D	Parks and Recreational	0.07	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
37-D	Residential	3.54	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
37-D	Commercial	0.82	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
38-D	Residential	1.73	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
38-D	Commercial	3.10	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
38-D	Parks and Recreational	0.01	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
39-D	Residential	2.92	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
39-D	Commercial	5.34	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
39-D	Parks and Recreational	0.89	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
40-D	Residential	1.34	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
40-D	Commercial	6.05	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
AGDAO PROPER	Residential	7.62	15,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
AGDAO PROPER	Commercial	22.65	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
AGDAO PROPER	Industrial	1.29	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
AGDAO PROPER	Parks and Recreational	0.01	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
WILFREDO AQUINO	Residential	26.09	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
WILFREDO AQUINO	Parks and Recreational	1.06	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
WILFREDO AQUINO	Commercial	23.77	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES

Table U-3. Urban Use Area Exposure to Liquefaction, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
WILFREDO AQUINO	Industrial	0.12	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
PACIANO BANGOY	Residential	21.36	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
PACIANO BANGOY	Industrial	0.67	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
PACIANO BANGOY	Commercial	37.06	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
RAFAEL CASTILLO	Residential	11.86	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
RAFAEL CASTILLO	Commercial	16.41	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
RAFAEL CASTILLO	Industrial	9.33	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
RAFAEL CASTILLO	Parks and Recreational	0.02	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
CENTRO	Residential	22.72	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
CENTRO	Commercial	1.14	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
CENTRO	Industrial	10.73	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
CENTRO	Parks and Recreational	0.04	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
GOV. VICENTE DUTERTE	Residential	20.34	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
GOV. VICENTE DUTERTE	Industrial	12.56	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
GOV. VICENTE DUTERTE	Commercial	4.95	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
GOV. VICENTE DUTERTE	Parks and Recreational	0.06	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES

Table U-3. Urban Use Area Exposure to Liquefaction, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
LEON GARCIA SR.	Residential	12.04	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
LEON GARCIA SR.	Commercial	1.06	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LEON GARCIA SR.	Industrial	0.29	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
LEON GARCIA SR.	Parks and Recreational	0.08	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LAPU - LAPU	Residential	23.68	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
LAPU - LAPU	Commercial	1.61	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
LAPU - LAPU	Industrial	22.95	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LAPU - LAPU	Parks and Recreational	0.04	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
TOMAS MONTE-VERDE	Residential	2.09	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
TOMAS MONTE-VERDE	Commercial	11.83	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
TOMAS MONTE-VERDE	Industrial	0.83	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
SAN ANTONIO	Residential	25.28	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
SAN ANTONIO	Commercial	43.27	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
SAN ANTONIO	Industrial	10.51	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
SAN ANTONIO	Parks and Recreational	0.06	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES

Table U-3. Urban Use Area Exposure to Liquefaction, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
UBALDE	Residential	5.94	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
UBALDE	Commercial	1.53	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
UBALDE	Industrial	0.21	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
BUHANGIN	Residential	335.29	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
BUHANGIN	Industrial	4.40	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
BUHANGIN	Commercial	52.91	15,000.00					YES	YES	NO	YES	YES
MANDUG	Residential	168.40	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
MANDUG	Agri-Industrial	6.55	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
PAMPANGA	Commercial	11.31	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
PAMPANGA	Tourism	2.99	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
PAMPANGA	Industrial	26.69	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
PAMPANGA	Residential	49.98	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
SASA	Residential	223.80	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
SASA	Industrial	93.77	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
SASA	Commercial	58.02	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
SASA	Parks and Recreational	0.21	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
TIGATTO	Residential	256.29	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
TIGATTO	Commercial	3.25	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
TIGATTO	Industrial	13.03	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
WAAN	Residential	38.48	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
WAAN	Parks and Recreational	0.08	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
A. ANGLI-ONGTO	Residential	155.68	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
A. ANGLI-ONGTO	Commercial	38.75	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
A. ANGLI-ONGTO	Industrial	17.16	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES

Table U-3. Urban Use Area Exposure to Liquefaction, Davao City

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V. HIZON	Residential	118.71	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
V. HIZON	Industrial	6.31	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
V. HIZON	Commercial	25.25	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
V. HIZON	Tourism	1.52	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BUNAWAN	Residential	123.76	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
BUNAWAN	Commercial	11.86	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
BUNAWAN	Industrial	115.61	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
BUNAWAN	Agri-Industrial	1.86	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
BUNAWAN	Parks and Recreational	0.24	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
ILANG	Residential	125.72	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
ILANG	Industrial	90.29	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
ILANG	Commercial	2.20	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LASANG	Residential	50.73	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
LASANG	Industrial	38.00	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LASANG	Commercial	2.13	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LASANG	Agri-Industrial	9.39	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
LASANG	Parks and Recreational	0.07	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
MAHAYAG	Residential	57.77	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
MAHAYAG	Industrial	70.08	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
PANACAN	Residential	256.99	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
PANACAN	Parks and Recreational	6.97	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
PANACAN	Cemetery	1.30	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
PANACAN	Industrial	120.38	15,000.00	High	High	Low	Very High	YES	YES	NO	YES	YES
PANACAN	Commercial	7.46	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES

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PANACAN	Tourism	0.96	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
SAN ISIDRO	Residential	26.47	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
SAN ISIDRO	Agri-Industrial	1.38	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
SAN ISIDRO	Industrial	4.21	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
SAN ISIDRO	Parks and Recreational	0.08	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
TIBUNGCO	Residential	131.99	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
TIBUNGCO	Industrial	41.74	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
BAGO APLA-YA	Residential	95.45	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
BAGO GAL-LERA	Residential	129.96	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
BAGO APLA-YA	Industrial	16.24	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BAGO APLA-YA	Commercial	12.91	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
BAGO APLA-YA	Parks and Recreational	5.45	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BAGO GAL-LERA	Parks and Recreational	63.48	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BAGO GAL-LERA	Commercial	0.65	15,000.00					YES	YES	NO	YES	YES
BUCANA	Residential	216.96	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
BUCANA	Parks and Recreational	1.92	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BUCANA	Commercial	63.45	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BUCANA	Tourism	0.67	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BUCANA	Industrial	0.12	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES

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Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
CATALUNAN GRANDE	Residential	301.76	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
DUMOY	Residential	162.79	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
DUMOY	Tourism	5.83	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
DUMOY	Parks and Recreational	8.33	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
DUMOY	Commercial	8.18	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
DUMOY	Industrial	32.56	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
MATINA APLAYA	Residential	155.50	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
MATINA APLAYA	Tourism	2.35	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
MATINA APLAYA	Commercial	20.47	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
MATINA APLAYA	Industrial	2.91	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
MATINA APLAYA	Parks and Recreational	2.27	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
MATINA CROSSING	Residential	250.40	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
MATINA CROSSING	Commercial	50.86	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
MATINA CROSSING	Industrial	5.73	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
MATINA CROSSING	Parks and Recreational	18.39	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
MATINA CROSSING	Tourism	0.35	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES

Table U-3. Urban Use Area Exposure to Liquefaction, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
MATINA PANGI	Residential	152.50	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
MATINA PANGI	Industrial	0.04	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
MATINA PANGI	Parks and Recreational	0.54	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
TALOMO	Residential	297.56	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
MA-A	Residential	428.27	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
MA-A	Industrial	22.54	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
MA-A	Cemetery	25.42	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
MA-A	Commercial	90.16	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
TALOMO	Tourism	1.55	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
TALOMO	Commercial	20.65	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
MA-A	Parks and Recreational	12.99	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
MA-A	Tourism	16.56	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
TALOMO	Parks and Recreational	5.46	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
TALOMO	Industrial	15.85	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
CROSSING BAYABAS	Residential	93.21	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
CROSSING BAYABAS	Commercial	9.26	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
BINUGAO	Residential	52.80	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
BINUGAO	Parks and Recreational	1.34	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BINUGAO	Commercial	3.44	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES

Table U-3. Urban Use Area Exposure to Liquefaction, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
BINUGAO	Industrial	63.36	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
BINUGAO	Agri-Industrial	13.50	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
DALIAO	Residential	107.79	10,000.00	Moderate	Moderate	Low	Very High	NO	NO	YES	YES	YES
DALIAO	Industrial	14.75	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
DALIAO	Tourism	1.79	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
DALIAO	Parks and Recreational	0.16	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
DALIAO	Commercial	0.07	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LIZADA	Residential	100.96	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
LIZADA	Industrial	13.44	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
LIZADA	Commercial	2.79	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
LIZADA	Parks and Recreational	0.19	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LIZADA	Tourism	0.08	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
LIZADA	Agri-Industrial	5.18	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
SIRAWAN	Residential	83.94	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
SIRAWAN	Agri-Industrial	85.28	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
SIRAWAN	Industrial	1.85	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
SIRAWAN	Parks and Recreational	0.04	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
SIRAWAN	Commercial	0.83	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
TORIL	Residential	69.46	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
TORIL	Industrial	2.86	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES

Table U-3. Urban Use Area Exposure to Liquefaction, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
TORIL	Commercial	24.53	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
NEW CARMEN	Residential	15.64	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES

FAULTLINE

Data in the table below reveal the following barangays exposed to fault line: 25 barangays with a total of 1,827.78 hectares designated for residential use; four (4) barangays with 25.11 hectares allocated for commercial use, two (2) barangays with a 69.72 hectares for industrial, nine (9) barangays with 230.74 hectares for agri-industrial, two (2) barangays with 1.95 hectares for tourism, three (3) barangays with 2.90 hectares, and a barangay with 3.97 hectares utilized as cemetery.

Considering sensitivity ratings, the proportion of buildings in dilapidated/condemned condition is accounted as a measure. Data below reveal there are four (4) residential areas with very high, 14 residential areas still with high, three (3) residential areas again with moderate, 21 mostly agri-industrial areas with low, and four (4) residential areas again with residual ratings.

In terms of adaptive capacity, residential areas exposed have no capacity and are not willing to retrofit or relocate or conform with new regulations though there are identified relocation sites. Exposed commercial, agri-industrial, tourism, and parks and recreation areas have the capacity to retrofit and can relocate but areas for relocation have yet to be identified.

Table U-4. Urban Use Area Exposure to Faultline, Davao City

Barangay	EXPOSURE			SENSITIVITY				ADAPTIVE CAPACITY				
	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/Condemned Condition	Structure not employing hazard resistant building design	No access/area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
MALAGOS	Residential	18.01	10,000	High	High	Moderate	Moderate	NO	NO	YES	YES	YES
BIAO JOAQUIN	Agri-Industrial	20.15	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
CALINAN	Residential	107.31	10,000	Moderate	Moderate	Moderate	Moderate	NO	NO	YES	YES	YES
CALINAN	Commercial	19.53	10,000	Low	Low	Moderate	Moderate					
CAWAYAN	Agri-Industrial	5.98	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
PANGYAN	Residential	5.09	10,000	High	High	Moderate	Moderate	NO	NO	YES	YES	YES
RIVERSIDE	Residential	21.18	10,000	High	High	Moderate	Moderate	NO	NO	YES	YES	YES

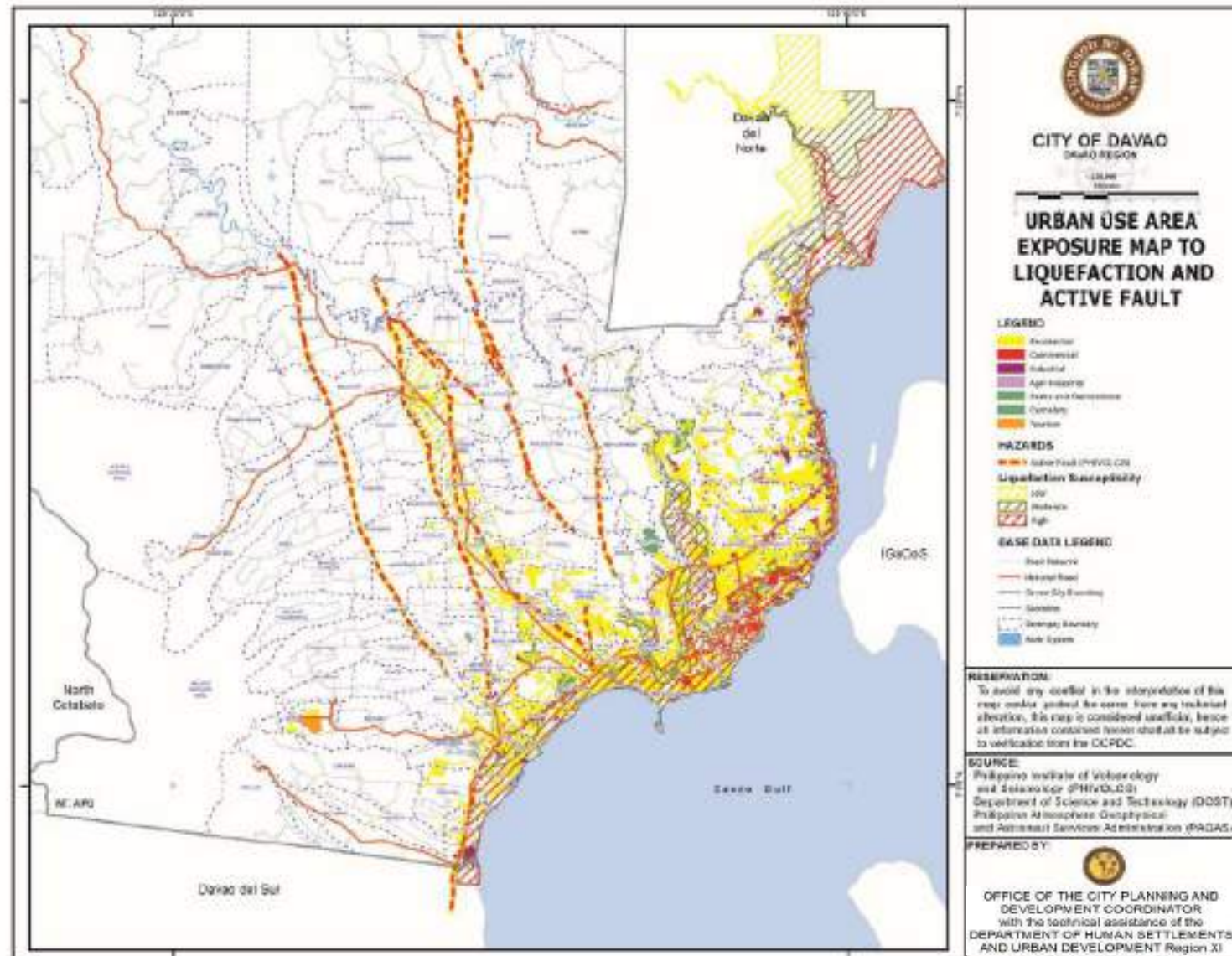
Table U-4. Urban Use Area Exposure to Faultline, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
RIVERSIDE	Parks and Recreational	0.07	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
RIVERSIDE	Commercial	1.11	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
SUBASTA	Residential	9.56	10,000	Very High	Very High	Moderate	Moderate	NO	NO	YES	YES	YES
TALOMO RIVER	Residential	21.82	10,000	Moderate	Moderate	Moderate	Moderate	NO	NO	YES	YES	YES
TALOMO RIVER	Agri-Industrial	18.35	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
WANGAN	Residential	3.34	10,000	High	High	Moderate	Moderate	NO	NO	YES	YES	YES
TAMUGAN	Residential	10.19	10,000	Residual	Residual	Moderate	Moderate	NO	NO	YES	YES	NO
TAMUGAN	Agri-Industrial	21.52	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	NO
LOS AMIGOS	Residential	39.99	10,000	High	High	Moderate	Moderate	NO	NO	YES	YES	YES
LOS AMIGOS	Tourism	0.63	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
LOS AMIGOS	Commercial	1.03	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
MALABOG	Residential	18.22	10,000	Residual	Residual	Moderate	Moderate	NO	NO	YES	YES	NO
PANALUM	Residential	2.08	10,000	Residual	Residual	Moderate	Moderate	NO	NO	YES	YES	NO
SUMIMAO	Residential	1.78	10,000	Very High	Very High	Moderate	Moderate	NO	NO	YES	YES	NO
BALIOK	Industrial	6.36	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
CATALUNAN GRANDE	Residential	301.76	10,000	High	High	Moderate	Moderate	NO	NO	YES	YES	YES
CATALUNAN PEQUENO	Residential	197.43	10,000	Moderate	Moderate	Moderate	Moderate	NO	NO	YES	YES	YES
CATALUNAN PEQUENO	Tourism	1.32	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
CATALUNAN PEQUENO	Agri-Industrial	13.65	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
TALOMO	Residential	297.56	10,000	High	High	Moderate	Moderate	NO	NO	YES	YES	YES

Table U-4. Urban Use Area Exposure to Faultline, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
BANKAS HEIGHTS	Residential	29.39	10,000	Residual	Residual	Moderate	Moderate	NO	NO	YES	YES	YES
BINUGAO	Residential	52.80	10,000	High	High	Moderate	Moderate	NO	NO	YES	YES	YES
BINUGAO	Industrial	63.36	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
BINUGAO	Commercial	3.44	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
LIZADA	Residential	100.96	10,000	High	High	Moderate	Moderate	NO	NO	YES	YES	YES
SIRAWAN	Residential	83.94	10,000	High	High	Moderate	Moderate	NO	NO	YES	YES	YES
SIRAWAN	Agri-Industrial	85.28	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
ANGALAN	Residential	11.70	10,000	High	High	Moderate	Moderate	NO	NO	YES	YES	YES
BAGO OSHIRO	Residential	138.54	10,000	Very High	Very High	Moderate	Moderate	NO	NO	YES	YES	YES
BIAO ESCUELA	Agri-Industrial	36.45	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
MINTAL	Residential	150.20	10,000	High	High	Moderate	Moderate	NO	NO	YES	YES	YES
MINTAL	Parks and Recreational	0.41	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
STO. NINO	Residential	80.86	10,000	High	High	Moderate	Moderate	NO	NO	YES	YES	YES
TAGAKPAN	Residential	9.67	10,000	Very High	Very High	Moderate	Moderate	NO	NO	YES	YES	YES
TAGAKPAN	Parks and Recreational	2.42	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
TALANDANG	Agri-Industrial	24.66	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES
TUGBOK	Residential	114.40	10,000	High	High	Moderate	Moderate	NO	NO	YES	YES	YES
TUGBOK	Cemetery	3.97	15,000	Low	Low	Moderate	Moderate	YES	NO	NO	YES	YES
TUGBOK	Agri-Industrial	4.70	15,000	Low	Low	Moderate	Moderate	YES	YES	NO	YES	YES

Map 4.3 Urban Use Area Exposure Attribute to Liquefaction and Fault line



STORM SURGE

A total of 3,666.32 hectares of residential areas in 72 barangays, 1,126.60 hectares of commercial areas in 65 barangays, 880.83 hectares of industrial use in 39 barangays, a 1.86 hectares of land in a barangay utilized for agri-industrial use, 17.77 hectares in 10 barangays designated for tourism use, and 122.28 hectares in 41 barangays used as parks and recreation are all exposed to storm surge.

Taking into account sensitivity ratings, the proportion of buildings in dilapidated/condemned condition is considered as a measure. Data in the table below reveal there are 17 residential areas with very high, 22 residential areas still with high, 81 barangays with parks and recreation as dominant use, and 108 barangays with low rating with commercial as dominant use.

In terms of adaptive capacity, residential areas exposed have no capacity and are not willing to retrofit or relocate or conform with new regulations though there are identified relocation sites. Exposed commercial, agri-industrial, tourism, and parks and recreation areas have the capacity to retrofit and relocate but areas for relocation have yet to be identified.

Table U-5. Urban Use Area Exposure to Storm Surge, Davao City

Barangay	EXPOSURE			SENSITIVITY				ADAPTIVE CAPACITY				
	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/Condemned Condition	Structure not employing hazard resistant building design	No access/area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
1-A	Commercial	1.40	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
1-A	Parks and Recreational	0.08	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
1-A	Residential	6.95	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
2-A	Commercial	11.32	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
2-A	Parks and Recreational	0.44	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
2-A	Residential	1.62	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
3-A	Commercial	14.90	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
3-A	Parks and Recreational	0.10	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES

Table U-5. Urban Use Area Exposure to Storm Surge, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
3-A	Residential	0.55	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
4-A	Commercial	9.55	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
4-A	Industrial	0.08	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
4-A	Parks and Recreational	4.00	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
4-A	Residential	2.93	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
5-A	Commercial	4.34	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
5-A	Residential	20.41	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
6-A	Commercial	5.66	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
6-A	Residential	4.39	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
7-A	Commercial	6.79	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
7-A	Residential	10.18	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
8-A	Residential	82.83	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
9-A	Commercial	247.36	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
9-A	Industrial	7.49	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
9-A	Residential	0.22	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
10-A	Commercial	7.60	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
10-A	Industrial	0.25	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
10-A	Residential	5.79	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
11-B	Commercial	4.52	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
11-B	Industrial	0.61	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
11-B	Residential	2.56	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
12-B	Commercial	12.43	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
12-B	Industrial	0.01	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
12-B	Parks and Recreational	0.06	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
12-B	Residential	1.20	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
13-B	Commercial	8.52	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
13-B	Residential	0.57	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES

Table U-5. Urban Use Area Exposure to Storm Surge, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
14-B	Commercial	7.52	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
14-B	Industrial	0.30	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
14-B	Residential	3.09	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
15-B	Commercial	24.46	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
15-B	Parks and Recreational	0.19	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
15-B	Residential	1.46	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
16-B	Commercial	3.38	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
16-B	Residential	0.42	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
17-B	Commercial	3.89	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
17-B	Residential	0.52	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
18-B	Commercial	8.95	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
18-B	Parks and Recreational	0.42	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
18-B	Residential	0.40	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
19-B	Commercial	28.23	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
20-B	Commercial	28.60	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
20-B	Residential	13.92	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
21-C	Commercial	0.30	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
21-C	Parks and Recreational	0.07	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
21-C	Residential	5.18	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
22-C	Commercial	0.50	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
22-C	Parks and Recreational	0.05	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
22-C	Residential	4.78	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
23-C	Commercial	0.87	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
23-C	Parks and Recreational	0.72	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES

Table U-5. Urban Use Area Exposure to Storm Surge, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
23-C	Residential	12.79	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
24-C	Commercial	3.60	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
24-C	Parks and Recreational	0.05	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
24-C	Residential	3.60	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
25-C	Commercial	2.24	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
25-C	Residential	1.73	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
26-C	Commercial	4.32	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
26-C	Residential	2.23	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
27-C	Commercial	18.61	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
27-C	Industrial	0.69	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
27-C	Parks and Recreational	4.10	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
27-C	Residential	0.64	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
27-C	Tourism	0.04	15,000.00	Moderate	Moderate	moderate	Very High	YES	YES	NO	YES	YES
28-C	Commercial	3.95	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
28-C	Residential	1.65	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
29-C	Commercial	6.88	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
29-C	Residential	1.07	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
30-C	Commercial	14.96	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
30-C	Industrial	0.29	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
30-C	Residential	1.37	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
31-D	Commercial	0.61	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
31-D	Parks and Recreational	0.13	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
31-D	Residential	13.56	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
32-D	Commercial	5.17	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
32-D	Parks and Recreational	0.20	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES

Table U-5. Urban Use Area Exposure to Storm Surge, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
32-D	Residential	2.75	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
33-D	Commercial	2.89	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
33-D	Residential	3.86	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
34-D	Commercial	12.70	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
34-D	Industrial	0.00	15,000.00	Low	Low	moderate	Very High	YES	YES	NO	YES	YES
34-D	Parks and Recreational	0.3688	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
34-D	Residential	2.48	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
35-D	Commercial	4.13	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
35-D	Parks and Recreational	0.04	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
35-D	Residential	0.35	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
36-D	Commercial	3.33	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
36-D	Parks and Recreational	0.07	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
36-D	Residential	2.39	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
37-D	Commercial	0.82	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
37-D	Residential	3.54	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
38-D	Commercial	3.10	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
38-D	Parks and Recreational	0.01	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
38-D	Residential	1.73	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
39-D	Commercial	5.34	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
39-D	Parks and Recreational	0.89	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
39-D	Residential	2.92	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
40-D	Commercial	6.05	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
40-D	Residential	1.34	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES

Table U-5. Urban Use Area Exposure to Storm Surge, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
AGDAO PROP-ER	Commercial	22.65	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
AGDAO PROP-ER	Industrial	1.29	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
AGDAO PROP-ER	Parks and Recreational	0.01	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
AGDAO PROP-ER	Residential	7.62	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
WILFREDO AQUINO	Commercial	23.77	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
WILFREDO AQUINO	Industrial	0.12	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
WILFREDO AQUINO	Parks and Recreational	1.06	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
WILFREDO AQUINO	Residential	26.09	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
PACIANO BAN-GOY	Commercial	37.06	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
PACIANO BAN-GOY	Industrial	0.67	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
PACIANO BAN-GOY	Residential	21.36	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
RAFAEL CAS-TILLO	Commercial	16.41	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
RAFAEL CAS-TILLO	Industrial	9.33	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
RAFAEL CAS-TILLO	Parks and Recreational	0.02	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
RAFAEL CAS-TILLO	Residential	11.86	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES

Table U-5. Urban Use Area Exposure to Storm Surge, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
CENTRO	Commercial	1.14	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
CENTRO	Industrial	10.73	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
CENTRO	Parks and Recreational	0.04	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
CENTRO	Residential	22.72	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
GOV. VICENTE DUTERTE	Commercial	4.95	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
GOV. VICENTE DUTERTE	Industrial	12.56	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
GOV. VICENTE DUTERTE	Parks and Recreational	0.06	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
GOV. VICENTE DUTERTE	Residential	20.34	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
LEON GARCIA SR.	Commercial	1.06	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LEON GARCIA SR.	Industrial	0.29	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
LEON GARCIA SR.	Parks and Recreational	0.08	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LEON GARCIA SR.	Residential	12.04	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
LAPU - LAPU	Commercial	1.61	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
LAPU - LAPU	Industrial	22.95	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LAPU - LAPU	Parks and Recreational	0.04	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LAPU - LAPU	Residential	23.68	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
TOMAS MON-TEVERDE	Commercial	11.83	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES

Table U-5. Urban Use Area Exposure to Storm Surge, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
TOMAS MON-TEVERDE	Industrial	0.83	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
TOMAS MON-TEVERDE	Residential	2.09	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
SAN ANTONIO	Commercial	43.27	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
SAN ANTONIO	Industrial	10.51	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
SAN ANTONIO	Parks and Recreational	0.06	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
SAN ANTONIO	Residential	25.28	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
UBALDE	Commercial	1.53	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
UBALDE	Industrial	0.21	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
UBALDE	Residential	5.94	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
PAMPANGA	Commercial	11.31	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
PAMPANGA	Industrial	26.69	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
PAMPANGA	Residential	49.98	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
PAMPANGA	Tourism	2.99	15,000.00	Moderate	Moderate	moderate	Very High	YES	YES	NO	YES	YES
SASA	Commercial	58.02	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
SASA	Industrial	93.77	15,000.00	Low	Moderate	moderate	Very High	YES	YES	NO	YES	YES
SASA	Residential	223.80	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
A. ANGLI-ONGTO	Commercial	38.75	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
A. ANGLI-ONGTO	Industrial	17.16	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
A. ANGLI-ONGTO	Residential	155.68	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
V. HIZON	Commercial	25.25	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES

Table U-5. Urban Use Area Exposure to Storm Surge, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
V. HIZON	Industrial	6.31	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
V. HIZON	Residential	118.71	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
V. HIZON	Tourism	1.52	15,000.00	Moderate	Moderate	moderate	Very High	YES	YES	NO	YES	YES
BUNAWAN	Agri-Industrial	1.86	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
BUNAWAN	Commercial	11.86	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
BUNAWAN	Industrial	115.61	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
BUNAWAN	Parks and Recreational	0.24	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BUNAWAN	Residential	123.76	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
ILANG	Industrial	90.12	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
ILANG	Residential	125.68	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
LASANG	Commercial	2.13	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LASANG	Industrial	38.00	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LASANG	Parks and Recreational	0.07	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LASANG	Residential	50.73	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
MAHAYAG	Industrial	70.08	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
MAHAYAG	Residential	57.77	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
PANACAN	Commercial	7.46	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
PANACAN	Industrial	120.38	15,000.00	High	High	Low	Very High	YES	YES	NO	YES	YES
PANACAN	Parks and Recreational	6.97	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
PANACAN	Residential	256.99	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
PANACAN	Tourism	0.96	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
TIBUNGCO	Industrial	41.74	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES

Table U-5. Urban Use Area Exposure to Storm Surge, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
TIBUNGCO	Residential	11.83	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
BAGO APLAYA	Commercial	12.91	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BAGO APLAYA	Industrial	16.24	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BAGO APLAYA	Parks and Recreational	5.45	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BAGO APLAYA	Residential	95.45	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
BAGO GALLERA	Parks and Recreational	63.48	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BAGO GALLERA	Residential	129.96	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
BUCANA	Commercial	63.45	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BUCANA	Industrial	0.12	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
BUCANA	Parks and Recreational	1.92	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BUCANA	Residential	216.96	10,000.00	Very High	Very High	Low	Very High	NO	NO	YES	YES	YES
BUCANA	Tourism	0.67	15,000.00	Moderate	Moderate	moderate	Very High	YES	YES	NO	YES	YES
DUMOY	Commercial	8.18	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
DUMOY	Industrial	32.56	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
DUMOY	Parks and Recreational	8.33	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
DUMOY	Residential	162.79	15,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
DUMOY	Tourism	5.83	10,000.00	Moderate	Moderate	moderate	Very High	YES	YES	NO	YES	YES
MA-A	Commercial	90.16	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
MA-A	Industrial	22.54	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
MA-A	Parks and Recreational	12.99	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
MA-A	Residential	428.27	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES

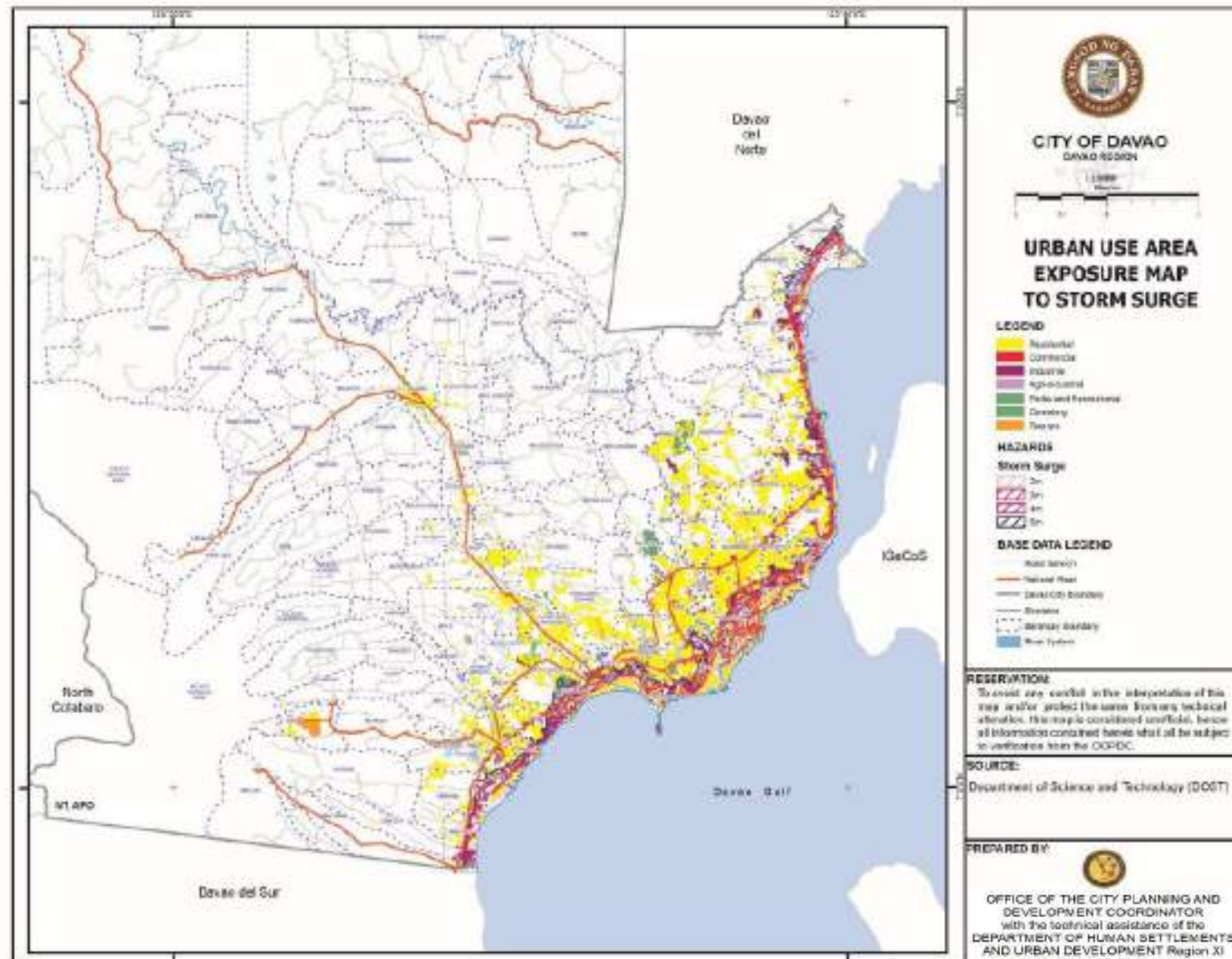
Table U-5. Urban Use Area Exposure to Storm Surge, Davao City

EXPOSURE				SENSITIVITY				ADAPTIVE CAPACITY				
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MATINA APLA-YA	Commercial	20.47	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
MATINA APLA-YA	Industrial	2.91	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
MATINA APLA-YA	Parks and Recreational	2.27	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
MATINA APLA-YA	Residential	155.50	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
MATINA APLA-YA	Tourism	2.35	15,000.00	Moderate	Moderate	moderate	Very High	YES	YES	NO	YES	YES
MATINA CROSSING	Commercial	50.86	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
MATINA CROSSING	Residential	250.40	10,000.00	Low	Low	Low	Very High	NO	NO	YES	YES	YES
TALOMO	Commercial	20.65	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
TALOMO	Industrial	15.85	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
TALOMO	Parks and Recreational	5.46	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
TALOMO	Residential	297.56	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
TALOMO	Tourism	1.55	15,000.00	Moderate	Moderate	moderate	Very High	YES	YES	NO	YES	YES
BINUGAO	Industrial	63.36	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
BINUGAO	Parks and Recreational	1.34	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
BINUGAO	Residential	52.80	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
DALIAO	Commercial	0.07	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
DALIAO	Industrial	14.75	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
DALIAO	Parks and Recreational	0.16	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES

Table U-5. Urban Use Area Exposure to Storm Surge, Davao City

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Barangay	Existing land Use (Specific Use)	Total Area Allocation per Land Use Per Barangay	Replacement Cost (PHP per sq. meter)	Proportion of buildings with walls with light to salvageable materials	Proportion of buildings in dilapidated/ Condemned Condition	Structure not employing hazard resistant building design	No access/ area coverage to infrastructure related hazard mitigation measures	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government Capacity to impose/ implement zoning regulations
DALIAO	Residential	107.79	10,000.00	Moderate	Moderate	moderate	Very High	NO	NO	YES	YES	YES
DALIAO	Tourism	1.79	15,000.00	Moderate	Moderate	moderate	Very High	YES	YES	NO	YES	YES
LIZADA	Industrial	13.44	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
LIZADA	Parks and Recreational	0.19	15,000.00	Moderate	Moderate	Low	Very High	YES	YES	NO	YES	YES
LIZADA	Residential	100.96	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES
LIZADA	Tourism	0.08	15,000.00	Low	Low	Low	Very High	YES	YES	NO	YES	YES
SIRAWAN	Parks and Recreational	0.04	15,000.00	High	Moderate	Low	Very High	YES	YES	NO	YES	YES
SIRAWAN	Residential	83.94	10,000.00	High	High	Low	Very High	NO	NO	YES	YES	YES

Map 4.4 Urban Use Area Exposure Map to Storm Surge



URBAN USE EXPOSURE ESTIMATION

FLOOD

Exposure Estimation

Based on the shown table above, the determined area most exposed to flood is within the residential area of 76 barangays with a total area of 5,212.20 hectares. As per assessment, 23% of the total residential area has high exposure to hazard in which, when hazard-induced damages take place in the area, may cost an approximate exposed value of Php 12,259,500,000.

Table U-6. Urban Use Area Exposure Estimation for Flood, Davao City

Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	XPOSURE				SENSITIVITY			
			Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
1-A	Residential	6.95	6.94	99.86%	10,000	69,400,000.00	Very High	Very High	Moderate	Very High
1-A	Parks and Recreational	0.08	0.08	100.00%	15,000	1,200,000.00	Low	Low	High	Very High
1-A	Commercial	1.41	1.02	72.34%	15,000	15,300,000.00	Low	Low	High	Very High
2-A	Residential	1.62	1.23	75.93%	10,000	12,300,000.00	Low	Low	Moderate	Very High
2-A	Commercial	11.32	1.53	13.52%	15,000	22,950,000.00	Low	Low	High	Very High
5-A	Residential	20.41	14.12	69.18%	10,000	141,200,000.00	Very High	Very High	Moderate	Very High
5-A	Parks and Recreational	0.01	0.01	100.00%	15,000	150,000.00	Low	Low	High	Very High
5-A	Commercial	4.34	0.14	3.23%	15,000	2,100,000.00	Low	Low	High	Very High
8-A	Residential	82.83	47.94	57.88%	10,000	479,400,000.00	High	High	High	Very High
8-A	Industrial	3.84	3.84	100.00%	15,000	57,600,000.00	Low	Low	High	Very High
8-A	Commercial	5.65	4.29	75.93%	15,000	64,350,000.00	Low	Low	High	Very High
8-A	Cemetery	18.90	3.17	16.77%	15,000	47,550,000.00	Low	Low	High	Very High
8-A	Parks and Recreational	1.17	0.04	3.42%	15,000	600,000.00	Low	Low	High	Very High

Table U-6. Urban Use Area Exposure Estimation for Flood, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
15-B	Residential	1.46	0.22	15.07%	10,000	2,200,000.00	Very High	Very High	Moderate	Very High
15-B	Commercial	24.46	1.2	4.91%	15,000	18,000,000.00	Low	Low	High	Very High
19-B	Residential	179.82	40.47	22.51%	10,000	404,700,000.00	Moderate	Moderate	Moderate	Very High
19-B	Parks and Recreational	0.36	0.1	27.78%	15,000	1,500,000.00	Low	Low	High	Very High
19-B	Commercial	28.23	4.9	17.36%	15,000	73,500,000.00	Low	Low	High	Very High
19-B	Industrial	2.48	0.16	6.45%	15,000	2,400,000.00	Low	Low	High	Very High
21-C	Residential	5.18	1.32	25.48%	10,000	13,200,000.00	High	High	Moderate	Very High
22-C	Residential	4.78	3.53	73.85%	10,000	35,300,000.00	High	High	Moderate	Very High
22-C	Parks and Recreational	0.05	0.001	2.00%	15,000	15,000.00	Low	Low	Moderate	Very High
23-C	Residential	12.79	11.18	87.41%	10,000	111,800,000.00	Very High	Very High	Moderate	Very High
23-C	Parks and Recreational	0.72	0.43	59.72%	15,000	6,450,000.00	Low	Low	High	Very High
27-C	Tourism	0.04	0.04	100.00%	15,000	600,000.00	Low	Low	High	Very High
27-C	Parks and Recreational	4.10	3.01	73.41%	15,000	45,150,000.00	Low	Low	High	Very High
31-D	Residential	13.56	7.74	57.08%	10,000	77,400,000.00	High	High	Moderate	Very High
31-D	Parks and Recreational	0.13	0.11	84.62%	15,000	1,650,000.00	Low	Low	High	Very High
37-D	Residential	3.55	0.76	21.41%	10,000	7,600,000.00	High	High	Moderate	Very High
39-D	Residential	2.93	2.53	86.35%	10,000	25,300,000.00	Low	Low	Moderate	Very High
39-D	Commercial	5.35	3.03	56.64%	15,000	45,450,000.00	Low	Low	High	Very High
39-D	Parks and Recreational	0.89	0.16	17.98%	15,000	2,400,000.00	Low	Low	High	Very High
40-D	Residential	1.34	1.30	97.01%	10,000	13,000,000.00	Very High	Very High	Moderate	Very High
40-D	Commercial	6.05	6.04	99.83%	15,000	90,600,000.00	Low	Low	High	Very High
AGDAO PROPER	Residential	7.62	7.62	100.00%	10,000	76,200,000.00	Very High	Very High	Moderate	Very High
AGDAO PROPER	Parks and Recreational	0.01	0.01	100.00%	15,000	150,000.00	Low	Low	High	Very High

Table U-6. Urban Use Area Exposure Estimation for Flood, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
AGDAO PROPER	Industrial	1.29	1.29	100.00%	15,000	19,350,000.00	Low	Low	High	Very High
AGDAO PROPER	Commercial	22.65	19.23	84.90%	15,000	288,450,000.00	Low	Low	High	Very High
WILFREDO AQUINO	Residential	26.11	1.51	5.78%	10,000	15,100,000.00	Low	Low	High	Very High
WILFREDO AQUINO	Commercial	23.80	9.33	39.20%	15,000	139,950,000.00	Low	Low	High	Very High
WILFREDO AQUINO	Industrial	0.12	0.01	8.33%	15,000	150,000.00	Low	Low	High	Very High
PACIANO BANGGOY	Residential	21.36	17.65	82.63%	10,000	176,500,000.00	High	High	High	Very High
PACIANO BANGGOY	Industrial	0.67	0.67	100.00%	15,000	10,050,000.00	Low	Low	High	Very High
PACIANO BANGGOY	Commercial	37.06	20.06	54.13%	15,000	300,900,000.00	Low	Low	High	Very High
RAFAEL CASTILLO	Residential	11.87	7.41	62.43%	10,000	74,100,000.00	Moderate	Moderate	High	Very High
RAFAEL CASTILLO	Commercial	16.42	1.77	10.78%	15,000	26,550,000.00	Low	Low	High	Very High
RAFAEL CASTILLO	Industrial	9.33	0.18	1.93%	15,000	2,700,000.00	Low	Low	High	Very High
CENTRO	Residential	22.72	18.39	80.94%	10,000	183,900,000.00	Low	Low	Moderate	Very High
CENTRO	Parks and Recreational	0.04	0.04	100.00%	15,000	600,000.00	Low	Low	High	Very High
CENTRO	Industrial	10.73	8.83	82.29%	15,000	132,450,000.00	Low	Low	High	Very High
CENTRO	Commercial	1.14	0.26	22.81%	15,000	3,900,000.00	Low	Low	High	Very High
GOV. VICENTE DUTERTE	Residential	20.34	14.16	69.62%	10,000	141,600,000.00	Very High	Very High	Moderate	Very High
GOV. VICENTE DUTERTE	Commercial	4.95	2.49	50.30%	15,000	37,350,000.00	Low	Low	High	Very High
GOV. VICENTE DUTERTE	Industrial	12.57	3.99	31.74%	15,000	59,850,000.00	Low	Low	High	Very High
LEON GARCIA SR.	Residential	12.04	10.85	90.12%	10,000	108,500,000.00	Residual	Residual	High	Very High
LEON GARCIA SR.	Parks and Recreational	0.08	0.08	100.00%	15,000	1,200,000.00	Low	Low	High	Very High

Table U-6. Urban Use Area Exposure Estimation for Flood, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
LEON GARCIA SR.	Industrial	0.29	0.29	100.00%	15,000	4,350,000.00	Low	Low	High	Very High
LEON GARCIA SR.	Commercial	1.06	0.82	77.36%	15,000	12,300,000.00	Low	Low	High	Very High
LAPU - LAPU	Residential	23.68	17.27	72.93%	10,000	172,700,000.00	Moderate	Moderate	Moderate	Very High
LAPU - LAPU	Parks and Recreational	0.04	0.04	100.00%	15,000	600,000.00	Low	Low	High	Very High
LAPU - LAPU	Commercial	1.61	0.89	55.28%	15,000	13,350,000.00	Low	Low	High	Very High
LAPU - LAPU	Industrial	22.95	5.97	26.01%	15,000	89,550,000.00	Low	Low	High	Very High
TOMAS MONTE-VERDE	Residential	2.09	1.69	80.86%	10,000	16,900,000.00	Very High	Very High	High	Very High
TOMAS MONTE-VERDE	Industrial	0.83	0.83	100.00%	15,000	12,450,000.00	Low	Low	High	Very High
TOMAS MONTE-VERDE	Commercial	11.83	7.82	66.10%	15,000	117,300,000.00	Low	Low	High	Very High
SAN ANTONIO	Residential	25.28	0.01	0.04%	10,000	100,000.00	Moderate	Moderate	High	Very High
SAN ANTONIO	Commercial	43.27	0.08	0.18%	15,000	1,200,000.00	Low	Low	High	Very High
UBALDE	Residential	5.94	0.93	15.66%	10,000	9,300,000.00	Moderate	Moderate	High	Very High
UBALDE	Commercial	1.53	0.37	24.18%	15,000	5,550,000.00	Low	Low	High	Very High
BAGUIO	Residential	12.03	8.10	67.33%	10,000	81,000,000.00	High	High	Moderate	Very High
BAGUIO	Agri-Industrial	6.17	3.03	49.11%	15,000	45,450,000.00	Low	Low	High	Very High
GUMALANG	Parks and Recreational	0.05	0.05	100.00%	15,000	750,000.00	Low	Low	High	Very High
GUMALANG	Agri-Industrial	21.28	0.30	1.41%	15,000	4,500,000.00	Low	Low	High	Very High
MALAGOS	Residential	18.01	4.89	27.15%	10,000	48,900,000.00	High	High	High	Very High
MALAGOS	Industrial	3.05	0.79	25.90%	15,000	11,850,000.00	Low	Low	High	Very High
MALAGOS	Tourism	13.49	0.95	7.04%	15,000	14,250,000.00	Low	Low	High	Very High
MALAGOS	Agri-Industrial	7.82	0.17	2.17%	15,000	2,550,000.00	Low	Low	High	Very High
BUHANGIN	Industrial	4.40	0.46	10.45%	15,000	6,900,000.00	Low	Low	High	Very High

Table U-6. Urban Use Area Exposure Estimation for Flood, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
BUHANGIN	Residential	335.40	9.41	2.81%	10,000	94,100,000.00	Moderate	Moderate	Moderate	Very High
BUHANGIN	Commercial	52.91	0.16	0.30%	15,000	2,400,000.00	Low	Low	High	Very High
BUHANGIN	Cemetery	8.84	0.25	2.83%	15,000	3,750,000.00	Low	Low	High	Very High
CABANTIAN	Residential	305.58	5.47	1.79%	10,000	54,700,000.00	Low	Low	Moderate	Very High
CABANTIAN	Industrial	26.47	0.04	0.15%	15,000	600,000.00	Low	Low	High	Very High
CABANTIAN	Commercial	23.17	0.07	0.30%	15,000	1,050,000.00	Low	Low	High	Very High
CALLAWA	Residential	7.91	0.11	1.39%	10,000	1,100,000.00	High	High	Moderate	Very High
COMMUNAL	Tourism	20.16	0.70	3.47%	15,000	10,500,000.00	Low	Low	High	Very High
COMMUNAL	Residential	162.84	7.08	4.35%	10,000	70,800,000.00	Residual	Residual	Moderate	Very High
COMMUNAL	Commercial	11.99	0.02	0.17%	15,000	300,000.00	Low	Low	High	Very High
INDANGAN	Tourism	0.01	0.005	50.00%	15,000	75,000.00	Low	Low	Moderate	Very High
INDANGAN	Commercial	1.71	0.45	26.32%	15,000	6,750,000.00	Low	Low	High	Very High
INDANGAN	Residential	247.61	0.40	0.16%	10,000	4,000,000.00	Residual	Residual	Moderate	Very High
MANDUG	Agri-Industrial	6.55	6.54	99.85%	15,000	98,100,000.00	Low	Low	High	Very High
MANDUG	Residential	168.40	20.99	12.46%	10,000	209,900,000.00	Moderate	Moderate	High	Very High
PAMPANGA	Tourism	2.99	2.99	100.00%	15,000	44,850,000.00	Low	Low	High	Very High
PAMPANGA	Industrial	26.69	25.60	95.92%	15,000	384,000,000.00	Low	Low	High	Very High
PAMPANGA	Commercial	11.31	11.31	100.00%	15,000	169,650,000.00	Low	Low	High	Very High
PAMPANGA	Residential	50.90	10.16	19.96%	10,000	101,600,000.00	Residual	Residual	High	Very High
SASA	Residential	227.28	47.18	20.76%	10,000	471,800,000.00	Moderate	Moderate	High	Very High
SASA	Industrial	93.80	10.27	10.95%	15,000	154,050,000.00	Low	Low	High	Very High
SASA	Commercial	58.11	13.92	23.95%	15,000	208,800,000.00	Low	Low	High	Very High
SASA	Parks and Recreational	0.21	0.02	9.52%	15,000	300,000.00	Low	Low	High	Very High
TIGATTO	Residential	256.32	102.74	40.08%	10,000	1,027,400,000.00	Moderate	Moderate	High	Very High
TIGATTO	Commercial	3.25	1.47	45.23%	15,000	22,050,000.00	Low	Low	High	Very High
TIGATTO	Industrial	13.03	3.76	28.86%	15,000	56,400,000.00	Low	Low	High	Very High
WAAN	Residential	38.48	21.29	55.33%	10,000	212,900,000.00	Very High	Very High	High	Very High
WAAN	Parks and Recreational	0.08	0.08	100.00%	15,000	1,200,000.00	Low	Low	High	Very High

Table U-6. Urban Use Area Exposure Estimation for Flood, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
A. ANGLIONGTO	Residential	155.73	6.30	4.05%	10,000	63,000,000.00	Low	Low	Moderate	Very High
A. ANGLIONGTO	Industrial	17.16	0.00002	0.0001%	15,000	300.00	Low	Low	Moderate	Very High
A. ANGLIONGTO	Commercial	38.75	0.51	1.32%	15,000	7,650,000.00	Low	Low	High	Very High
V. HIZON	Tourism	1.52	0.67	44.08%	15,000	10,050,000.00	Low	Low	High	Very High
V. HIZON	Commercial	25.25	13.51	53.50%	15,000	202,650,000.00	Low	Low	High	Very High
V. HIZON	Residential	118.71	17.98	15.15%	10,000	179,800,000.00	Moderate	Moderate	High	Very High
V. HIZON	Industrial	6.31	2.36	37.40%	15,000	35,400,000.00	Low	Low	High	Very High
BUNAWAN	Residential	124.56	35.10	28.18%	10,000	351,000,000.00	Very High	Very High	Moderate	Very High
BUNAWAN	Parks and Recreational	0.24	0.11	45.83%	15,000	1,650,000.00	Low	Low	High	Very High
BUNAWAN	Commercial	11.86	5.74	48.40%	15,000	86,100,000.00	Low	Low	High	Very High
BUNAWAN	Industrial	115.63	25.79	22.30%	15,000	386,850,000.00	Low	Low	High	Very High
BUNAWAN	Agri-Industrial	1.86	0.10	5.38%	15,000	1,500,000.00	Low	Low	High	Very High
GATUNGAN	Parks and Recreational	0.01	0.01	100.00%	15,000	150,000.00	Low	Low	High	Very High
GATUNGAN	Residential	1.99	0.04	2.01%	10,000	400,000.00	High	High	Moderate	Very High
ILANG	Residential	125.68	7.03	5.59%	10,000	70,300,000.00	High	High	Moderate	Very High
ILANG	Industrial	90.12	7.34	8.14%	15,000	110,100,000.00	Low	Low	High	Very High
LASANG	Residential	50.73	20.65	40.71%	10,000	206,500,000.00	Very High	Very High	High	Very High
LASANG	Parks and Recreational	0.07	0.07	100.00%	15,000	1,050,000.00	Low	Low	High	Very High
LASANG	Agri-Industrial	9.39	4.10	43.66%	15,000	61,500,000.00	Low	Low	High	Very High
LASANG	Industrial	38.20	6.57	17.20%	15,000	98,550,000.00	Low	Low	High	Very High
LASANG	Commercial	2.13	0.13	6.10%	15,000	1,950,000.00	Low	Low	High	Very High
MAHAYAG	Residential	57.77	0.74	1.28%	10,000	7,400,000.00	High	High	High	Very High
MAHAYAG	Industrial	26.18	1.17	4.47%	15,000	17,550,000.00	Low	Low	High	Very High
MUDIANG	Agri-Industrial	1.89	0.23	12.17%	15,000	3,450,000.00	Low	Low	High	Very High

Table U-6. Urban Use Area Exposure Estimation for Flood, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
MUDIANG	Residential	67.96	1.00	1.47%	10,000	10,000,000.00	Moderate	Moderate	High	Very High
PANACAN	Tourism	0.96	0.67	69.79%	15,000	10,050,000.00	Low	Low	High	Very High
PANACAN	Residential	261.47	31.89	12.20%	10,000	318,900,000.00	Moderate	Moderate	High	Very High
PANACAN	Parks and Recreational	6.97	1.06	15.21%	15,000	15,900,000.00	Low	Low	High	Very High
PANACAN	Industrial	120.52	15.16	12.58%	15,000	227,400,000.00	Low	Low	High	Very High
PANACAN	Commercial	7.48	0.91	12.17%	15,000	13,650,000.00	Low	Low	High	Very High
SAN ISIDRO	Residential	26.47	0.08	0.30%	10,000	800,000.00	Moderate	Moderate	High	Very High
SAN ISIDRO	Industrial	4.21	0.03	0.71%	15,000	450,000.00	Low	Low	High	Very High
TIBUNGCO	Residential	131.99	14.31	10.84%	10,000	143,100,000.00	Very High	Very High	High	Very High
TIBUNGCO	Industrial	41.74	10.48	25.11%	15,000	157,200,000.00	Low	Low	High	Very High
TIBUNGCO	Commercial	9.88	0.72	7.29%	15,000	10,800,000.00	Low	Low	High	Very High
TIBUNGCO	Agri-Industrial	4.17	0.13	3.12%	15,000	1,950,000.00	Low	Low	High	Very High
BIAO JOAQUIN	Residential	3.20	2.38	74.38%	10,000	23,800,000.00	High	High	Moderate	Very High
BIAO JOAQUIN	Agri-Industrial	20.15	16.06	79.70%	15,000	240,900,000.00	Low	Low	High	Very High
CALINAN	Residential	107.32	107.19	99.88%	10,000	1,071,900,000.00	Moderate	Moderate	Moderate	Very High
CALINAN	Parks and Recreational	0.75	0.75	100.00%	15,000	11,250,000.00	Low	Low	High	Very High
CALINAN	Industrial	2.17	2.17	100.00%	15,000	32,550,000.00	Low	Low	High	Very High
CALINAN	Commercial	19.53	19.53	100.00%	15,000	292,950,000.00	Low	Low	High	Very High
CALINAN	Cemetery	5.97	5.97	100.00%	15,000	89,550,000.00	Low	Low	High	Very High
CALINAN	Agri-Industrial	3.12	3.12	100.00%	15,000	46,800,000.00	Low	Low	High	Very High
CAWAYAN	Residential	1.84	0.30	16.30%	10,000	3,000,000.00	High	High	Moderate	Very High
DACUDAO	Agri-Industrial	37.73	6.60	17.49%	15,000	99,000,000.00	Low	Low	High	Very High
DACUDAO	Residential	7.13	0.29	4.07%	10,000	2,900,000.00	Very High	Very High	Moderate	Very High
DALAGDAG	Residential	2.54	1.18	46.46%	10,000	11,800,000.00	Very High	Very High	Moderate	Very High

Table U-6. Urban Use Area Exposure Estimation for Flood, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
DOMINGA	Residential	1.77	1.73	97.74%	10,000	17,300,000.00	Very High	Very High	Moderate	Very High
INAYANGAN	Residential	30.20	0.01	0.03%	10,000	100,000.00	Very High	Very High	Moderate	Very High
LACSON	Residential	5.16	1.30	25.19%	10,000	13,000,000.00	High	High	Moderate	Very High
LACSON	Agri-Industrial	11.02	1.06	9.62%	15,000	15,900,000.00	Low	Low	High	Very High
LAMANAN	Residential	4.54	0.06	1.32%	10,000	600,000.00	Very High	Very High	Moderate	Very High
LAMPIANAO	Residential	2.14	0.29	13.55%	10,000	2,900,000.00	Very High	Very High	Moderate	Very High
MEGKAWAYAN	Residential	5.52	0.06	1.09%	10,000	600,000.00	Very High	Very High	High	Very High
PANGYAN	Residential	5.09	1.99	39.10%	10,000	19,900,000.00	High	High	High	Very High
RIVERSIDE	Residential	21.17	19.33	91.31%	10,000	193,300,000.00	High	High	High	Very High
RIVERSIDE	Parks and Recreational	0.07	0.07	100.00%	15,000	1,050,000.00	Low	Low	High	Very High
RIVERSIDE	Industrial	1.20	1.01	84.17%	15,000	15,150,000.00	Low	Low	High	Very High
RIVERSIDE	Commercial	1.11	1.11	100.00%	15,000	16,650,000.00	Low	Low	High	Very High
RIVERSIDE	Agri-Industrial	8.21	5.49	66.87%	15,000	82,350,000.00	Low	Low	High	Very High
RIVERSIDE	Cemetery	15.93	6.20	38.92%	15,000	93,000,000.00	Low	Low	High	Very High
SALOY	Residential	1.79	0.01	0.56%	10,000	100,000.00	Very High	Very High	High	Very High
SIRIB	Residential	7.56	1.96	25.93%	10,000	19,600,000.00	Very High	Very High	High	Very High
SUBASTA	Residential	9.56	6.61	69.14%	10,000	66,100,000.00	Very High	Very High	High	Very High
SUBASTA	Agri-Industrial	13.45	9.58	71.23%	15,000	143,700,000.00	Low	Low	High	Very High
TALOMO RIVER	Residential	21.82	19.81	90.79%	10,000	198,100,000.00	Moderate	Moderate	High	Very High
TALOMO RIVER	Industrial	0.67	0.67	100.00%	15,000	10,050,000.00	Low	Low	High	Very High
TALOMO RIVER	Commercial	0.30	0.30	100.00%	15,000	4,500,000.00	Low	Low	High	Very High
TALOMO RIVER	Agri-Industrial	18.34	7.49	40.84%	15,000	112,350,000.00	Low	Low	High	Very High
WANGAN	Residential	3.33	1.34	40.24%	10,000	13,400,000.00	High	High	High	Very High
WANGAN	Cemetery	0.71	0.71	100.00%	15,000	10,650,000.00	Low	Low	High	Very High

Table U-6. Urban Use Area Exposure Estimation for Flood, Davao City

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Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
WANGAN	Agri-Industrial	4.70	0.59	12.55%	15,000	8,850,000.00	Low	Low	High	Very High
GUMITAN	Residential	8.23	0.03	0.36%	10,000	300,000.00	Residual	Residual	Moderate	Very High
MALAMBA	Residential	13.12	1.40	10.67%	10,000	14,000,000.00	Very High	Very High	High	Very High
MARILOG	Residential	92.61	0.10	0.11%	10,000	1,000,000.00	Residual	Residual	High	Very High
SALAYSAY	Residential	10.06	0.03	0.30%	10,000	300,000.00	Residual	Residual	High	Very High
SUAWAN	Agri-Industrial	19.11	1.15	6.02%	15,000	17,250,000.00	Low	Low	High	Very High
TAMUGAN	Residential	10.19	8.77	86.06%	10,000	87,700,000.00	Residual	Residual	High	Very High
TAMUGAN	Agri-Industrial	21.51	8.25	38.35%	15,000	123,750,000.00	Low	Low	High	Very High
MALABOG	Residential	18.22	0.03	0.16%	10,000	300,000.00	Residual	Residual	High	Very High
SALAPAWAN	Residential	3.04	0.01	0.33%	10,000	100,000.00	Residual	Residual	High	Very High
SUMIMAO	Residential	1.78	0.66	37.08%	10,000	6,600,000.00	Very High	Very High	High	Very High
TAPAK	Residential	18.67	1.93	10.34%	10,000	19,300,000.00	Very High	Very High	High	Very High
BAGO APLAYA	Residential	95.45	28.28	29.63%	10,000	282,800,000.00	Residual	Residual	Moderate	Very High
BAGO APLAYA	Industrial	16.24	5.86	36.08%	15,000	87,900,000.00	Low	Low	High	Very High
BAGO APLAYA	Commercial	12.91	4.13	31.99%	15,000	61,950,000.00	Low	Low	High	Very High
BAGO APLAYA	Parks and Recreational	5.45	0.40	7.34%	15,000	6,000,000.00	Low	Low	High	Very High
BAGO GALLERA	Residential	129.96	49.25	37.90%	10,000	492,500,000.00	Moderate	Moderate	Moderate	Very High
BAGO GALLERA	Industrial	0.12	0.11	91.67%	15,000	1,650,000.00	Low	Low	High	Very High
BAGO GALLERA	Commercial	0.65	0.28	43.08%	15,000	4,200,000.00	Low	Low	High	Very High
BAGO GALLERA	Parks and Recreational	63.48	11.63	18.32%	15,000	174,450,000.00	Low	Moderate	Moderate	Very High
BALIOK	Residential	77.41	14.12	18.24%	10,000	141,200,000.00	Residual	Residual	Moderate	Very High
BALIOK	Parks and Recreational	0.35	0.09	25.71%	15,000	1,350,000.00	Low	Low	High	Very High
BUCANA	Tourism	0.67	0.30	44.78%	15,000	4,500,000.00	Low	Low	High	Very High
BUCANA	Residential	216.99	86.42	39.83%	10,000	864,200,000.00	Very High	Very High	Moderate	Very High

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EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
BUCANA	Parks and Recreational	1.92	0.22	11.46%	15,000	3,300,000.00	Low	Low	High	Very High
BUCANA	Commercial	63.45	6.95	10.95%	15,000	104,250,000.00	Low	Low	High	Very High
CATALUNAN GRANDE	Residential	301.77	69.62	23.07%	10,000	696,200,000.00	High	High	Moderate	Very High
CATALUNAN GRANDE	Agri-Industrial	21.25	9.74	45.84%	15,000	146,100,000.00	Low	Low	High	Very High
CATALUNAN GRANDE	Parks and Recreational	5.80	1.82	31.38%	15,000	27,300,000.00	Low	Low	High	Very High
CATALUNAN GRANDE	Commercial	6.03	0.88	14.59%	15,000	13,200,000.00	Low	Low	High	Very High
CATALUNAN PEQUEÑO	Tourism	1.32	0.22	16.67%	15,000	3,300,000.00	Low	Low	High	Very High
CATALUNAN PEQUEÑO	Residential	197.40	26.64	13.50%	10,000	266,400,000.00	Moderate	Moderate	Moderate	Very High
CATALUNAN PEQUEÑO	Industrial	2.15	0.002	0.09%	15,000	30,000.00	Low	Low	High	Very High
CATALUNAN PEQUEÑO	Commercial	3.55	0.30	8.45%	15,000	4,500,000.00	Low	Low	High	Very High
CATALUNAN PEQUEÑO	Agri-Industrial	13.65	0.74	5.42%	15,000	11,100,000.00	Low	Low	High	Very High
DUMOY	Tourism	5.83	4.00	68.61%	15,000	60,000,000.00	Low	Low	High	Very High
DUMOY	Parks and Recreational	8.33	5.15	61.82%	15,000	77,250,000.00	Low	Low	High	Very High
DUMOY	Residential	162.79	28.49	17.50%	10,000	284,900,000.00	Residual	Residual	Moderate	Very High
DUMOY	Industrial	32.56	0.25	0.77%	15,000	3,750,000.00	Low	Low	High	Very High
LANGUB	Residential	13.62	0.01	0.07%	10,000	100,000.00	High	High	Moderate	Very High
MA-A	Residential	428.30	136.31	31.83%	10,000	1,363,100,000.00	High	High	High	Very High
MA-A	Parks and Recreational	12.99	5.36	41.26%	15,000	80,400,000.00	Low	Low	High	Very High

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MA-A	Industrial	22.55	18.04	80.00%	15,000	270,600,000.00	Low	Low	High	Very High
MA-A	Tourism	16.56	5.60	33.82%	15,000	84,000,000.00	Low	Low	High	Very High
MA-A	Commercial	90.17	27.80	30.83%	15,000	417,000,000.00	Low	Low	High	Very High
MAGTUOD	Residential	53.99	10.06	18.63%	10,000	100,600,000.00	Very High	Very High	High	Very High
MAGTUOD	Parks and Recreational	10.49	0.41	3.91%	15,000	6,150,000.00	Low	Low	High	Very High
MAGTUOD	Commercial	0.77	0.004	0.52%	15,000	60,000.00	Low	Low	High	Very High
MATINA APLAYA	Residential	155.55	72.79	46.80%	10,000	727,900,000.00	High	High	High	Very High
MATINA APLAYA	Parks and Recreational	2.27	1.37	60.35%	15,000	20,550,000.00	Low	Low	High	Very High
MATINA APLAYA	Commercial	20.48	13.87	67.72%	15,000	208,050,000.00	Low	Low	High	Very High
MATINA APLAYA	Tourism	2.35	0.47	20.00%	15,000	7,050,000.00	Low	Low	High	Very High
MATINA APLAYA	Industrial	2.92	0.72	24.66%	15,000	10,800,000.00	Low	Low	High	Very High
MATINA CROSS-ING	Residential	250.42	66.49	26.55%	10,000	664,900,000.00	Low	Low	High	Very High
MATINA CROSS-ING	Commercial	50.86	20.99	41.27%	15,000	314,850,000.00	Low	Low	High	Very High
MATINA CROSS-ING	Industrial	5.73	1.33	23.21%	15,000	19,950,000.00	Low	Low	High	Very High
MATINA CROSS-ING	Parks and Recreational	18.39	0.01	0.05%	15,000	150,000.00	Low	Low	High	Very High
MATINA PANGI	Residential	152.20	51.00	33.51%	10,000	510,000,000.00	Very High	Very High	High	Very High
MATINA PANGI	Industrial	0.04	0.03	75.00%	15,000	450,000.00	Low	Low	High	Very High
MATINA PANGI	Parks and Recreational	0.54	0.10	18.52%	15,000	1,500,000.00	Low	Low	High	Very High
TALOMO	Tourism	1.55	1.29	83.23%	15,000	19,350,000.00	Low	Low	High	Very High
TALOMO	Residential	297.68	226.76	76.18%	10,000	2,267,600,000.00	High	High	High	Very High
TALOMO	Industrial	15.85	9.85	62.15%	15,000	147,750,000.00	Low	Low	High	Very High
TALOMO	Commercial	20.65	13.97	67.65%	15,000	209,550,000.00	Low	Low	High	Very High

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TALOMO	Parks and Recreational	5.46	1.72	31.50%	15,000	25,800,000.00	Low	Low	High	Very High
ALAMBRE	Residential	7.87	0.09	1.14%	10,000	900,000.00	High	High	Moderate	Very High
ALAMBRE	Agri-Industrial	12.70	0.0003	0.0024%	15,000	4,500.00	Low	Low	Moderate	Very High
BANKAS HEIGHTS	Residential	29.39	18.61	63.32%	10,000	186,100,000.00	Residual	Residual	Moderate	Very High
BANKAS HEIGHTS	Agri-Industrial	1.67	0.18	10.78%	15,000	2,700,000.00	Low	Low	High	Very High
BATO	Commercial	0.47	0.33	70.21%	15,000	4,950,000.00	Low	Low	High	Very High
BATO	Residential	44.81	2.08	4.64%	10,000	20,800,000.00	Residual	Residual	Moderate	Very High
CROSSING BAYA-BAS	Residential	92.31	21.61	23.41%	10,000	216,100,000.00	High	High	Moderate	Very High
BINUGAO	Residential	52.80	26.77	50.70%	10,000	267,700,000.00	High	High	Moderate	Very High
BINUGAO	Parks and Recreational	1.34	1.34	100.00%	15,000	20,100,000.00	Low	Low	High	Very High
BINUGAO	Industrial	63.36	48.27	76.18%	15,000	724,050,000.00	Low	Low	High	Very High
BINUGAO	Commercial	3.44	1.44	41.86%	15,000	21,600,000.00	Low	Low	High	Very High
BINUGAO	Agri-Industrial	13.50	0.15	1.11%	15,000	2,250,000.00	Low	Low	High	Very High
CATIGAN	Residential	6.31	0.24	3.80%	10,000	2,400,000.00	Very High	Very High	Moderate	Very High
DALIAO	Tourism	1.79	1.46	81.56%	15,000	21,900,000.00	Low	Low	High	Very High
DALIAO	Residential	107.79	23.42	21.73%	15,000	351,300,000.00	Moderate	Moderate	Moderate	Very High
DALIAO	Parks and Recreational	0.16	0.07	43.75%	15,000	1,050,000.00	Low	Low	High	Very High
DALIAO	Industrial	14.75	7.84	53.15%	15,000	117,600,000.00	Low	Low	High	Very High
EDEN	Tourism	98.41	9.12	9.27%	15,000	136,800,000.00	Low	Low	High	Very High
EDEN	Residential	51.49	2.35	4.56%	10,000	23,500,000.00	Very High	Very High	Moderate	Very High
KILATE	Residential	2.61	0.11	4.21%	10,000	1,100,000.00	Very High	Very High	Moderate	Very High
LIZADA	Agri-Industrial	5.18	2.10	40.54%	15,000	31,500,000.00	Low	Low	High	Very High

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LIZADA	Residential	100.96	19.82	19.63%	10,000	198,200,000.00	High	High	High	Very High
LIZADA	Industrial	13.44	1.42	10.57%	15,000	21,300,000.00	Low	Low	High	Very High
LUBOGAN	Residential	90.18	32.08	35.57%	15,000	481,200,000.00	Residual	Residual	High	Very High
LUBOGAN	Parks and Recreational	1.10	0.07	6.36%	15,000	1,050,000.00	Low	Low	High	Very High
LUBOGAN	Cemetery	5.67	0.09	1.59%	15,000	1,350,000.00	Low	Low	High	Very High
MARAPANGI	Tourism	0.02	0.02	100.00%	15,000	300,000.00	Low	Low	High	Very High
MARAPANGI	Agri-Industrial	9.85	8.44	85.69%	15,000	126,600,000.00	Low	Low	High	Very High
MARAPANGI	Residential	76.92	12.97	16.86%	10,000	129,700,000.00	High	High	High	Very High
SIBULAN	Residential	2.14	0.01	0.47%	10,000	100,000.00	Residual	Residual	High	Very High
SIRAWAN	Residential	83.94	22.25	26.51%	10,000	222,500,000.00	High	High	High	Very High
SIRAWAN	Parks and Recreational	0.04	0.04	100.00%	15,000	600,000.00	Low	Low	High	Very High
SIRAWAN	Agri-Industrial	85.28	6.23	7.31%	15,000	93,450,000.00	Low	Low	High	Very High
TAGAKPAN	Residential	9.67	6.82	70.53%	10,000	68,200,000.00	Very High	Very High	High	Very High
TAGAKPAN	Parks and Recreational	2.42	2.42	100.00%	15,000	36,300,000.00	Low	Low	High	Very High
TAGAKPAN	Agri-Industrial	0.61	0.61	100.00%	15,000	9,150,000.00	Low	Low	High	Very High
TAGLUNO	Residential	2.27	0.09	3.96%	10,000	900,000.00	High	High	High	Very High
TIBULOY	Agri-Industrial	7.75	1.20	15.48%	15,000	18,000,000.00	Low	Low	High	Very High
TUNGKALAN	Residential	3.85	0.05	1.30%	15,000	750,000.00	Residual	Residual	High	Very High
ANGALAN	Agri-Industrial	12.30	12.30	100.00%	15,000	184,500,000.00	Low	Low	High	Very High
ANGALAN	Residential	11.73	11.73	100.00%	10,000	117,300,000.00	High	High	Moderate	Very High
ANGALAN	Parks and Recreational	0.06	0.06	100.00%	15,000	900,000.00	Low	Low	High	Very High

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MINTAL	Parks and Recreational	0.41	0.30	73.17%	15,000	4,500,000.00	Low	Low	High	Very High
MINTAL	Commercial	6.08	6.08	100.00%	15,000	91,200,000.00	Low	Low	High	Very High
MINTAL	Industrial	1.42	0.03	2.11%	15,000	450,000.00	Low	Low	High	Very High
NEW CARMEN	Residential	15.64	13.17	84.21%	10,000	131,700,000.00	Very High	Very High	High	Very High
NEW VALENCIA	Residential	4.94	2.24	45.34%	10,000	22,400,000.00	Very High	Very High	High	Very High
STO. NIÑO	Commercial	4.13	2.86	69.25%	15,000	42,900,000.00	Low	Low	High	Very High
STO. NIÑO	Residential	80.85	8.74	10.81%	10,000	87,400,000.00	High	High	High	Very High
TACUNAN	Residential	52.76	31.80	60.27%	10,000	318,000,000.00	High	High	High	Very High
TACUNAN	Parks and Recreational	4.02	3.96	98.51%	15,000	59,400,000.00	Low	Low	High	Very High
TACUNAN	Cemetery	0.003	0.003	100.00%	15,000	45,000.00	Low	Low	Moderate	Very High
TALANDANG	Residential	7.96	3.19	40.08%	10,000	31,900,000.00	Very High	Very High	High	Very High
TALANDANG	Agri-Industrial	24.66	6.23	25.26%	15,000	93,450,000.00	Low	Low	High	Very High
TUGBOK	Tourism	0.07	0.07	100.00%	15,000	1,050,000.00	Low	Low	High	Very High
TUGBOK	Residential	114.41	107.98	94.38%	10,000	1,079,800,000.00	High	High	High	Very High
TUGBOK	Industrial	0.75	0.75	100.00%	15,000	11,250,000.00	Low	Low	High	Very High
TUGBOK	Commercial	2.59	2.59	100.00%	15,000	38,850,000.00	Low	Low	High	Very High
TUGBOK	Cemetery	3.97	3.97	100.00%	15,000	59,550,000.00	Low	Low	High	Very High
TUGBOK	Agri-Industrial	4.70	3.83	81.49%	15,000	57,450,000.00	Low	Low	High	Very High
ULA	Residential	14.19	7.04	49.61%	10,000	70,400,000.00	High	High	High	Very High
ULA	Parks and Recreational	0.10	0.05	50.00%	15,000	750,000.00	Low	Low	High	Very High
ULA	Industrial	2.38	2.15	90.34%	15,000	32,250,000.00	Low	Low	High	Very High
ULA	Agri-Industrial	16.52	16.35	98.97%	15,000	245,250,000.00	Low	Low	High	Very High

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Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
BAGO OSHIRO	Residential	138.55	2.96	2.14%	10,000	29,600,000.00	Very High	Very High	Moderate	Very High
BALENGAENG	Agri-Industrial	35.49	35.49	100.00%	15,000	532,350,000.00	Low	Low	High	Very High
BALENGAENG	Residential	2.27	2.27	100.00%	10,000	22,700,000.00	Very High	Very High	High	Very High
BALENGAENG	Parks and Recreational	0.05	0.05	100.00%	15,000	750,000.00	Low	Low	High	Very High
BIAO ESCUELA	Parks and Recreational	0.04	0.04	100.00%	15,000	600,000.00	Low	Low	High	Very High
BIAO ESCUELA	Agri-Industrial	36.45	16.81	46.12%	15,000	252,150,000.00	Low	Low	High	Very High
BIAO ESCUELA	Residential	8.59	1.62	18.86%	10,000	16,200,000.00	Very High	Very High	Moderate	Very High
BIAO GUIANGA	Agri-Industrial	6.20	6.20	100.00%	15,000	93,000,000.00	Low	Low	High	Very High
BIAO GUIANGA	Residential	3.83	1.69	44.13%	10,000	16,900,000.00	Moderate	Moderate	Moderate	Very High
MATINA BIAO	Tourism	0.41	0.41	100.00%	15,000	6,150,000.00	Low	Low	High	Very High
MATINA BIAO	Residential	2.77	1.80	64.98%	10,000	18,000,000.00	Moderate	Moderate	High	Very High
MATINA BIAO	Parks and Recreational	0.06	0.06	100.00%	15,000	900,000.00	Low	Low	High	Very High
MATINA BIAO	Agri-Industrial	6.90	5.43	78.70%	15,000	81,450,000.00	Low	Low	High	Very High
LOS AMIGOS	Tourism	0.63	0.63	100.00%	15,000	9,450,000.00	Low	Low	High	Very High
LOS AMIGOS	Residential	39.99	38.62	96.57%	10,000	386,200,000.00	High	High	High	Very High
LOS AMIGOS	Industrial	3.31	3.31	100.00%	15,000	49,650,000.00	Low	Low	High	Very High
LOS AMIGOS	Commercial	1.03	1.03	100.00%	15,000	15,450,000.00	Low	Low	High	Very High
MANAMBULAN	Residential	9.65	9.10	94.30%	10,000	91,000,000.00	High	High	High	Very High
MANUEL GUI-ANGA	Agri-Industrial	4.52	1.69	37.39%	15,000	25,350,000.00	Low	Low	High	Very High
MANUEL GUI-ANGA	Residential	7.31	0.17	2.33%	10,000	1,700,000.00	Very High	Very High	High	Very High
MINTAL	Residential	150.19	65.05	43.31%	10,000	650,500,000.00	High	High	High	Very High

LANDSLIDE

Based on the table shown, residential use area is most exposed to landslide, totalling to 90 barangays with a total area of 5,276.49 hectares. As per assessment, 21.4% of the total residential area has high exposure to hazard in which, when hazard-induced damages take place in the area, may cost an approximate exposed value of Php 116,573,000,000.

Table U-7. Urban Use Area Exposure Estimation for Landslide, Davao City

Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	EXPOSURE				SENSITIVITY			
			Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
19-B	Commercial	28.23	1.86	6.59%	15,000.00	279,000,000.00	low	low	moderate	very high
19-B	Residential	179.82	1.32	0.73%	10,000.00	132,000,000.00	moderate	moderate	low	very high
CARMEN	Residential	1.49	1.26	84.56%	10,000.00	126,000,000.00	very high	very high	low	very high
GUMALANG	Agri-Industrial	21.27	2.68	12.60%	15,000.00	402,000,000.00	moderate	moderate	moderate	very high
GUMALANG	Residential	4.56	0.38	8.33%	10,000.00	38,000,000.00	very high	very high	low	very high
MALAGOS	Agri-Industrial	7.18	0.43	5.99%	15,000.00	64,500,000.00	moderate	moderate	moderate	very high
MALAGOS	Tourism	13.48	0.12	0.89%	15,000.00	18,000,000.00	moderate	moderate	low	very high
TAMBOBONG	Residential	4.49	4.49	100.00%	10,000.00	449,000,000.00	very high	very high	low	very high
TAWAN-TAWAN	Residential	2.60	0.04	1.54%	10,000.00	4,000,000.00	very high	very high	low	very high
ACACIA	Residential	15.14	15.14	100.00%	10,000.00	1,514,000,000.00	high	high	low	very high
ACACIA	Parks and Recreational	0.04	0.04	95.24%	15,000.00	6,000,000.00	low	low	low	very high
BUHANGIN	Cemetery	8.84	7.54	85.29%	15,000.00	1,131,000,000.00	moderate	moderate	low	very high
BUHANGIN	Industrial	4.40	2.45	55.68%	15,000.00	367,500,000.00	low	low	moderate	very high
BUHANGIN	Parks and Recreational	0.96	0.26	27.08%	15,000.00	39,000,000.00	moderate	moderate	moderate	very high
BUHANGIN	Residential	335.29	36.71	10.95%	10,000.00	3,671,000,000.00	moderate	moderate	moderate	very high
BUHANGIN	Commercial	52.90	0.54	1.02%	15,000.00	81,000,000.00	low	low	moderate	very high
CABANTIAN	Cemetery	0.28	0.28	100.00%	15,000.00	42,000,000.00	moderate	moderate	low	very high

Table U-7. Urban Use Area Exposure Estimation for Landslide, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
CABANTIAN	Residential	304.36	83.13	27.31%	10,000.00	8,313,000,000.00	low	low	low	very high
CABANTIAN	Commercial	23.10	3.71	16.06%	15,000.00	556,500,000.00	low	low	moderate	very high
CABANTIAN	Industrial	26.46	1.69	6.39%	15,000.00	253,500,000.00	low	low	moderate	very high
CALLAWA	Residential	7.90	0.68	8.61%	10,000.00	68,000,000.00	high	high	low	very high
COMMUNAL	Tourism	20.15	12.51	62.08%	15,000.00	1,876,500,000.00	moderate	moderate	moderate	very high
COMMUNAL	Residential	161.79	67.72	41.86%	10,000.00	6,772,000,000.00	low	low	low	very high
COMMUNAL	Commercial	11.99	1.26	10.51%	15,000.00	189,000,000.00	moderate	moderate	moderate	very high
COMMUNAL	Industrial	4.48	0.43	9.60%	15,000.00	64,500,000.00	low	low	moderate	very high
INDANGAN	Tourism	0.01	0.01	100.00%	15,000.00	1,500,000.00	moderate	moderate	low	very high
INDANGAN	Commercial	1.70	1.58	92.94%	15,000.00	237,000,000.00	moderate	moderate	moderate	very high
INDANGAN	Parks and Recreational	56.26	33.27	59.14%	15,000.00	4,990,500,000.00	moderate	moderate	low	very high
INDANGAN	Industrial	11.16	1.86	16.67%	15,000.00	279,000,000.00	moderate	moderate	moderate	very high
INDANGAN	Residential	247.61	23.10	9.33%	10,000.00	2,310,000,000.00	residual	residual	low	very high
MANDUG	Parks and Recreational	32.36	20.19	62.39%	15,000.00	3,028,500,000.00	moderate	moderate	low	very high
MANDUG	Residential	168.39	20.17	11.98%	10,000.00	2,017,000,000.00	moderate	moderate	low	very high
MANDUG	Agri-Industrial	6.55	0.32	4.89%	15,000.00	48,000,000.00	moderate	moderate	moderate	very high
MANDUG	Industrial	19.99	0.90	4.50%	15,000.00	135,000,000.00	low	low	moderate	very high
SASA	Residential	223.79	1.14	0.51%	10,000.00	114,000,000.00	moderate	moderate	low	very high
TIGATTO	Industrial	13.02	7.17	55.07%	15,000.00	1,075,500,000.00	very high	very high	low	very high
TIGATTO	Residential	256.29	39.43	15.38%	10,000.00	3,943,000,000.00	low	low	moderate	very high
WAAN	Cemetery	3.83	3.83	100.00%	15,000.00	574,500,000.00	residual	residual	low	very high
WAAN	Residential	38.48	7.17	18.63%	10,000.00	717,000,000.00	high	high	low	very high
A. ANGLIONGTO	Residential	155.67	0.72	0.46%	10,000.00	72,000,000.00	low	low	moderate	very high
A. ANGLIONGTO	Industrial	17.15	0.01	0.06%	15,000.00	1,500,000.00	low	low	moderate	very high
BUNAWAN	Industrial	115.60	11.07	9.58%	15,000.00	1,660,500,000.00	low	low	moderate	very high
BUNAWAN	Residential	123.76	7.75	6.26%	10,000.00	775,000,000.00	very high	very high	low	very high

Table U-7. Urban Use Area Exposure Estimation for Landslide, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
GATUNGAN	Agri-Industrial	2.17	2.17	100.00%	15,000.00	325,500,000.00	moderate	moderate	moderate	very high
GATUNGAN	Industrial	0.38	0.38	100.00%	15,000.00	57,000,000.00	low	low	moderate	very high
GATUNGAN	Parks and Recreational	0.01	0.01	100.00%	15,000.00	1,200,000.00	moderate	moderate	moderate	very high
GATUNGAN	Residential	1.98	1.70	85.86%	10,000.00	170,000,000.00	high	high	low	very high
ILANG	Residential	125.67	16.66	13.26%	10,000.00	1,666,000,000.00	high	high	low	very high
ILANG	Industrial	90.12	0.07	0.08%	15,000.00	10,500,000.00	low	low	moderate	very high
MAHAYAG	Agri-Industrial	26.18	6.41	24.48%	15,000.00	961,500,000.00	low	low	moderate	very high
MAHAYAG	Industrial	70.08	15.68	22.37%	15,000.00	2,352,000,000.00	low	low	moderate	very high
MAHAYAG	Residential	57.77	7.19	12.45%	10,000.00	719,000,000.00	high	high	low	very high
MAHAYAG	Commercial	8.62	0.39	4.52%	15,000.00	58,500,000.00	moderate	moderate	moderate	very high
MUDIANG	Residential	67.96	38.15	56.14%	10,000.00	3,815,000,000.00	high	high	moderate	very high
MUDIANG	Industrial	6.42	3.09	48.13%	15,000.00	463,500,000.00	moderate	moderate	moderate	very high
MUDIANG	Agri-Industrial	1.88	0.42	22.34%	15,000.00	63,000,000.00				very high
PANACAN	Residential	256.99	67.73	26.36%	10,000.00	6,773,000,000.00	high	high	moderate	very high
PANACAN	Industrial	120.37	21.00	17.45%	15,000.00	3,150,000,000.00	low	low	low	very high
SAN ISIDRO	Residential	26.46	3.40	12.85%	10,000.00	340,000,000.00	moderate	moderate	moderate	very high
SAN ISIDRO	Industrial	4.21	0.01	0.24%	15,000.00	1,500,000.00	very high	very high	low	very high
TIBUNGCO	Agri-Industrial	4.17	0.99	23.74%	15,000.00	148,500,000.00	very high	very high	low	very high
TIBUNGCO	Industrial	41.73	8.15	19.53%	15,000.00	1,222,500,000.00	low	low	moderate	very high
TIBUNGCO	Residential	131.99	18.18	13.77%	10,000.00	1,818,000,000.00	low	low	moderate	very high
BIAO JOAQUIN	Residential	3.19	0.82	25.71%	10,000.00	82,000,000.00	high	high	low	very high
BIAO JOAQUIN	Agri-Industrial	20.15	4.09	20.30%	15,000.00	613,500,000.00	moderate	moderate	moderate	very high
CALINAN	Residential	107.30	0.02	0.02%	10,000.00	2,000,000.00	moderate	moderate	low	very high

Table U-7. Urban Use Area Exposure Estimation for Landslide, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
DACUDAO	Agri-Industrial	37.72	2.24	5.94%	15,000.00	336,000,000.00	moderate	moderate	moderate	very high
DALAGDAG	Residential	2.54	1.14	44.88%	10,000.00	114,000,000.00	very high	very high	low	very high
DOMINGA	Residential	1.76	0.11	6.25%	10,000.00	11,000,000.00	very high	very high	low	very high
INAYANGAN	Residential	3.02	1.89	62.58%	10,000.00	189,000,000.00	very high	very high	low	very high
LACSON	Agri-Industrial	11.02	6.44	58.44%	15,000.00	966,000,000.00	moderate	moderate	moderate	very high
LACSON	Residential	5.16	0.07	1.36%	10,000.00	7,000,000.00	high	high	low	very high
LAMANAN	Residential	4.53	4.47	98.68%	10,000.00	447,000,000.00	very high	very high	low	very high
LAMPIANAO	Residential	2.13	1.85	86.85%	10,000.00	185,000,000.00	very high	very high	low	very high
MEGKAWAYAN	Residential	5.51	5.51	100.00%	10,000.00	551,000,000.00	very high	very high	low	very high
MEGKAWAYAN	Tourism	1.93	1.93	100.00%	15,000.00	289,500,000.00	moderate	moderate	low	very high
PANGYAN	Residential	5.09	1.33	26.13%	10,000.00	133,000,000.00	very high	very high	low	very high
SALOY	Residential	1.78	1.77	99.44%	10,000.00	177,000,000.00	residual	residual	low	very high
SIRIB	Residential	7.56	0.90	11.90%	10,000.00	90,000,000.00	high	high	low	very high
TALOMO RIVER	Agri-Industrial	18.30	1.18	6.45%	15,000.00	177,000,000.00	high	high	low	very high
TALOMO RIVER	Residential	21.81	0.10	0.46%	10,000.00	10,000,000.00	moderate	moderate	moderate	very high
TAMAYONG	Residential	4.57	2.67	58.42%	10,000.00	267,000,000.00	moderate	moderate	low	very high
BAGANIHAN	Tourism	3.95	0.47	11.90%	15,000.00	70,500,000.00	moderate	moderate	moderate	very high
BAGANIHAN	Residential	3.08	0.16	5.19%	10,000.00	16,000,000.00	very high	very high	low	very high
BANTOL	Residential	2.61	2.61	100.00%	10,000.00	261,000,000.00	very high	very high	low	very high
BUDA	Residential	19.63	4.07	20.73%	10,000.00	407,000,000.00	very high	very high	low	very high
DALAG LUMOT	Residential	9.86	9.86	100.00%	10,000.00	986,000,000.00	very high	very high	low	very high
DATU SALUMAY	Residential	21.30	4.94	23.19%	10,000.00	494,000,000.00	very high	very high	low	very high
DATU SALUMAY	Tourism	8.83	0.29	3.28%	15,000.00	43,500,000.00	moderate	moderate	moderate	very high
GUMITAN	Residential	8.82	6.63	75.17%	10,000.00	663,000,000.00	very high	very high	low	very high
MAGSAYSAY	Residential	8.68	8.68	100.00%	10,000.00	868,000,000.00	very high	very high	low	very high
MAGSAYSAY	Tourism	0.99	0.99	100.00%	15,000.00	148,500,000.00	moderate	moderate	low	very high

Table U-7. Urban Use Area Exposure Estimation for Landslide, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
MALAMBA	Residential	13.13	10.09	76.85%	10,000.00	1,009,000,000.00	very high	very high	low	very high
MARILOG	Residential	92.60	91.12	98.40%	10,000.00	9,112,000,000.00	residual	residual	low	very high
MARILOG	Tourism	29.99	26.29	87.66%	15,000.00	3,943,500,000.00	moderate	moderate	low	very high
SALAYSAY	Residential	10.06	10.00	99.40%	10,000.00	1,000,000,000.00	residual	residual	low	very high
SUAWAN	Residential	7.31	7.31	100.00%	10,000.00	731,000,000.00	moderate	moderate	moderate	very high
SUAWAN	Agri-Industrial	19.10	1.77	9.27%	15,000.00	265,500,000.00	very high	very high	low	very high
COLOSAS	Residential	9.67	9.65	99.79%	10,000.00	965,000,000.00	very high	very high	low	very high
FATIMA	Residential	9.80	7.61	77.65%	15,000.00	1,141,500,000.00	very high	very high	low	very high
LUMIAD	Residential	8.61	8.61	100.00%	10,000.00	861,000,000.00	very high	very high	low	very high
MABUHAY	Residential	7.35	0.68	9.25%	10,000.00	68,000,000.00	very high	very high	low	very high
MALABOG	Residential	18.21	18.21	100.00%	10,000.00	1,821,000,000.00	residual	residual	low	very high
MALABOG	Tourism	4.34	4.34	100.00%	15,000.00	651,000,000.00	moderate	moderate	low	very high
MAPULA	Residential	14.69	14.69	100.00%	10,000.00	1,469,000,000.00	residual	residual	low	very high
PANDAITAN	Residential	9.35	9.34	99.89%	10,000.00	934,000,000.00	moderate	moderate	moderate	very high
PAÑALUM	Residential	2.07	2.07	100.00%	10,000.00	207,000,000.00	very high	very high	low	very high
PAQUIBATO	Residential	12.53	12.53	100.00%	10,000.00	1,253,000,000.00	high	high	low	very high
PAQUIBATO	Tourism	0.99	0.99	100.00%	15,000.00	148,500,000.00	very high	very high	low	very high
PARADISE EMBAC	Residential	1.90	1.90	100.00%	10,000.00	190,000,000.00	high	high	low	very high
SALAPAWAN	Residential	3.04	3.03	99.67%	10,000.00	303,000,000.00	very high	very high	low	very high
SUMIMAO	Residential	1.77	1.77	100.00%	10,000.00	177,000,000.00	very high	very high	low	very high
TAPAK	Residential	18.67	18.46	98.88%	10,000.00	1,846,000,000.00	residual	residual	low	very high
CATALUNAN GRANDE	Residential	301.75	5.07	1.68%	10,000.00	507,000,000.00	high	high	low	very high
CATALUNAN GRANDE	Parks and Recreational	5.79	0.02	0.35%	15,000.00	3,000,000.00	moderate	moderate	low	very high
LANGUB	Parks and Recreational	2.13	2.13	100.00%	15,000.00	319,500,000.00	moderate	moderate	low	very high
LANGUB	Tourism	0.32	0.32	100.00%	15,000.00	48,000,000.00	moderate	moderate	moderate	very high

Table U-7. Urban Use Area Exposure Estimation for Landslide, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
LANGUB	Commercial	0.01	0.01	100.00%	15,000.00	1,500,000.00	moderate	moderate	moderate	very high
LANGUB	Residential	13.61	13.48	99.04%	10,000.00	1,348,000,000.00	high	high	low	very high
MA-A	Tourism	16.55	6.86	41.45%	15,000.00	1,029,000,000.00	moderate	moderate	low	very high
MA-A	Parks and Recreational	12.99	4.05	31.18%	15,000.00	607,500,000.00	moderate	moderate	low	very high
MA-A	Residential	428.26	101.76	23.76%	10,000.00	10,176,000,000.00	high	high	low	very high
MA-A	Commercial	90.16	10.05	11.15%	15,000.00	1,507,500,000.00	low	low	moderate	very high
MA-A	Cemetery	25.41	2.15	8.46%	15,000.00	322,500,000.00	moderate	moderate	low	very high
MA-A	Industrial	22.53	0.09	0.40%	15,000.00	13,500,000.00	low	low	moderate	very high
MAGTUOD	Parks and Recreational	10.48	10.43	99.52%	15,000.00	1,564,500,000.00	moderate	moderate	low	very high
MAGTUOD	Cemetery	91.87	84.30	91.76%	15,000.00	12,645,000,000.00	moderate	moderate	low	very high
MAGTUOD	Residential	53.99	46.37	85.89%	10,000.00	4,637,000,000.00	very high	very high	low	very high
MAGTUOD	Commercial	0.77	0.11	14.29%	15,000.00	16,500,000.00	moderate	moderate	moderate	very high
MATINA CROSSING	Industrial	5.72	4.06	70.98%	15,000.00	609,000,000.00	low	low	low	very high
MATINA CROSSING	Residential	250.40	29.25	11.68%	10,000.00	2,925,000,000.00	low	low	low	very high
MATINA CROSSING	Commercial	50.80	0.21	0.41%	15,000.00	31,500,000.00	low	low	low	very high
MATINA PANGI	Commercial	4.88	4.88	100.00%	15,000.00	732,000,000.00	low	low	moderate	very high
MATINA PANGI	Parks and Recreational	0.53	0.40	75.47%	15,000.00	60,000,000.00	moderate	moderate	low	very high
MATINA PANGI	Tourism	0.55	0.31	56.36%	15,000.00	46,500,000.00	moderate	moderate	low	very high
MATINA PANGI	Residential	152.49	64.73	42.45%	15,000.00	9,709,500,000.00	very high	very high	low	very high
MATINA PANGI	Industrial	0.03	0.01	33.33%	15,000.00	1,500,000.00	low	low	moderate	very high
TALOMO	Industrial	15.84	2.61	16.48%	15,000.00	391,500,000.00	low	low	moderate	very high
TALOMO	Commercial	20.65	0.82	3.97%	15,000.00	123,000,000.00	moderate	moderate	low	very high
TALOMO	Residential	297.55	10.51	3.53%	10,000.00	1,051,000,000.00	low	low	moderate	very high
ALAMBRE	Residential	7.80	0.09	1.15%	10,000.00	9,000,000.00	high	high	low	very high
ATAN-AWE	Residential	0.88	0.88	100.00%	10,000.00	88,000,000.00	very high	very high	low	very high
BARACATAN	Residential	4.30	1.55	36.05%	10,000.00	155,000,000.00	very high	very high	low	very high

Table U-7. Urban Use Area Exposure Estimation for Landslide, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
BATO	Residential	44.80	1.00	2.23%	10,000.00	100,000,000.00	low	low	low	very high
BAYABAS	Tourism	0.08	0.08	100.00%	15,000.00	12,000,000.00	moderate	moderate	low	very high
BAYABAS	Residential	3.34	2.05	61.38%	10,000.00	205,000,000.00	very high	very high	low	very high
BINUGAO	Agri-Industrial	13.50	10.65	78.89%	15,000.00	1,597,500,000.00	moderate	moderate	moderate	very high
BINUGAO	Residential	52.79	24.70	46.79%	10,000.00	2,470,000,000.00	high	high	low	very high
BINUGAO	Industrial	63.36	9.79	15.45%	15,000.00	1,468,500,000.00	low	low	moderate	very high
BINUGAO	Commercial	3.43	0.04	1.17%	15,000.00	6,000,000.00	low	low	moderate	very high
CAMANSI	Residential	2.44	1.73	70.90%	10,000.00	173,000,000.00	high	high	low	very high
CATIGAN	Residential	6.30	2.21	35.08%	10,000.00	221,000,000.00	very high	very high	low	very high
DALIAON PLANTATION	Residential	5.55	2.17	39.10%	10,000.00	217,000,000.00	very high	very high	low	very high
EDEN	Residential	51.48	51.48	100.00%	10,000.00	5,148,000,000.00	very high	very high	low	very high
EDEN	Agri-Industrial	1.27	1.27	100.00%	15,000.00	190,500,000.00	moderate	moderate	moderate	very high
EDEN	Parks and Recreational	0.55	0.55	100.00%	15,000.00	82,500,000.00	moderate	moderate	moderate	very high
EDEN	Commercial	0.08	0.08	100.00%	15,000.00	12,000,000.00	low	low	low	very high
EDEN	Tourism	98.40	94.89	96.43%	15,000.00	14,233,500,000.00	moderate	moderate	low	very high
KILATE	Residential	2.60	0.19	7.31%	10,000.00	19,000,000.00	very high	very high	low	very high
MARAPANGI	Tourism	0.19	0.07	36.84%	15,000.00	10,500,000.00	moderate	moderate	low	very high
MARAPANGI	Residential	76.91	1.99	2.59%	10,000.00	199,000,000.00	high	high	low	very high
SIBULAN	Residential	2.13	2.13	100.00%	10,000.00	213,000,000.00	moderate	moderate	low	very high
SIRAWAN	Agri-Industrial	85.27	14.86	17.43%	15,000.00	2,229,000,000.00	residual	residual	low	very high
SIRAWAN	Residential	83.94	7.50	8.93%	10,000.00	750,000,000.00	low	low	moderate	very high
TAGURANO	Residential	1.66	0.60	36.14%	10,000.00	60,000,000.00	very high	very high	low	very high
TIBULOY	Agri-Industrial	7.75	7.75	100.00%	15,000.00	1,162,500,000.00	high	high	low	very high

Table U-7. Urban Use Area Exposure Estimation for Landslide, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
TIBULOY	Residential	3.76	3.57	94.95%	10,000.00	357,000,000.00	moderate	moderate	moderate	very high
TUNGKALAN	Residential	3.84	1.09	28.39%	10,000.00	109,000,000.00	moderate	moderate	low	very high
MATINA BIAO	Agri-Industrial	6.89	0.82	11.90%	15,000.00	123,000,000.00	moderate	moderate	moderate	very high
MATINA BIAO	Residential	2.76	0.05	1.81%	10,000.00	5,000,000.00	moderate	high	low	very high
MANAMBULAN	Residential	9.65	0.12	1.24%	10,000.00	12,000,000.00	high	high	low	very high
NEW CARMEN	Parks and Recreational	0.09	0.09	100.00%	15,000.00	13,500,000.00	moderate	moderate	low	very high
NEW CARMEN	Residential	15.64	2.26	14.45%	10,000.00	226,000,000.00	moderate	moderate	low	very high
NEW VALENCIA	Residential	4.93	1.00	20.28%	10,000.00	100,000,000.00	very high	very high	low	very high
TALANDANG	Agri-Industrial	24.65	8.55	34.69%	15,000.00	1,282,500,000.00	very high	very high	low	very high

LIQUEFACTION

Residential, commercial and industrial areas are urban use areas most exposed to liquefaction. As shown in the table, residential areas have 83 barangays which are exposed to liquefaction. The identified barangays were assessed to have an accumulated area of 5,434.07 hectares wherein 44.52% of the total residential area is highly exposed to liquefaction. Moreover, the commercial area seconded with 75 exposed barangays which have a total land area of 990.73 hectares. A percentage of 76.7 of the total commercial area is foreseen to take the most damage. Lastly, the industrial area came in third as 50 barangays were identified to have hazard susceptibility. A total of 912.52 hectares constitute the industrial area and 57.3% of which is exposed to liquefaction. The exposed values of the identified urban use areas are Php 242,344,970,983.36, Php 114,008,914,141.13, and 78,395,913,631.67, respectively.

Table U-8. Urban Use Area Exposure Estimation for Liquefaction, Davao City

Barangay	Existing land Use (Specific Use)	EXPOSURE					SENSITIVITY			
		Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
1-A	Residential	6.95	6.69	96.19%	10,000.00	668,759,626.53	High	High	Low	Very High
1-A	Commercial	1.40	1.40	100.00%	15,000.00	210,517,192.30	Low	Low	Low	Very High
1-A	Parks and Recreational	0.08	0.08	97.85%	15,000.00	11,505,813.54	Low	Low	Low	Very High
2-A	Residential	1.62	1.61	99.34%	10,000.00	160,937,232.18	Very High	Very High	Low	Very High
2-A	Commercial	11.32	11.32	100.00%	15,000.00	1,697,980,810.46	Low	Low	Low	Very High
2-A	Parks and Recreational	0.44	0.44	100.00%	15,000.00	66,567,762.78	Low	Low	Low	Very High
3-A	Residential	0.55	0.55	100.00%	10,000.00	55,110,084.98	Low	Low	Low	Very High
3-A	Commercial	14.90	14.90	100.00%	15,000.00	2,234,645,239.30	Low	Low	Low	Very High
3-A	Parks and Recreational	0.10	0.10	100.00%	15,000.00	15,358,498.74	Low	Low	Low	Very High
4-A	Residential	2.93	2.93	100.00%	10,000.00	293,381,608.75	Very High	Very High	Low	Very High
4-A	Commercial	9.55	9.55	100.00%	15,000.00	1,432,224,807.14	Low	Low	Low	Very High
4-A	Parks and Recreational	4.00	4.00	100.00%	15,000.00	600,131,302.57	Low	Low	Low	Very High
4-A	Industrial	0.08	0.08	100.00%	15,000.00	12,539,491.89	Low	Low	Low	Very High

Table U-8. Urban Use Area Exposure Estimation for Liquefaction, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
5-A	Residential	20.41	13.27	65.02%	10,000.00	1,327,255,535.69	Very High	Very High	Low	Very High
5-A	Parks and Recreational	0.01	0.01	100.00%	15,000.00	1,995,534.93	Low	Low	Low	Very High
5-A	Commercial	4.34	1.17	27.01%	15,000.00	175,965,313.03	Low	Low	Low	Very High
6-A	Residential	4.39	0.93	21.18%	10,000.00	92,966,603.62	High	High	Low	Very High
6-A	Industrial	0.06	0.06	100.00%	15,000.00	8,855,098.62	Low	Low	Low	Very High
6-A	Commercial	5.66	3.70	65.46%	15,000.00	555,622,734.63	Low	Low	Low	Very High
7-A	Residential	10.18	5.60	55.02%	10,000.00	560,224,332.89	Moderate	Moderate	Low	Very High
7-A	Commercial	6.79	6.73	99.01%	15,000.00	1,008,959,035.34	Low	Low	Low	Very High
8-A	Residential	82.83	34.14	41.22%	10,000.00	3,413,933,203.73	High	High	Low	Very High
8-A	Industrial	3.84	3.56	92.69%	15,000.00	533,886,321.61	Low	Low	Low	Very High
8-A	Commercial	5.65	4.38	77.59%	15,000.00	657,478,527.85	Low	Low	Low	Very High
8-A	Parks and Recreational	1.17	0.02	1.44%	15,000.00	2,513,790.82	Low	Low	Low	Very High
8-A	Cemetery	18.90	0.01	0.08%	15,000.00	2,187,504.64	Low	Low	Low	Very High
9-A	Residential	13.91	8.69	62.51%	10,000.00	869,383,869.54	Moderate	Moderate	Low	Very High
9-A	Industrial	0.22	0.22	100.00%	15,000.00	33,700,922.46	Low	Low	Low	Very High
9-A	Commercial	7.49	7.42	99.04%	15,000.00	1,113,063,974.88	Low	Low	Low	Very High
10-A	Residential	5.79	4.27	73.65%	10,000.00	426,663,756.87	Moderate	Moderate	Low	Very High
10-A	Industrial	0.26	0.26	100.00%	15,000.00	38,842,452.40	Low	Low	Low	Very High
10-A	Commercial	7.70	6.64	86.22%	15,000.00	995,803,712.62	Low	Low	Low	Very High
11-B	Residential	2.56	2.56	100.00%	10,000.00	256,070,679.52	Very High	Very High	Low	Very High
11-B	Commercial	4.52	4.52	100.00%	15,000.00	678,304,676.37	Low	Low	Low	Very High
11-B	Industrial	0.61	0.61	100.00%	15,000.00	90,819,721.30	Low	Low	Low	Very High
12-B	Residential	1.20	1.20	100.00%	10,000.00	119,529,526.40	High	High	Low	Very High
12-B	Commercial	12.43	12.43	100.00%	15,000.00	1,864,538,807.44	Low	Low	Low	Very High
12-B	Parks and Recreational	0.06	0.06	100.00%	15,000.00	9,730,755.67	Low	Low	Low	Very High
12-B	Industrial	0.01	0.01	100.00%	15,000.00	1,832,308.60	Low	Low	Low	Very High

Table U-8. Urban Use Area Exposure Estimation for Liquefaction, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
13-B	Residential	0.57	0.57	100.00%	10,000.00	57,417,430.57	Very High	Very High	Low	Very High
13-B	Commercial	8.52	8.52	100.00%	15,000.00	1,278,263,622.49	Low	Low	Low	Very High
14-B	Residential	3.09	3.09	100.00%	10,000.00	309,083,330.97	Moderate	Moderate	Low	Very High
14-B	Commercial	7.52	7.52	100.00%	15,000.00	1,128,353,743.17	Low	Low	Low	Very High
14-B	Industrial	0.30	0.30	100.00%	15,000.00	45,018,001.26	Low	Low	Low	Very High
15-B	Residential	1.46	1.46	100.00%	10,000.00	146,470,545.79	Very High	Very High	Low	Very High
15-B	Commercial	24.46	24.46	100.00%	15,000.00	3,668,268,076.75	Low	Low	Low	Very High
15-B	Parks and Recreational	0.19	0.19	100.00%	15,000.00	28,853,312.07	Low	Low	Low	Very High
15-B	Industrial	0.00011	0.00011	100.00%	15,000.00	16,137.0239				
16-B	Residential	0.43	0.43	100.00%	10,000.00	42,608,316.39	Low	Low	Low	Very High
16-B	Commercial	3.38	3.38	100.00%	15,000.00	507,126,888.09	Low	Low	Low	Very High
17-B	Residential	0.53	0.53	100.00%	10,000.00	52,577,744.66	Low	Low	Low	Very High
17-B	Commercial	3.89	3.89	100.00%	15,000.00	583,679,837.63	Low	Low	Low	Very High
18-B	Residential	0.40	0.40	100.00%	10,000.00	40,499,797.62	Moderate	Moderate	Low	Very High
18-B	Commercial	8.95	8.95	100.00%	15,000.00	1,343,099,654.85	Low	Low	Low	Very High
18-B	Parks and Recreational	0.42	0.42	100.00%	15,000.00	63,521,647.83	Low	Low	Low	Very High
19-B	Residential	179.81	31.90	17.74%	10,000.00	3,189,532,024.73	Moderate	Moderate	Low	Very High
19-B	Tourism	0.23	0.23	100.00%	15,000.00	34,671,884.65	Low	Low	Low	Very High
19-B	Commercial	28.23	12.47	44.19%	15,000.00	1,871,180,694.53	Low	Low	Low	Very High
19-B	Parks and Recreational	0.36	0.10	28.85%	15,000.00	15,685,642.67	Low	Low	Low	Very High
19-B	Industrial	2.48	0.13	5.14%	15,000.00	19,144,453.15	Low	Low	Low	Very High
20-B	Residential	13.93	13.62	97.80%	10,000.00	1,362,240,617.82	Moderate	Moderate	Low	Very High
20-B	Commercial	28.61	24.30	84.95%	15,000.00	3,645,093,389.38	Low	Low	Low	Very High
20-B	Industrial	0.28	0.25	88.75%	15,000.00	37,559,267.30	Low	Low	Low	Very High
21-C	Residential	5.18	5.16	99.54%	10,000.00	515,854,291.85	High	High	Low	Very High
21-C	Commercial	0.30	0.30	100.00%	15,000.00	45,315,507.14	Low	Low	Low	Very High

Table U-8. Urban Use Area Exposure Estimation for Liquefaction, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
21-C	Parks and Recreational	0.07	0.07	100.00%	15,000.00	10,759,658.32	Low	Low	Low	Very High
22-C	Residential	4.78	4.76	99.43%	10,000.00	475,661,619.70	High	High	Low	Very High
22-C	Commercial	0.50	0.50	100.00%	15,000.00	75,115,751.36	Low	Low	Low	Very High
22-C	Parks and Recreational	0.05	0.05	100.00%	15,000.00	6,881,766.47	Low	Low	Low	Very High
23-C	Residential	12.79	12.74	99.59%	10,000.00	1,273,965,335.14	Very High	Very High	Low	Very High
23-C	Commercial	0.87	0.87	100.00%	15,000.00	130,465,332.82	Low	Low	Low	Very High
23-C	Parks and Recreational	0.72	0.70	98.19%	15,000.00	105,641,066.53	Low	Low	Low	Very High
24-C	Residential	2.51	2.51	100.00%	10,000.00	251,444,449.30	Moderate	Moderate	Low	Very High
24-C	Commercial	3.60	3.60	100.00%	15,000.00	540,610,880.67	Low	Low	Low	Very High
24-C	Parks and Recreational	0.05	0.05	100.00%	15,000.00	7,246,289.48	Low	Low	Low	Very High
25-C	Residential	1.73	1.73	100.00%	10,000.00	172,897,030.99	High	High	Low	Very High
25-C	Commercial	2.24	2.24	100.00%	15,000.00	335,958,502.01	Low	Low	Low	Very High
26-C	Residential	2.23	2.23	100.00%	10,000.00	223,439,536.27	Moderate	Moderate	Low	Very High
26-C	Commercial	4.32	4.32	100.00%	15,000.00	648,391,002.94	Low	Low	Low	Very High
27-C	Residential	0.64	0.64	100.00%	10,000.00	64,430,739.12	High	High	Low	Very High
27-C	Commercial	18.61	18.61	100.00%	15,000.00	2,792,069,841.63	Low	Low	Low	Very High
27-C	Industrial	0.69	0.69	100.00%	15,000.00	103,892,418.99	Low	Low	Low	Very High
27-C	Parks and Recreational	4.10	3.97	96.80%	15,000.00	595,045,006.93	Low	Low	Low	Very High
27-C	Tourism	0.04	0.04	100.00%	15,000.00	6,481,597.18	Low	Low	Low	Very High
28-C	Residential	1.65	1.65	100.00%	10,000.00	164,904,371.86	Moderate	Moderate	Low	Very High
28-C	Commercial	3.95	3.95	100.00%	15,000.00	592,148,476.58	Low	Low	Low	Very High
29-C	Residential	1.07	1.07	100.00%	10,000.00	106,578,472.04	High	High	Low	Very High
29-C	Commercial	6.88	6.88	100.00%	15,000.00	1,032,303,551.14	Low	Low	Low	Very High
30-C	Residential	1.37	1.37	100.00%	10,000.00	136,706,623.40	Low	Low	Low	Very High

Table U-8. Urban Use Area Exposure Estimation for Liquefaction, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
30-C	Commercial	14.96	14.96	100.00%	15,000.00	2,243,731,104.79	Low	Low	Low	Very High
30-C	Industrial	0.29	0.29	100.00%	15,000.00	43,726,588.70	Low	Low	Low	Very High
31-D	Residential	13.56	13.55	99.88%	10,000.00	1,354,516,309.29	Moderate	Moderate	Low	Very High
31-D	Commercial	0.61	0.61	100.00%	15,000.00	91,246,534.10	Low	Low	Low	Very High
31-D	Parks and Recreational	0.13	0.13	100.00%	15,000.00	19,561,711.58	Low	Low	Low	Very High
32-D	Residential	2.75	2.75	100.00%	10,000.00	274,985,420.10	Low	Low	Low	Very High
32-D	Commercial	5.17	5.17	100.00%	15,000.00	775,207,875.14	Low	Low	Low	Very High
32-D	Parks and Recreational	0.20	0.20	100.00%	15,000.00	29,385,028.90	Low	Low	Low	Very High
33-D	Residential	3.86	3.86	100.00%	10,000.00	386,250,542.28	High	High	Low	Very High
33-D	Commercial	2.89	2.89	100.00%	15,000.00	433,152,351.11	Low	Low	Low	Very High
34-D	Residential	0.37	0.37	100.00%	10,000.00	36,876,195.80	Low	Low	Low	Very High
34-D	Commercial	12.70	12.70	100.00%	15,000.00	1,905,014,679.50	Low	Low	Low	Very High
34-D	Parks and Recreational	0.00	0.00	100.00%	15,000.00	35,858.57	Low	Low	Low	Very High
35-D	Residential	0.04	0.04	100.00%	10,000.00	4,296,290.38	Very High	Very High	Low	Very High
35-D	Parks and Recreational	4.13	4.13	100.00%	15,000.00	620,121,371.22	Low	Low	Low	Very High
35-D	Commercial	2.48	2.48	100.00%	15,000.00	372,155,324.57	Low	Low	Low	Very High
36-D	Residential	2.39	2.39	100.00%	10,000.00	238,999,142.25	Moderate	Moderate	Low	Very High
36-D	Commercial	3.33	3.33	100.00%	15,000.00	499,363,982.22	Low	Low	Low	Very High
36-D	Parks and Recreational	0.07	0.07	100.00%	15,000.00	10,425,373.15	Low	Low	Low	Very High
37-D	Residential	3.54	3.54	100.00%	10,000.00	354,418,789.96	High	High	Low	Very High
37-D	Commercial	0.82	0.82	100.00%	15,000.00	123,129,696.28	Low	Low	Low	Very High
38-D	Residential	1.73	1.73	100.00%	10,000.00	172,640,113.76	Very High	Very High	Low	Very High
38-D	Commercial	3.10	3.10	100.00%	15,000.00	465,690,451.04	Low	Low	Low	Very High
38-D	Parks and Recreational	0.01	0.01	100.00%	15,000.00	1,032,136.18	Low	Low	Low	Very High

Table U-8. Urban Use Area Exposure Estimation for Liquefaction, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
39-D	Residential	2.92	2.92	100.00%	10,000.00	292,022,357.47	Low	Low	Low	Very High
39-D	Commercial	5.34	5.34	100.00%	15,000.00	801,638,610.92	Low	Low	Low	Very High
39-D	Parks and Recreational	0.89	0.89	100.00%	15,000.00	133,631,679.19	Low	Low	Low	Very High
40-D	Residential	1.34	1.34	100.00%	10,000.00	133,947,735.42	Very High	Very High	Low	Very High
40-D	Commercial	6.05	6.05	100.00%	15,000.00	907,271,520.63	Low	Low	Low	Very High
AGDAO PROPER	Residential	7.62	7.62	100.00%	15,000.00	1,142,729,213.98	Very High	Very High	Low	Very High
AGDAO PROPER	Commercial	22.65	22.65	100.00%	15,000.00	3,397,577,978.24	Low	Low	Low	Very High
AGDAO PROPER	Industrial	1.29	1.29	100.00%	15,000.00	193,897,955.89	Low	Low	Low	Very High
AGDAO PROPER	Parks and Recreational	0.01	0.01	100.00%	15,000.00	1,612,503.96	Moderate	Moderate	Low	Very High
WILFREDO AQUINO	Residential	26.09	19.31	74.00%	10,000.00	1,931,007,597.92	Low	Low	Low	Very High
WILFREDO AQUINO	Parks and Recreational	1.06	1.06	100.00%	15,000.00	159,711,995.73	Moderate	Moderate	Low	Very High
WILFREDO AQUINO	Commercial	23.77	16.38	68.91%	15,000.00	2,457,340,460.18	Low	Low	Low	Very High
WILFREDO AQUINO	Industrial	0.12	0.11	99.03%	15,000.00	17,100,262.62	Low	Low	Low	Very High
PACIANO BANGOY	Residential	21.36	17.47	81.80%	10,000.00	1,747,224,664.29	High	High	Low	Very High
PACIANO BANGOY	Industrial	0.67	0.67	100.00%	15,000.00	100,104,649.30	Low	Low	Low	Very High
PACIANO BANGOY	Commercial	37.06	28.33	76.43%	15,000.00	4,249,211,221.59	Low	Low	Low	Very High
RAFAEL CASTILLO	Residential	11.86	11.86	100.00%	10,000.00	1,186,306,442.08	Moderate	Moderate	Low	Very High
RAFAEL CASTILLO	Commercial	16.41	16.41	100.00%	15,000.00	2,461,002,411.19	Low	Low	Low	Very High
RAFAEL CASTILLO	Industrial	9.33	9.33	100.00%	15,000.00	1,398,997,645.74	Low	Low	Low	Very High
RAFAEL CASTILLO	Parks and Recreational	0.02	0.02	100.00%	15,000.00	2,764,122.06	Moderate	Moderate	Low	Very High
CENTRO	Residential	22.72	22.37	98.48%	10,000.00	2,237,168,588.75	High	High	Low	Very High
CENTRO	Commercial	1.14	1.14	100.00%	15,000.00	170,319,260.99	Low	Low	Low	Very High
CENTRO	Industrial	10.73	10.60	98.81%	15,000.00	1,590,332,982.19	Low	Low	Low	Very High
CENTRO	Parks and Recreational	0.04	0.04	100.00%	15,000.00	6,174,813.88	Moderate	Moderate	Low	Very High

Table U-8. Urban Use Area Exposure Estimation for Liquefaction, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
GOV. VICENTE DUTERTE	Residential	20.34	20.02	98.43%	10,000.00	2,001,596,458.56	High	High	Low	Very High
GOV. VICENTE DUTERTE	Industrial	12.56	12.56	100.00%	15,000.00	1,884,562,350.82	Low	Low	Low	Very High
GOV. VICENTE DUTERTE	Commercial	4.95	4.95	100.00%	15,000.00	741,989,967.31	Low	Low	Low	Very High
GOV. VICENTE DUTERTE	Parks and Recreational	0.06	0.06	100.00%	15,000.00	9,423,105.82	Low	Low	Low	Very High
LEON GARCIA SR.	Residential	12.04	12.04	100.00%	10,000.00	1,204,204,820.76	Low	Low	Low	Very High
LEON GARCIA SR.	Commercial	1.06	1.06	100.00%	15,000.00	158,606,156.97	Moderate	Moderate	Low	Very High
LEON GARCIA SR.	Industrial	0.29	0.29	100.00%	15,000.00	43,386,392.02	Low	Low	Low	Very High
LEON GARCIA SR.	Parks and Recreational	0.08	0.08	100.00%	15,000.00	11,720,015.13	Moderate	Moderate	Low	Very High
LAPU - LAPU	Residential	23.68	23.68	100.00%	10,000.00	2,367,807,745.32	Moderate	Moderate	Low	Very High
LAPU - LAPU	Commercial	1.61	1.61	100.00%	15,000.00	241,574,580.62	Low	Low	Low	Very High
LAPU - LAPU	Industrial	22.95	22.91	99.82%	15,000.00	3,435,992,158.31	Moderate	Moderate	Low	Very High
LAPU - LAPU	Parks and Recreational	0.04	0.04	100.00%	15,000.00	6,300,464.21	Moderate	Moderate	Low	Very High
TOMAS MONTE-VERDE	Residential	2.09	2.09	100.00%	10,000.00	209,331,746.48	Very High	Very High	Low	Very High
TOMAS MONTE-VERDE	Commercial	11.83	11.83	100.00%	15,000.00	1,774,600,141.53	Low	Low	Low	Very High
TOMAS MONTE-VERDE	Industrial	0.83	0.83	100.00%	15,000.00	124,595,117.78	Low	Low	Low	Very High
SAN ANTONIO	Residential	25.28	25.28	100.00%	10,000.00	2,528,393,562.43	Low	Low	Low	Very High
SAN ANTONIO	Commercial	43.27	43.27	100.00%	15,000.00	6,490,728,043.48	Low	Low	Low	Very High
SAN ANTONIO	Industrial	10.51	10.51	100.00%	15,000.00	1,576,505,260.49	Moderate	Moderate	Low	Very High
SAN ANTONIO	Parks and Recreational	0.06	0.06	100.00%	15,000.00	8,476,887.60	Moderate	Moderate	Low	Very High

Table U-8. Urban Use Area Exposure Estimation for Liquefaction, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
UBALDE	Residential	5.94	5.94	100.00%	10,000.00	593,870,521.72	Moderate	Moderate	Low	Very High
UBALDE	Commercial	1.53	1.53	100.00%	15,000.00	229,829,539.97	Low	Low	Low	Very High
UBALDE	Industrial	0.21	0.21	100.00%	15,000.00	31,293,522.98	Low	Low	Low	Very High
BUHANGIN	Residential	335.29	1.20	0.36%	10,000.00	120,062,974.52	Moderate	Moderate	Low	Very High
BUHANGIN	Industrial	4.40	0.13	2.90%	15,000.00	19,185,313.05	Low	Low	Low	Very High
BUHANGIN	Commercial	52.91	0.0024	0.0046%	15,000.00	365,546.33				
MANDUG	Residential	168.40	14.09	8.37%	10,000.00	1,408,849,663.61	Moderate	Moderate	Low	Very High
MANDUG	Agri-Industrial	6.55	3.98	60.74%	15,000.00	596,994,165.02	Moderate	Moderate	Low	Very High
PAMPANGA	Commercial	11.31	11.31	100.00%	15,000.00	1,696,336,620.04	Moderate	Moderate	Low	Very High
PAMPANGA	Tourism	2.99	2.99	100.00%	15,000.00	447,772,687.45	Moderate	Moderate	Low	Very High
PAMPANGA	Industrial	26.69	23.90	89.57%	15,000.00	3,585,193,086.02	Moderate	Moderate	Low	Very High
PAMPANGA	Residential	49.98	0.05	0.11%	10,000.00	5,456,768.47	Low	Low	Low	Very High
SASA	Residential	223.80	25.93	11.59%	10,000.00	2,593,156,006.38	Moderate	Moderate	Low	Very High
SASA	Industrial	93.77	34.63	36.93%	15,000.00	5,193,798,341.78	Low	Low	Low	Very High
SASA	Commercial	58.02	20.86	35.96%	15,000.00	3,129,116,617.57	Low	Low	Low	Very High
SASA	Parks and Recreational	0.21	0.05	21.64%	15,000.00	6,879,260.67	Low	Low	Low	Very High
TIGATTO	Residential	256.29	156.38	61.02%	10,000.00	15,637,877,275.48	Moderate	Moderate	Low	Very High
TIGATTO	Commercial	3.25	2.91	89.48%	15,000.00	436,358,787.31	Low	Low	Low	Very High
TIGATTO	Industrial	13.03	5.15	39.52%	15,000.00	772,261,861.35	Low	Low	Low	Very High
WAAN	Residential	38.48	18.52	48.12%	10,000.00	1,851,715,453.66	Very High	Very High	Low	Very High
WAAN	Parks and Recreational	0.08	0.08	100.00%	15,000.00	11,568,767.90	Low	Low	Low	Very High
A. ANGLIONGTO	Residential	155.68	24.62	15.82%	10,000.00	2,462,151,601.11	Low	Low	Low	Very High
A. ANGLIONGTO	Commercial	38.75	31.98	82.53%	15,000.00	4,797,541,896.67	Low	Low	Low	Very High
A. ANGLIONGTO	Industrial	17.16	3.47	20.21%	15,000.00	520,142,547.01	Low	Low	Low	Very High
V. HIZON	Residential	118.71	52.73	44.42%	10,000.00	5,273,012,392.18	Moderate	Moderate	Low	Very High
V. HIZON	Industrial	6.31	6.31	100.00%	15,000.00	946,708,359.96	Low	Low	Low	Very High
V. HIZON	Commercial	25.25	25.13	99.53%	15,000.00	3,769,698,812.30	Low	Low	Low	Very High

Table U-8. Urban Use Area Exposure Estimation for Liquefaction, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
V. HIZON	Tourism	1.52	0.69	45.20%	15,000.00	103,159,341.14	Moderate	Moderate	Low	Very High
BUNAWAN	Residential	123.76	89.65	72.44%	10,000.00	8,965,265,387.13	Very High	Very High	Low	Very High
BUNAWAN	Commercial	11.86	11.67	98.45%	15,000.00	1,751,033,615.40	Low	Low	Low	Very High
BUNAWAN	Industrial	115.61	79.29	68.58%	15,000.00	11,892,753,831.92	Low	Low	Low	Very High
BUNAWAN	Agri-Industrial	1.86	1.18	63.19%	15,000.00	176,310,977.33	Low	Low	Low	Very High
BUNAWAN	Parks and Recreational	0.24	0.18	75.90%	15,000.00	27,636,409.51	Moderate	Moderate	Low	Very High
ILANG	Residential	125.72	10.88	8.65%	10,000.00	1,087,914,568.68	High	High	Low	Very High
ILANG	Industrial	90.29	33.50	37.10%	15,000.00	5,025,088,268.27	Low	Low	Low	Very High
ILANG	Commercial	2.20	0.41	18.58%	15,000.00	61,233,382.40	Moderate	Moderate	Low	Very High
LASANG	Residential	50.73	50.58	99.70%	10,000.00	5,058,098,233.04	Very High	Very High	Low	Very High
LASANG	Industrial	38.00	38.00	100.00%	15,000.00	5,700,555,728.53	Moderate	Moderate	Low	Very High
LASANG	Commercial	2.13	2.13	100.00%	15,000.00	318,954,077.54	Moderate	Moderate	Low	Very High
LASANG	Agri-Industrial	9.39	9.35	99.61%	15,000.00	1,403,109,661.19	Low	Low	Low	Very High
LASANG	Parks and Recreational	0.07	0.07	100.00%	15,000.00	10,756,125.65	Moderate	Moderate	Low	Very High
MAHAYAG	Residential	57.77	7.63	13.21%	10,000.00	763,277,727.56	High	High	Low	Very High
MAHAYAG	Industrial	70.08	1.04	1.48%	15,000.00	155,557,683.32	Low	Low	Low	Very High
PANACAN	Residential	256.99	51.96	20.22%	10,000.00	5,196,453,706.62	Moderate	Moderate	Low	Very High
PANACAN	Parks and Recreational	6.97	6.97	100.00%	15,000.00	1,045,707,938.01	Moderate	Moderate	Low	Very High
PANACAN	Cemetery	1.30	1.30	100.00%	15,000.00	195,635,496.94	Low	Low	Low	Very High
PANACAN	Industrial	120.38	70.20	58.32%	15,000.00	10,530,080,704.21	High	High	Low	Very High
PANACAN	Commercial	7.46	3.81	51.05%	15,000.00	571,287,446.10	Moderate	Moderate	Low	Very High
PANACAN	Tourism	0.96	0.45	46.80%	15,000.00	67,258,881.59	Low	Low	Low	Very High
SAN ISIDRO	Residential	26.47	18.25	68.95%	10,000.00	1,824,709,911.66	Moderate	Moderate	Low	Very High
SAN ISIDRO	Agri-Industrial	1.38	1.38	100.00%	15,000.00	207,366,014.96	Low	Low	Low	Very High
SAN ISIDRO	Industrial	4.21	2.74	65.07%	15,000.00	411,065,887.15	Moderate	Moderate	Low	Very High
SAN ISIDRO	Parks and Recreational	0.08	0.08	100.00%	15,000.00	11,270,954.85	Low	Low	Low	Very High

Table U-8. Urban Use Area Exposure Estimation for Liquefaction, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
TIBUNGCO	Residential	131.99	1.24	0.94%	10,000.00	123,605,480.56	Very High	Very High	Low	Very High
TIBUNGCO	Industrial	41.74	3.77	9.03%	15,000.00	565,182,964.20	Low	Low	Low	Very High
BAGO APLAYA	Residential	95.45	94.69	99.20%	10,000.00	9,468,574,543.80	Low	Low	Low	Very High
BAGO GALLERA	Residential	129.96	1.56	1.20%	10,000.00	156,147,770.86	Moderate	Moderate	Low	Very High
BAGO APLAYA	Industrial	16.24	16.24	100.00%	15,000.00	2,436,509,741.16	Moderate	Moderate	Low	Very High
BAGO APLAYA	Commercial	12.91	12.82	99.29%	15,000.00	1,922,278,391.94	Low	Low	Low	Very High
BAGO APLAYA	Parks and Recreational	5.45	5.25	96.35%	15,000.00	788,103,884.73	Moderate	Moderate	Low	Very High
BAGO GALLERA	Parks and Recreational	63.48	9.3802	14.78%	15,000.00	1,407,032,731.74	Moderate	Moderate	Low	Very High
BAGO GALLERA	Commercial	0.65	0.0002	0.03%	15,000.00	26,869.93				
BUCANA	Residential	216.96	216.58	99.83%	10,000.00	21,657,754,187.75	Very High	Very High	Low	Very High
BUCANA	Parks and Recreational	1.92	1.92	100.00%	15,000.00	287,500,120.02	Moderate	Moderate	Low	Very High
BUCANA	Commercial	63.45	63.09	99.44%	15,000.00	9,464,086,291.80	Moderate	Moderate	Low	Very High
BUCANA	Tourism	0.67	0.66	99.35%	15,000.00	99,239,738.21	Moderate	Moderate	Low	Very High
BUCANA	Industrial	0.12	0.12	100.00%	15,000.00	17,514,521.14	Low	Low	Low	Very High
CATALUNAN GRANDE	Residential	301.76	0.01	0.00%	10,000.00	608,697.75	High	High	Low	Very High
DUMOY	Residential	162.79	82.31	50.56%	10,000.00	8,230,754,277.10	Low	Low	Low	Very High
DUMOY	Tourism	5.83	5.83	100.00%	15,000.00	874,001,152.47	Moderate	Moderate	Low	Very High
DUMOY	Parks and Recreational	8.33	8.04	96.50%	15,000.00	1,205,607,293.55	Moderate	Moderate	Low	Very High
DUMOY	Commercial	8.18	5.79	70.86%	15,000.00	869,242,941.13	Low	Low	Low	Very High
DUMOY	Industrial	32.56	16.42	50.44%	15,000.00	2,463,477,068.57	Low	Low	Low	Very High
MATINA APLAYA	Residential	155.50	154.67	99.46%	10,000.00	15,466,659,751.19	High	High	Low	Very High

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Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
MATINA APLAYA	Tourism	2.35	2.34	99.55%	15,000.00	351,540,934.99	Moderate	Moderate	Low	Very High
MATINA APLAYA	Commercial	20.47	20.34	99.33%	15,000.00	3,050,355,113.13	Low	Low	Low	Very High
MATINA APLAYA	Industrial	2.91	2.87	98.82%	15,000.00	430,643,771.07	Low	Low	Low	Very High
MATINA APLAYA	Parks and Recreational	2.27	2.21	97.55%	15,000.00	332,186,534.95	Moderate	Moderate	Low	Very High
MATINA CROSSING	Residential	250.40	170.46	68.07%	10,000.00	17,045,624,248.24	Low	Low	Low	Very High
MATINA CROSSING	Commercial	50.86	40.51	79.66%	15,000.00	6,076,973,082.65	Low	Low	Low	Very High
MATINA CROSSING	Industrial	5.73	1.45	25.37%	15,000.00	217,986,259.43	Low	Low	Low	Very High
MATINA CROSSING	Parks and Recreational	18.39	3.91	21.29%	15,000.00	587,219,779.47	Low	Low	Low	Very High
MATINA CROSSING	Tourism	0.35	0.02	5.44%	15,000.00	2,885,957.22	Low	Low	Low	Very High
MATINA PANGI	Residential	152.50	42.34	27.77%	10,000.00	4,234,146,266.64	Very High	Very High	Low	Very High
MATINA PANGI	Industrial	0.04	0.03	79.94%	15,000.00	4,496,776.71	Low	Low	Low	Very High
MATINA PANGI	Parks and Recreational	0.54	0.10	18.24%	15,000.00	14,718,941.42	Moderate	Moderate	Low	Very High
TALOMO	Residential	297.56	226.37	76.08%	10,000.00	22,636,705,778.28	High	High	Low	Very High
MA-A	Residential	428.27	232.93	54.39%	10,000.00	23,293,021,468.97	High	High	Low	Very High
MA-A	Industrial	22.54	21.06	93.46%	15,000.00	3,159,224,523.44	Low	Low	Low	Very High
MA-A	Cemetery	25.42	14.51	57.08%	15,000.00	2,176,100,238.35	Moderate	Moderate	Low	Very High
MA-A	Commercial	90.16	51.11	56.68%	15,000.00	7,665,881,304.79	Low	Low	Low	Very High
TALOMO	Tourism	1.55	0.84	54.26%	15,000.00	126,092,259.32	Moderate	Moderate	Low	Very High
TALOMO	Commercial	20.65	9.98	48.33%	15,000.00	1,497,362,859.58	Low	Low	Low	Very High
MA-A	Parks and Recreational	12.99	5.92	45.58%	15,000.00	888,246,652.98	Moderate	Moderate	Low	Very High
MA-A	Tourism	16.56	5.54	33.43%	15,000.00	830,268,413.78	Moderate	Moderate	Low	Very High
TALOMO	Parks and Recreational	5.46	1.31	23.92%	15,000.00	195,905,297.94	Moderate	Moderate	Low	Very High

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Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
TALOMO	Industrial	15.85	2.23	14.07%	15,000.00	334,394,932.65	Low	Low	Low	Very High
CROSSING BAYA-BAS	Residential	93.21	0.01	0.01%	10,000.00	863,460.12	High	High	Low	Very High
CROSSING BAYA-BAS	Commercial	9.26	0.01	0.06%	15,000.00	806,367.26	Low	Low	Low	Very High
BINUGAO	Residential	52.80	15.57	29.49%	10,000.00	1,556,937,502.14	High	High	Low	Very High
BINUGAO	Parks and Recreational	1.34	1.31	98.08%	15,000.00	196,714,670.75	Moderate	Moderate	Low	Very High
BINUGAO	Commercial	3.44	3.05	88.77%	15,000.00	457,874,584.52	Low	Low	Low	Very High
BINUGAO	Industrial	63.36	53.20	83.96%	15,000.00	7,980,233,775.99	Low	Low	Low	Very High
BINUGAO	Agri-Industrial	13.50	0.22	1.63%	15,000.00	33,107,063.92	Moderate	Moderate	Low	Very High
DALIAO	Residential	107.79	106.80	99.09%	10,000.00	10,680,348,977.07	Moderate	Moderate	Low	Very High
DALIAO	Industrial	14.75	14.75	100.00%	15,000.00	2,213,132,533.61	Moderate	Moderate	Low	Very High
DALIAO	Tourism	1.79	1.79	100.00%	15,000.00	268,157,597.97	Moderate	Moderate	Low	Very High
DALIAO	Parks and Recreational	0.16	0.16	100.00%	15,000.00	23,834,181.92	Moderate	Moderate	Low	Very High
DALIAO	Commercial	0.07	0.07	100.00%	15,000.00	10,872,775.79	Moderate	Moderate	Low	Very High
LIZADA	Residential	100.96	98.22	97.28%	10,000.00	9,821,953,362.16	High	High	Low	Very High
LIZADA	Industrial	13.44	13.44	100.00%	15,000.00	2,015,844,149.64	Low	Low	Low	Very High
LIZADA	Commercial	2.79	2.79	100.00%	15,000.00	418,663,206.86	Low	Low	Low	Very High
LIZADA	Parks and Recreational	0.19	0.19	100.00%	15,000.00	28,055,563.27	Moderate	Moderate	Low	Very High
LIZADA	Tourism	0.08	0.08	100.00%	15,000.00	12,102,495.64	Low	Low	Low	Very High
LIZADA	Agri-Industrial	5.18	0.04	0.83%	15,000.00	6,423,153.77	Low	Low	Low	Very High
SIRAWAN	Residential	83.94	24.35	29.01%	10,000.00	2,435,005,448.17	High	High	Low	Very High
SIRAWAN	Agri-Industrial	85.28	1.74	2.04%	15,000.00	261,050,376.78	Low	Low	Low	Very High

Table U-8. Urban Use Area Exposure Estimation for Liquefaction, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
SIRAWAN	Industrial	1.85	0.06	3.48%	15,000.00	9,673,389.54	Low	Low	Low	Very High
SIRAWAN	Parks and Recreational	0.04	0.04	100.00%	15,000.00	6,667,004.87	Moderate	Moderate	Low	Very High
SIRAWAN	Commercial	0.83	0.01	1.00%	15,000.00	1,243,126.00	Low	Low	Low	Very High
TORIL	Residential	69.46	48.61	69.97%	10,000.00	4,860,613,368.09	High	High	Low	Very High
TORIL	Industrial	2.86	2.86	100.00%	15,000.00	428,606,130.51	Low	Low	Low	Very High
TORIL	Commercial	24.53	14.72	60.01%	15,000.00	2,208,388,947.16	Low	Low	Low	Very High
NEW CARMEN	Residential	15.64	11.98	76.58%	10,000.00	1,197,922,126.49	Very High	Very High	Low	Very High

STORM SURGE

Residential areas, commercial areas, and industrial areas have topped as the most exposed urban use areas for storm surge. As shown in the table a total of 72 barangays with residential urban use have areas exposed to storm surge. These barangays have an accumulated area of 3,666.32 hectares in which 36.2% of the total residential area is highly susceptible to storm surge. Moreover, the number of barangays with commercial use susceptible to storm surge is the second highest at 65 with corresponding total land area of 1,126.60 hectares. Out of these barangays, 47.6% of the total commercial area are foreseen to take the most damage. Lastly, the number barangays with industrial use came in third at 39, totalling 880.843 hectares all in all and out of these hectares, 38% is exposed to storm surge. The exposed values of the identified urban use areas are Php 134,813,338,505.36, Php 80,590,650,929.35, and 50,266,027,887.23, respectively.

Table U-9. Urban Use Area Exposure Estimation for Storm Surge, Davao City

Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	EXPOSURE				SENSITIVITY			
			Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
1-A	Commercial	1.40	1.14	81.43%	15,000.00	171,000,000.00	Low	Low	Low	Very High
1-A	Parks and Recreational	0.08	0.08	100.00%	15,000.00	12,000,000.00	Moderate	Moderate	Low	Very High
1-A	Residential	6.95	6.95	100.00%	10,000.00	695,000,000.00	High	High	Low	Very High
2-A	Commercial	11.32	9.14	80.79%	15,000.00	1,371,732,731.02	Low	Low	Low	Very High
2-A	Parks and Recreational	0.44	0.44	100.00%	15,000.00	66,567,818.65	Moderate	Moderate	Low	Very High
2-A	Residential	1.62	1.62	99.89%	10,000.00	161,836,733.90	Very High	Very High	Low	Very High
3-A	Commercial	14.90	14.90	100.00%	15,000.00	2,234,604,689.15	Low	Low	Low	Very High
3-A	Parks and Recreational	0.10	0.10	100.00%	15,000.00	15,358,451.09	Moderate	Moderate	Low	Very High
3-A	Residential	0.55	0.55	100.00%	10,000.00	55,110,065.12	Low	Low	Low	Very High
4-A	Commercial	9.55	9.55	100.00%	15,000.00	1,432,224,844.85	Low	Low	Low	Very High
4-A	Industrial	0.08	0.08	100.00%	15,000.00	12,539,491.89	Low	Low	Low	Very High
4-A	Parks and Recreational	4.00	4.00	100.00%	15,000.00	600,131,108.50	Moderate	Moderate	Low	Very High
4-A	Residential	2.93	2.93	100.00%	10,000.00	293,381,599.56	Very High	Very High	Low	Very High

Table U-9. Urban Use Area Exposure Estimation for Storm Surge, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
5-A	Commercial	4.34	1.51	34.67%	15,000.00	225,891,312.78	Low	Low	Low	Very High
5-A	Residential	20.41	10.31	50.50%	10,000.00	1,030,738,916.39	Very High	Very High	Low	Very High
6-A	Commercial	5.66	0.78	13.78%	15,000.00	116,980,567.71	Low	Low	Low	Very High
6-A	Residential	4.39	0.51	11.53%	10,000.00	50,627,731.15	High	High	Low	Very High
7-A	Commercial	6.79	3.25	47.78%	15,000.00	486,873,588.36	Low	Low	Low	Very High
7-A	Residential	10.18	0.59	5.83%	10,000.00	59,402,194.99	Moderate	Moderate	moderate	Very High
8-A	Residential	82.83	9.24	11.15%	10,000.00	923,606,706.71	High	High	Low	Very High
9-A	Commercial	247.36	0.66	0.27%	15,000.00	99,000,000.00	Moderate	Moderate	Low	Very High
9-A	Industrial	7.49	0.66	8.86%	15,000.00	99,572,259.48	Low	Low	Low	Very High
9-A	Residential	0.22	0.21	91.54%	10,000.00	20,567,176.36	Low	Low	Low	Very High
10-A	Commercial	7.60	5.52	72.63%	15,000.00	828,000,000.00	Low	Low	Low	Very High
10-A	Industrial	0.25	0.25	100.00%	15,000.00	37,500,000.00	Low	Low	Low	Very High
10-A	Residential	5.79	3.30	56.99%	10,000.00	330,000,000.00	Moderate	Moderate	moderate	Very High
11-B	Commercial	4.52	4.52	100.00%	15,000.00	678,000,000.00	Low	Low	Low	Very High
11-B	Industrial	0.61	0.61	100.00%	15,000.00	91,500,000.00	Low	Low	Low	Very High
11-B	Residential	2.56	2.56	100.00%	10,000.00	256,000,000.00	Very High	Very High	Low	Very High
12-B	Commercial	12.43	12.31	99.03%	15,000.00	1,846,500,000.00	Low	Low	Low	Very High
12-B	Industrial	0.01	0.01	100.00%	15,000.00	1,500,000.00	Low	Low	Low	Very High
12-B	Parks and Recreational	0.06	0.06	100.00%	15,000.00	9,000,000.00	Low	Low	Low	Very High
12-B	Residential	1.20	1.20	100.00%	10,000.00	120,000,000.00	High	High	Low	Very High
13-B	Commercial	8.52	8.52	100.00%	15,000.00	1,278,000,000.00	Low	Low	Low	Very High
13-B	Residential	0.57	0.57	100.00%	10,000.00	57,000,000.00	Very High	Very High	Low	Very High
14-B	Commercial	7.52	7.52	100.00%	15,000.00	1,128,000,000.00	Low	Low	Low	Very High
14-B	Industrial	0.30	0.30	100.00%	15,000.00	45,000,000.00	Low	Low	Low	Very High
14-B	Residential	3.09	3.09	100.00%	10,000.00	309,000,000.00	Moderate	Moderate	moderate	Very High
15-B	Commercial	24.46	24.46	100.00%	15,000.00	3,669,000,000.00	Low	Low	Low	Very High
15-B	Parks and Recreational	0.19	0.19	100.00%	15,000.00	28,500,000.00	Moderate	Moderate	Low	Very High

Table U-9. Urban Use Area Exposure Estimation for Storm Surge, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
15-B	Residential	1.46	1.46	100.00%	10,000.00	146,000,000.00	Very High	Very High	Low	Very High
16-B	Commercial	3.38	3.38	100.00%	15,000.00	507,000,000.00	Low	Low	Low	Very High
16-B	Residential	0.42	0.42	100.00%	10,000.00	42,000,000.00	Low	Low	Low	Very High
17-B	Commercial	3.89	3.89	100.00%	15,000.00	583,500,000.00	Low	Low	Low	Very High
17-B	Residential	0.52	0.52	100.00%	10,000.00	52,000,000.00	Low	Low	Low	Very High
18-B	Commercial	8.95	8.95	100.00%	15,000.00	1,342,500,000.00	Low	Low	Low	Very High
18-B	Parks and Recreational	0.42	0.42	100.00%	15,000.00	63,000,000.00	Moderate	Moderate	Low	Very High
18-B	Residential	0.40	0.40	100.00%	10,000.00	40,000,000.00	Moderate	Moderate	moderate	Very High
19-B	Commercial	28.23	2.58	9.14%	15,000.00	387,000,000.00	Low	Low	Low	Very High
20-B	Commercial	28.60	11.85	41.43%	15,000.00	1,777,500,000.00	Low	Low	Low	Very High
20-B	Residential	13.92	8.94	64.22%	10,000.00	894,000,000.00	Moderate	Moderate	moderate	Very High
21-C	Commercial	0.30	0.30	100.00%	15,000.00	45,000,000.00	Low	Low	Low	Very High
21-C	Parks and Recreational	0.07	0.07	100.00%	15,000.00	10,500,000.00	Moderate	Moderate	Low	Very High
21-C	Residential	5.18	5.18	100.00%	10,000.00	518,000,000.00	High	High	Low	Very High
22-C	Commercial	0.50	0.50	100.00%	15,000.00	75,000,000.00	Low	Low	Low	Very High
22-C	Parks and Recreational	0.05	0.05	100.00%	15,000.00	7,500,000.00	Moderate	Moderate	Low	Very High
22-C	Residential	4.78	4.78	100.00%	10,000.00	478,000,000.00	High	High	Low	Very High
23-C	Commercial	0.87	0.87	100.00%	15,000.00	130,500,000.00	Low	Low	Low	Very High
23-C	Parks and Recreational	0.72	0.72	100.00%	15,000.00	108,000,000.00	Moderate	Moderate	Low	Very High
23-C	Residential	12.79	12.79	100.00%	10,000.00	1,279,000,000.00	Very High	Very High	Low	Very High
24-C	Commercial	3.60	3.60	100.00%	15,000.00	540,000,000.00	Low	Low	Low	Very High
24-C	Parks and Recreational	0.05	0.05	100.00%	15,000.00	7,500,000.00	Moderate	Moderate	Low	Very High
24-C	Residential	3.60	2.51	69.72%	10,000.00	251,000,000.00	Moderate	Moderate	moderate	Very High
25-C	Commercial	2.24	2.24	100.00%	15,000.00	336,000,000.00	Low	Low	Low	Very High

Table U-9. Urban Use Area Exposure Estimation for Storm Surge, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
25-C	Residential	1.73	1.73	100.00%	10,000.00	173,000,000.00	High	High	Low	Very High
26-C	Commercial	4.32	4.32	100.00%	15,000.00	648,000,000.00	Low	Low	Low	Very High
26-C	Residential	2.23	2.23	100.00%	10,000.00	223,000,000.00	Moderate	Moderate	moderate	Very High
27-C	Commercial	18.61	18.61	100.00%	15,000.00	2,791,500,000.00	Low	Low	Low	Very High
27-C	Industrial	0.69	0.69	100.00%	15,000.00	103,500,000.00	Low	Low	Low	Very High
27-C	Parks and Recreational	4.10	4.10	100.00%	15,000.00	615,000,000.00	Moderate	Moderate	Low	Very High
27-C	Residential	0.64	0.64	100.00%	10,000.00	64,430,783.06	High	High	Low	Very High
27-C	Tourism	0.04	0.04	100.00%	15,000.00	6,481,597.18	Moderate	Moderate	moderate	Very High
28-C	Commercial	3.95	3.95	100.00%	15,000.00	592,148,326.85	Low	Low	Low	Very High
28-C	Residential	1.65	1.65	100.00%	10,000.00	164,904,358.72	Moderate	Moderate	moderate	Very High
29-C	Commercial	6.88	6.88	100.00%	15,000.00	1,032,303,475.68	Low	Low	Low	Very High
29-C	Residential	1.07	1.07	100.00%	10,000.00	106,578,556.98	High	High	Low	Very High
30-C	Commercial	14.96	14.96	100.00%	15,000.00	2,243,730,999.11	Low	Low	Low	Very High
30-C	Industrial	0.29	0.29	100.00%	15,000.00	43,726,594.40	Low	Low	Low	Very High
30-C	Residential	1.37	1.37	100.00%	10,000.00	136,706,617.66	Low	Low	Low	Very High
31-D	Commercial	0.61	0.61	100.00%	15,000.00	91,246,593.76	Low	Low	Low	Very High
31-D	Parks and Recreational	0.13	0.13	100.00%	15,000.00	19,561,694.62	Moderate	Moderate	Low	Very High
31-D	Residential	13.56	13.56	100.00%	10,000.00	1,356,101,073.23	Moderate	Moderate	moderate	Very High
32-D	Commercial	5.17	5.17	100.00%	15,000.00	775,208,195.52	Low	Low	Low	Very High
32-D	Parks and Recreational	0.20	0.20	100.00%	15,000.00	29,385,040.36	Moderate	Moderate	Low	Very High
32-D	Residential	2.75	2.75	100.00%	10,000.00	274,985,473.05	Low	Low	Low	Very High
33-D	Commercial	2.89	2.89	100.00%	15,000.00	433,152,447.07	Low	Low	Low	Very High
33-D	Residential	3.86	3.86	100.00%	10,000.00	386,250,546.69	High	High	Low	Very High
34-D	Commercial	12.70	12.70	100.00%	15,000.00	1,905,014,792.46	Low	Low	Low	Very High
34-D	Industrial	0.00	0.00	100.00%	15,000.00	35,858.57	Low	Low	moderate	Very High
34-D	Parks and Recreational	0.3688	0.3688	100.00%	15,000.00	55,314,292.62	Moderate	Moderate	Low	Very High

Table U-9. Urban Use Area Exposure Estimation for Storm Surge, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
34-D	Residential	2.48	2.48	100.00%	10,000.00	248,103,494.79	Low	Low	Low	Very High
35-D	Commercial	4.13	4.13	100.00%	15,000.00	620,121,662.03	Low	Low	Low	Very High
35-D	Parks and Recreational	0.04	0.04	100.00%	15,000.00	6,444,448.78	Moderate	Moderate	Low	Very High
35-D	Residential	0.35	0.35	100.00%	10,000.00	34,684,421.49	Very High	Very High	Low	Very High
36-D	Commercial	3.33	3.33	100.00%	15,000.00	499,363,988.12	Low	Low	Low	Very High
36-D	Parks and Recreational	0.07	0.07	100.00%	15,000.00	10,425,406.61	Moderate	Moderate	Low	Very High
36-D	Residential	2.39	2.39	100.00%	10,000.00	238,999,142.25	Moderate	Moderate	moderate	Very High
37-D	Commercial	0.82	0.82	100.00%	15,000.00	123,129,455.68	Low	Low	Low	Very High
37-D	Residential	3.54	3.54	100.00%	10,000.00	354,418,912.16	High	High	Low	Very High
38-D	Commercial	3.10	3.10	100.00%	15,000.00	465,690,522.39	Low	Low	Low	Very High
38-D	Parks and Recreational	0.01	0.01	100.00%	15,000.00	1,032,136.18	Moderate	Moderate	Low	Very High
38-D	Residential	1.73	1.73	100.00%	10,000.00	172,640,143.97	Very High	Very High	Low	Very High
39-D	Commercial	5.34	5.34	100.00%	15,000.00	801,638,866.43	Low	Low	Low	Very High
39-D	Parks and Recreational	0.89	0.89	100.00%	15,000.00	133,631,730.63	Moderate	Moderate	Low	Very High
39-D	Residential	2.92	2.92	100.00%	10,000.00	292,022,426.40	Low	Low	Low	Very High
40-D	Commercial	6.05	6.05	100.00%	15,000.00	907,271,894.76	Low	Low	Low	Very High
40-D	Residential	1.34	1.34	100.00%	10,000.00	133,947,526.34	Very High	Very High	Low	Very High
AGDAO PROPER	Commercial	22.65	22.65	100.00%	15,000.00	3,397,578,352.27	Low	Low	Low	Very High
AGDAO PROPER	Industrial	1.29	1.29	100.00%	15,000.00	193,897,927.91	Low	Low	Low	Very High
AGDAO PROPER	Parks and Recreational	0.01	0.01	100.00%	15,000.00	1,612,487.80	Moderate	Moderate	Low	Very High
AGDAO PROPER	Residential	7.62	7.62	100.00%	10,000.00	761,819,333.62	Very High	Very High	Low	Very High
WILFREDO AQUINO	Commercial	23.77	11.73	49.33%	15,000.00	1,759,265,765.79	Low	Low	Low	Very High
WILFREDO AQUINO	Industrial	0.12	0.11	98.60%	15,000.00	17,026,982.97	Low	Low	Low	Very High
WILFREDO AQUINO	Parks and Recreational	1.06	0.21	19.74%	15,000.00	31,522,470.25	Moderate	Moderate	Low	Very High

Table U-9. Urban Use Area Exposure Estimation for Storm Surge, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
WILFREDO AQUINO	Residential	26.09	8.59	32.93%	10,000.00	859,283,570.24	Low	Low	Low	Very High
PACIANO BANGOY	Commercial	37.06	26.00	70.14%	15,000.00	3,899,437,527.29	Low	Low	Low	Very High
PACIANO BANGOY	Industrial	0.67	0.67	100.00%	15,000.00	100,104,760.91	Low	Low	Low	Very High
PACIANO BANGOY	Residential	21.36	14.39	67.35%	10,000.00	1,438,505,620.27	High	High	Low	Very High
RAFAEL CASTILLO	Commercial	16.41	16.34	99.58%	15,000.00	2,450,664,622.06	Low	Low	Low	Very High
RAFAEL CASTILLO	Industrial	9.33	9.33	100.00%	15,000.00	1,398,997,714.83	Low	Low	Low	Very High
RAFAEL CASTILLO	Parks and Recreational	0.02	0.02	100.00%	15,000.00	2,764,122.06	Moderate	Moderate	Low	Very High
RAFAEL CASTILLO	Residential	11.86	11.86	100.00%	10,000.00	1,186,306,694.99	Moderate	Moderate	moderate	Very High
CENTRO	Commercial	1.14	1.14	100.00%	15,000.00	170,319,219.74	Low	Low	Low	Very High
CENTRO	Industrial	10.73	10.73	100.00%	15,000.00	1,609,490,361.01	Low	Low	Low	Very High
CENTRO	Parks and Recreational	0.04	0.04	100.00%	15,000.00	6,174,813.88	Moderate	Moderate	Low	Very High
CENTRO	Residential	22.72	22.72	100.00%	10,000.00	2,271,589,342.20	High	High	Low	Very High
GOV. VICENTE DUTERTE	Commercial	4.95	4.95	100.00%	15,000.00	741,990,041.23	Low	Low	Low	Very High
GOV. VICENTE DUTERTE	Industrial	12.56	12.56	100.00%	15,000.00	1,884,562,137.22	Low	Low	Low	Very High
GOV. VICENTE DUTERTE	Parks and Recreational	0.06	0.06	100.00%	15,000.00	9,423,105.42	Low	Low	Low	Very High
GOV. VICENTE DUTERTE	Residential	20.34	20.34	100.00%	10,000.00	2,033,555,834.25	Very High	Very High	Low	Very High
LEON GARCIA SR.	Commercial	1.06	1.06	100.00%	15,000.00	158,606,120.04	Moderate	Moderate	Low	Very High
LEON GARCIA SR.	Industrial	0.29	0.29	100.00%	15,000.00	43,386,408.60	Low	Low	Low	Very High
LEON GARCIA SR.	Parks and Recreational	0.08	0.08	100.00%	15,000.00	11,720,018.15	Moderate	Moderate	Low	Very High
LEON GARCIA SR.	Residential	12.04	12.04	100.00%	10,000.00	1,204,204,893.53	Low	Low	Low	Very High
LAPU - LAPU	Commercial	1.61	1.61	100.00%	15,000.00	241,574,388.17	Low	Low	Low	Very High
LAPU - LAPU	Industrial	22.95	22.95	100.00%	15,000.00	3,442,184,815.31	Moderate	Moderate	Low	Very High

Table U-9. Urban Use Area Exposure Estimation for Storm Surge, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
LAPU - LAPU	Parks and Recreational	0.04	0.04	100.00%	15,000.00	6,300,480.75	Moderate	Moderate	Low	Very High
LAPU - LAPU	Residential	23.68	23.68	100.00%	10,000.00	2,367,807,879.40	Moderate	Moderate	moderate	Very High
TOMAS MONTE-VERDE	Commercial	11.83	11.83	100.00%	15,000.00	1,774,599,927.95	Low	Low	Low	Very High
TOMAS MONTE-VERDE	Industrial	0.83	0.83	100.00%	15,000.00	124,595,134.07	Low	Low	Low	Very High
TOMAS MONTE-VERDE	Residential	2.09	2.09	100.00%	10,000.00	209,331,813.25	Very High	Very High	Low	Very High
SAN ANTONIO	Commercial	43.27	40.77	94.23%	15,000.00	6,116,149,628.24	Low	Low	Low	Very High
SAN ANTONIO	Industrial	10.51	10.51	100.00%	15,000.00	1,576,505,130.86	Moderate	Moderate	Low	Very High
SAN ANTONIO	Parks and Recreational	0.06	0.06	100.00%	15,000.00	8,476,891.29	Moderate	Moderate	Low	Very High
SAN ANTONIO	Residential	25.28	25.28	100.00%	10,000.00	2,528,310,391.01	Low	Low	Low	Very High
UBALDE	Commercial	1.53	1.53	100.00%	15,000.00	229,829,626.68	Low	Low	Low	Very High
UBALDE	Industrial	0.21	0.21	100.00%	15,000.00	31,293,618.69	Low	Low	Low	Very High
UBALDE	Residential	5.94	5.94	100.00%	10,000.00	593,870,630.71	Moderate	Moderate	moderate	Very High
PAMPANGA	Commercial	11.31	9.68	85.59%	15,000.00	1,451,849,595.57	Moderate	Moderate	Low	Very High
PAMPANGA	Industrial	26.69	22.14	82.98%	15,000.00	3,321,504,237.62	Moderate	Moderate	Low	Very High
PAMPANGA	Residential	49.98	0.07	0.13%	10,000.00	6,650,659.71	Moderate	Moderate	moderate	Very High
PAMPANGA	Tourism	2.99	2.99	100.00%	15,000.00	447,772,676.38	Moderate	Moderate	moderate	Very High
SASA	Commercial	58.02	9.87	17.02%	15,000.00	1,481,011,406.31	Low	Low	Low	Very High
SASA	Industrial	93.77	7.96	8.49%	15,000.00	1,193,938,159.28	Low	Moderate	moderate	Very High
SASA	Residential	223.80	15.53	6.94%	10,000.00	1,553,348,198.72	Moderate	Moderate	moderate	Very High
A. ANGLIONGTO	Commercial	38.75	16.74	43.20%	15,000.00	2,511,503,441.71	Low	Low	Low	Very High
A. ANGLIONGTO	Industrial	17.16	2.95	17.19%	15,000.00	442,465,662.96	Low	Low	Low	Very High
A. ANGLIONGTO	Residential	155.68	3.71	2.39%	10,000.00	371,340,252.39	Low	Low	Low	Very High
V. HIZON	Commercial	25.25	22.61	89.55%	15,000.00	3,391,652,239.64	Low	Low	Low	Very High
V. HIZON	Industrial	6.31	6.29	99.73%	15,000.00	944,162,773.44	Low	Low	Low	Very High

Table U-9. Urban Use Area Exposure Estimation for Storm Surge, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
V. HIZON	Residential	118.71	34.45	29.02%	10,000.00	3,445,009,803.24	Moderate	Moderate	moderate	Very High
V. HIZON	Tourism	1.52	0.69	45.20%	15,000.00	103,159,309.35	Moderate	Moderate	moderate	Very High
BUNAWAN	Agri-Industrial	1.86	1.18	63.19%	15,000.00	176,310,936.40	Low	Low	Low	Very High
BUNAWAN	Commercial	11.86	10.44	88.01%	15,000.00	1,565,375,961.43	Low	Low	Low	Very High
BUNAWAN	Industrial	115.61	71.18	61.57%	15,000.00	10,677,533,101.42	Low	Low	Low	Very High
BUNAWAN	Parks and Recreational	0.24	0.18	75.90%	15,000.00	27,636,318.14	Moderate	Moderate	Low	Very High
BUNAWAN	Residential	123.76	73.00	58.98%	10,000.00	7,299,529,543.00	Very High	Very High	Low	Very High
ILANG	Industrial	90.12	20.88	23.17%	15,000.00	3,132,663,525.14	Low	Low	Low	Very High
ILANG	Residential	125.68	11.24	8.95%	10,000.00	1,124,445,330.35	High	High	Low	Very High
LASANG	Commercial	2.13	0.59	27.59%	15,000.00	87,993,359.55	Moderate	Moderate	Low	Very High
LASANG	Industrial	38.00	10.51	27.64%	15,000.00	1,575,904,231.58	Moderate	Moderate	Low	Very High
LASANG	Parks and Recreational	0.07	0.07	100.00%	15,000.00	10,756,125.65	Moderate	Moderate	Low	Very High
LASANG	Residential	50.73	37.91	74.73%	10,000.00	3,791,015,974.16	Very High	Very High	Low	Very High
MAHAYAG	Industrial	70.08	2.18	3.12%	15,000.00	327,490,389.66	Low	Low	Low	Very High
MAHAYAG	Residential	57.77	8.08	13.99%	10,000.00	808,039,809.18	High	High	Low	Very High
PANACAN	Commercial	7.46	3.53	47.37%	15,000.00	530,072,420.12	Moderate	Moderate	Low	Very High
PANACAN	Industrial	120.38	39.42	32.75%	15,000.00	5,913,217,853.51	High	High	Low	Very High
PANACAN	Parks and Recreational	6.97	6.91	99.07%	15,000.00	1,035,970,786.26	Moderate	Moderate	Low	Very High
PANACAN	Residential	256.99	32.21	12.53%	10,000.00	3,221,054,544.67	Moderate	Moderate	moderate	Very High
PANACAN	Tourism	0.96	0.76	79.24%	15,000.00	113,878,781.56	Low	Low	Low	Very High
TIBUNGCO	Industrial	41.74	5.60	13.42%	15,000.00	840,477,503.05	Low	Low	Low	Very High
TIBUNGCO	Residential	11.83	11.83	100.00%	10,000.00	1,183,066,618.64	Very High	Very High	Low	Very High
BAGO APLAYA	Commercial	12.91	9.29	71.96%	15,000.00	1,392,984,605.26	Moderate	Moderate	Low	Very High
BAGO APLAYA	Industrial	16.24	15.91	97.95%	15,000.00	2,386,594,737.70	Moderate	Moderate	Low	Very High
BAGO APLAYA	Parks and Recreational	5.45	5.45	99.89%	15,000.00	817,011,372.54	Moderate	Moderate	Low	Very High

Table U-9. Urban Use Area Exposure Estimation for Storm Surge, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
BAGO APLAYA	Residential	95.45	83.51	87.48%	10,000.00	8,350,523,697.88	Low	Low	Low	Very High
BAGO GALLERA	Parks and Recreational	63.48	20.79	32.76%	15,000.00	3,119,077,919.81	Moderate	Moderate	Low	Very High
BAGO GALLERA	Residential	129.96	1.52	1.17%	10,000.00	151,684,311.52	Moderate	Moderate	moderate	Very High
BUCANA	Commercial	63.45	53.33	84.04%	15,000.00	7,999,105,327.65	Moderate	Moderate	Low	Very High
BUCANA	Industrial	0.12	0.12	100.00%	15,000.00	17,514,521.14	Low	Low	Low	Very High
BUCANA	Parks and Recreational	1.92	1.84	96.21%	15,000.00	276,608,516.54	Moderate	Moderate	Low	Very High
BUCANA	Residential	216.96	189.27	87.24%	10,000.00	18,927,308,315.83	Very High	Very High	Low	Very High
BUCANA	Tourism	0.67	0.67	100.00%	15,000.00	99,886,927.88	Moderate	Moderate	moderate	Very High
DUMOY	Commercial	8.18	2.03	24.80%	15,000.00	304,280,609.76	Low	Low	Low	Very High
DUMOY	Industrial	32.56	3.85	11.83%	15,000.00	577,795,389.33	Low	Low	Low	Very High
DUMOY	Parks and Recreational	8.33	8.04	96.50%	15,000.00	1,205,608,019.16	Moderate	Moderate	Low	Very High
DUMOY	Residential	162.79	40.74	25.03%	15,000.00	6,111,718,427.68	Low	Low	Low	Very High
DUMOY	Tourism	5.83	5.83	100.00%	10,000.00	582,667,328.21	Moderate	Moderate	moderate	Very High
MA-A	Commercial	90.16	2.88	3.19%	15,000.00	431,464,196.51	Low	Low	Low	Very High
MA-A	Industrial	22.54	2.08	9.22%	15,000.00	311,738,761.33	Low	Low	Low	Very High
MA-A	Parks and Recreational	12.99	0.05	0.41%	15,000.00	8,003,319.22	Moderate	Moderate	Low	Very High
MA-A	Residential	428.27	7.45	1.74%	10,000.00	744,643,837.80	High	High	Low	Very High
MATINA APLAYA	Commercial	20.47	15.77	77.01%	15,000.00	2,364,923,678.33	Low	Low	Low	Very High
MATINA APLAYA	Industrial	2.91	2.65	91.29%	15,000.00	397,836,146.49	Low	Low	Low	Very High
MATINA APLAYA	Parks and Recreational	2.27	1.51	66.30%	15,000.00	225,771,374.70	Moderate	Moderate	Low	Very High
MATINA APLAYA	Residential	155.50	131.23	84.39%	10,000.00	13,122,695,931.23	High	High	Low	Very High
MATINA APLAYA	Tourism	2.35	1.79	75.83%	15,000.00	267,773,888.10	Moderate	Moderate	moderate	Very High
MATINA CROSSING	Commercial	50.86	1.06	2.08%	15,000.00	158,999,255.72	Low	Low	Low	Very High
MATINA CROSSING	Residential	250.40	20.70	8.26%	10,000.00	2,069,535,118.57	Low	Low	Low	Very High

Table U-9. Urban Use Area Exposure Estimation for Storm Surge, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
TALOMO	Commercial	20.65	4.99	24.18%	15,000.00	749,217,882.81	Low	Low	Low	Very High
TALOMO	Industrial	15.85	2.63	16.61%	15,000.00	394,878,666.01	Low	Low	Low	Very High
TALOMO	Parks and Recreational	5.46	1.19	21.79%	15,000.00	178,456,030.72	Moderate	Moderate	Low	Very High
TALOMO	Residential	297.56	202.72	68.13%	10,000.00	20,271,618,543.12	High	High	Low	Very High
TALOMO	Tourism	1.55	0.84	54.26%	15,000.00	126,092,259.60	Moderate	Moderate	moderate	Very High
BINUGAO	Industrial	63.36	28.66	45.24%	15,000.00	4,299,580,048.70	Low	Low	Low	Very High
BINUGAO	Parks and Recreational	1.34	1.27	94.94%	15,000.00	190,405,495.62	Moderate	Moderate	Low	Very High
BINUGAO	Residential	52.80	5.83	11.04%	10,000.00	582,772,276.73	High	High	Low	Very High
DALIAO	Commercial	0.07	0.07	100.00%	15,000.00	10,872,775.79	Moderate	Moderate	Low	Very High
DALIAO	Industrial	14.75	13.79	93.47%	15,000.00	2,068,701,954.04	Moderate	Moderate	Low	Very High
DALIAO	Parks and Recreational	0.16	0.16	100.00%	15,000.00	23,834,181.92	Moderate	Moderate	Low	Very High
DALIAO	Residential	107.79	48.79	45.27%	10,000.00	4,879,317,807.20	Moderate	Moderate	moderate	Very High
DALIAO	Tourism	1.79	1.79	100.00%	15,000.00	268,157,669.73	Moderate	Moderate	moderate	Very High
LIZADA	Industrial	13.44	3.90	29.03%	15,000.00	585,111,028.13	Low	Low	Low	Very High
LIZADA	Parks and Recreational	0.19	0.11	61.34%	15,000.00	17,208,696.54	Moderate	Moderate	Low	Very High
LIZADA	Residential	100.96	71.85	71.16%	10,000.00	7,184,785,765.72	High	High	Low	Very High
LIZADA	Tourism	0.08	0.08	100.00%	15,000.00	12,102,495.64	Low	Low	Low	Very High
SIRAWAN	Parks and Recreational	0.04	0.04	100.00%	15,000.00	6,667,004.87	High	Moderate	Low	Very High
SIRAWAN	Residential	83.94	17.36	20.68%	10,000.00	1,735,603,133.59	High	High	Low	Very High

FAULTLINE

Residential areas and agro-industrial areas are among the urban uses susceptible to active fault. In the count of barangays with urban use, residential is the highest with a total of 25 barangays with an actual existing area of 1,827.78 hectares. However as per assessment 0.41% of these residential area is highly susceptible to active fault wherein the expose value of damage is at Php 753,342,241. On the other hand, the agro-industrial areas is also exposed to active fault with a total of 9 barangays constituting an area of 230.74 hectares. Any foreseen damages brought about by earthquake will damage 0.66% of the total agro-industrial area which corresponds to an exposed value of Php 228,227,334.

Table U-10. Urban Use Area Exposure Estimation for Faultline, Davao City

Barangay	EXPOSURE						SENSITIVITY			
	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
MALAGOS	Residential	18.01	0.08	0.43%	10,000	7,680,265	High	High	Moderate	Moderate
BIAO JOAQUIN	Agri-Industrial	20.15	0.32	1.61%	15,000	48,712,383	Low	Low	Moderate	Moderate
CALINAN	Residential	107.31	0.16	0.15%	10,000	16,452,449	Moderate	Moderate	Moderate	Moderate
CALINAN	Commercial	19.53	0.05	0.26%	10,000	5,000,000	Low	Low	Moderate	Moderate
CAWAYAN	Agri-Industrial	5.98	0.27	4.51%	15,000	40,475,177	Low	Low	Moderate	Moderate
PANGYAN	Residential	5.09	0.11	2.13%	10,000	10,829,847	High	High	Moderate	Moderate
RIVERSIDE	Residential	21.18	0.74	3.48%	10,000	73,649,697	High	High	Moderate	Moderate
RIVERSIDE	Parks and Recreation-al	0.07	0.01	12.96%	15,000	1,360,320	Low	Low	Moderate	Moderate
RIVERSIDE	Commercial	1.11	0.04	3.84%	15,000	6,391,537	Low	Low	Moderate	Moderate
SUBASTA	Residential	9.56	0.15	1.58%	10,000	15,140,439	Very High	Very High	Moderate	Moderate
TALOMO RIVER	Residential	21.82	0.15	0.69%	10,000	14,974,448	Moderate	Moderate	Moderate	Moderate
TALOMO RIVER	Agri-Industrial	18.35	0.16	0.89%	15,000	24,507,299	Low	Low	Moderate	Moderate

Table U-10. Urban Use Area Exposure Estimation for Faultline, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
WANGAN	Residential	3.34	0.05	1.35%	10,000	4,504,294	High	High	Moderate	Moderate
TAMUGAN	Residential	10.19	0.16	1.60%	10,000	16,308,833	Residual	Residual	Moderate	Moderate
TAMUGAN	Agri-Industrial	21.52	0.22	1.02%	15,000	33,081,754	Low	Low	Moderate	Moderate
LOS AMIGOS	Residential	39.99	0.16	0.39%	10,000	15,603,212	High	High	Moderate	Moderate
LOS AMIGOS	Tourism	0.63	0.03	5.10%	15,000	4,824,029	Low	Low	Moderate	Moderate
LOS AMIGOS	Commercial	1.03	0.01	0.74%	15,000	1,140,000	Low	Low	Moderate	Moderate
MALABOG	Residential	18.22	0.00	0.02%	10,000	439,318	Residual	Residual	Moderate	Moderate
PANALUM	Residential	2.08	0.00	0.01%	10,000	11,734	Residual	Residual	Moderate	Moderate
SUMIMAO	Residential	1.78	0.01	0.41%	10,000	734,094	Very High	Very High	Moderate	Moderate
BALIOK	Industrial	6.36	0.02	0.29%	15,000	2,805,000	Low	Low	Moderate	Moderate
CATALUNAN GRANDE	Residential	301.76	0.49	0.16%	10,000	48,595,846	High	High	Moderate	Moderate
CATALUNAN PEQUENO	Residential	197.43	1.26	0.64%	10,000	126,446,559	Moderate	Moderate	Moderate	Moderate
CATALUNAN PEQUENO	Tourism	1.32	0.02	1.37%	15,000	2,714,630	Low	Low	Moderate	Moderate
CATALUNAN PEQUENO	Agri-Industrial	13.65	0.13	0.93%	15,000	19,105,760	Low	Low	Moderate	Moderate

Table U-10. Urban Use Area Exposure Estimation for Faultline, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
TALOMO	Residential	297.56	0.38	0.13%	10,000	38,445,207	High	High	Moderate	Moderate
BANKAS HEIGHTS	Residential	29.39	0.07	0.24%	10,000	7,181,899	Residual	Residual	Moderate	Moderate
BINUGAO	Residential	52.80	0.59	1.12%	10,000	58,901,751	High	High	Moderate	Moderate
BINUGAO	Industrial	63.36	0.58	0.92%	15,000	87,022,225	Low	Low	Moderate	Moderate
BINUGAO	Commercial	3.44	0.04	1.16%	15,000	6,000,000	Low	Low	Moderate	Moderate
LIZADA	Residential	100.96	0.0004	0.0004%	10,000	42,717	High	High	Moderate	Moderate
SIRAWAN	Residential	83.94	0.54	0.64%	10,000	53,525,360	High	High	Moderate	Moderate
SIRAWAN	Agri-Industrial	85.28	0.01	0.01%	15,000	1,245,258	Low	Low	Moderate	Moderate
ANGALAN	Residential	11.70	0.01	0.11%	10,000	1,300,000	High	High	Moderate	Moderate
BAGO OSHIRO	Residential	138.54	0.10	0.07%	10,000	10,218,057	Very High	Very High	Moderate	Moderate
BIAO ESCUELA	Agri-Industrial	36.45	0.08	0.23%	15,000	12,548,263	Low	Low	Moderate	Moderate
MINTAL	Residential	150.20	1.06	0.71%	10,000	106,353,159	High	High	Moderate	Moderate
MINTAL	Parks and Recreation-al	0.41	0.04	9.78%	15,000	6,011,713	Low	Low	Moderate	Moderate
STO. NINO	Residential	80.86	0.47	0.58%	10,000	47,011,269	High	High	Moderate	Moderate

Table U-10. Urban Use Area Exposure Estimation for Faultline, Davao City

EXPOSURE							SENSITIVITY			
Barangay	Existing land Use (Specific Use)	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures
TAGAKPAN	Residential	9.67	0.04	0.38%	10,000	3,697,376	Very High	Very High	Moderate	Moderate
TAGAKPAN	Parks and Recreational	2.42	0.01	0.47%	15,000	1,690,592	Low	Low	Moderate	Moderate
TALANDANG	Agri-Industrial	24.66	0.29	1.16%	15,000	43,063,860	Low	Low	Moderate	Moderate
TUGBOK	Residential	114.40	0.75	0.66%	10,000	75,294,413	High	High	Moderate	Moderate
TUGBOK	Cemetery	3.97	0.22	5.53%	15,000	32,949,319	Low	Low	Moderate	Moderate
TUGBOK	Agri-Industrial	4.70	0.04	0.78%	15,000	5,487,579	Low	Low	Moderate	Moderate

DEGREE of IMPACT RATING

FLOOD

A percentage 77.63 of the total exposed barangays has the highest degree of impact among the urban use areas exposed to flood. These identified barangays have a total area of 4,750.60 hectares wherein a 25.16% of the total area is highly susceptible to hazard which corresponds to an exposed value of Php 12,234,500,000.

The top three (3) barangays with a high degree of impact for flood are residential areas in Talomo, Ma-a, and Tugbok with 226.76 hectares, 136.31 hectares, and 107.98 hectares land area respectively. Exposed values are pegged at P2,267,600,000, P1,363,100,000, and P 1,079,800,000.

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

Barangay	EXPOSURE				SENSITIVITY				IMPACT
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
1-A	Residential	6.94	99.86%	69,400,000.00	Very High	Very High	Moderate	Very High	3
1-A	Parks and Recreational	0.08	100.00%	1,200,000.00	Low	Low	High	Very High	2
1-A	Commercial	1.02	72.34%	15,300,000.00	Low	Low	High	Very High	3
2-A	Residential	1.23	75.93%	12,300,000.00	Low	Low	Moderate	Very High	3
2-A	Commercial	1.53	13.52%	22,950,000.00	Low	Low	High	Very High	3
5-A	Residential	14.12	69.18%	141,200,000.00	Very High	Very High	Moderate	Very High	3
5-A	Parks and Recreational	0.01	100.00%	150,000.00	Low	Low	High	Very High	1
5-A	Commercial	0.14	3.23%	2,100,000.00	Low	Low	High	Very High	2
8-A	Residential	47.94	57.88%	479,400,000.00	High	High	High	Very High	3
8-A	Industrial	3.84	100.00%	57,600,000.00	Low	Low	High	Very High	3
8-A	Commercial	4.29	75.93%	64,350,000.00	Low	Low	High	Very High	3
8-A	Cemetery	3.17	16.77%	47,550,000.00	Low	Low	High	Very High	3
8-A	Parks and Recreational	0.04	3.42%	600,000.00	Low	Low	High	Very High	2

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
15-B	Residential	0.22	15.07%	2,200,000.00	Very High	Very High	Moderate	Very High	2
15-B	Commercial	1.2	4.91%	18,000,000.00	Low	Low	High	Very High	3
19-B	Residential	40.47	22.51%	404,700,000.00	Moderate	Moderate	Moderate	Very High	3
19-B	Parks and Recreational	0.1	27.78%	1,500,000.00	Low	Low	High	Very High	2
19-B	Commercial	4.9	17.36%	73,500,000.00	Low	Low	High	Very High	3
19-B	Industrial	0.16	6.45%	2,400,000.00	Low	Low	High	Very High	2
21-C	Residential	1.32	25.48%	13,200,000.00	High	High	Moderate	Very High	3
22-C	Residential	3.53	73.85%	35,300,000.00	High	High	Moderate	Very High	3
22-C	Parks and Recreational	0.001	2.00%	15,000.00	Low	Low	Moderate	Very High	1
23-C	Residential	11.18	87.41%	111,800,000.00	Very High	Very High	Moderate	Very High	3
23-C	Parks and Recreational	0.43	59.72%	6,450,000.00	Low	Low	High	Very High	3
27-C	Tourism	0.04	100.00%	600,000.00	Low	Low	High	Very High	2
27-C	Parks and Recreational	3.01	73.41%	45,150,000.00	Low	Low	High	Very High	3
31-D	Residential	7.74	57.08%	77,400,000.00	High	High	Moderate	Very High	3
31-D	Parks and Recreational	0.11	84.62%	1,650,000.00	Low	Low	High	Very High	2
37-D	Residential	0.76	21.41%	7,600,000.00	High	High	Moderate	Very High	3
39-D	Residential	2.53	86.35%	25,300,000.00	Low	Low	Moderate	Very High	3
39-D	Commercial	3.03	56.64%	45,450,000.00	Low	Low	High	Very High	3
39-D	Parks and Recreational	0.16	17.98%	2,400,000.00	Low	Low	High	Very High	2
40-D	Residential	1.30	97.01%	13,000,000.00	Very High	Very High	Moderate	Very High	3
40-D	Commercial	6.04	99.83%	90,600,000.00	Low	Low	High	Very High	3
AGDAO PROPER	Residential	7.62	100.00%	76,200,000.00	Very High	Very High	Moderate	Very High	3
AGDAO PROPER	Parks and Recreational	0.01	100.00%	150,000.00	Low	Low	High	Very High	1

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
AGDAO PROPER	Industrial	1.29	100.00%	19,350,000.00	Low	Low	High	Very High	3
AGDAO PROPER	Commercial	19.23	84.90%	288,450,000.00	Low	Low	High	Very High	3
WILFREDO AQUINO	Residential	1.51	5.78%	15,100,000.00	Low	Low	High	Very High	3
WILFREDO AQUINO	Commercial	9.33	39.20%	139,950,000.00	Low	Low	High	Very High	3
WILFREDO AQUINO	Industrial	0.01	8.33%	150,000.00	Low	Low	High	Very High	1
PACIANO BANGOY	Residential	17.65	82.63%	176,500,000.00	High	High	High	Very High	3
PACIANO BANGOY	Industrial	0.67	100.00%	10,050,000.00	Low	Low	High	Very High	3
PACIANO BANGOY	Commercial	20.06	54.13%	300,900,000.00	Low	Low	High	Very High	3
RAFAEL CASTILLO	Residential	7.41	62.43%	74,100,000.00	Moderate	Moderate	High	Very High	3
RAFAEL CASTILLO	Commercial	1.77	10.78%	26,550,000.00	Low	Low	High	Very High	3
RAFAEL CASTILLO	Industrial	0.18	1.93%	2,700,000.00	Low	Low	High	Very High	2
CENTRO	Residential	18.39	80.94%	183,900,000.00	Low	Low	Moderate	Very High	3
CENTRO	Parks and Recreational	0.04	100.00%	600,000.00	Low	Low	High	Very High	2
CENTRO	Industrial	8.83	82.29%	132,450,000.00	Low	Low	High	Very High	3
CENTRO	Commercial	0.26	22.81%	3,900,000.00	Low	Low	High	Very High	2
GOV. VICENTE DUTERTE	Residential	14.16	69.62%	141,600,000.00	Very High	Very High	Moderate	Very High	3
GOV. VICENTE DUTERTE	Commercial	2.49	50.30%	37,350,000.00	Low	Low	High	Very High	3
GOV. VICENTE DUTERTE	Industrial	3.99	31.74%	59,850,000.00	Low	Low	High	Very High	3
LEON GARCIA SR.	Residential	10.85	90.12%	108,500,000.00	Residual	Residual	High	Very High	3
LEON GARCIA SR.	Parks and Recreational	0.08	100.00%	1,200,000.00	Low	Low	High	Very High	2
LEON GARCIA SR.	Industrial	0.29	100.00%	4,350,000.00	Low	Low	High	Very High	3
LEON GARCIA SR.	Commercial	0.82	77.36%	12,300,000.00	Low	Low	High	Very High	3
LAPU - LAPU	Residential	17.27	72.93%	172,700,000.00	Moderate	Moderate	Moderate	Very High	3
LAPU - LAPU	Parks and Recreational	0.04	100.00%	600,000.00	Low	Low	High	Very High	2

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
LAPU - LAPU	Commercial	0.89	55.28%	13,350,000.00	Low	Low	High	Very High	3
LAPU - LAPU	Industrial	5.97	26.01%	89,550,000.00	Low	Low	High	Very High	3
TOMAS MONTE-VERDE	Residential	1.69	80.86%	16,900,000.00	Very High	Very High	High	Very High	3
TOMAS MONTE-VERDE	Industrial	0.83	100.00%	12,450,000.00	Low	Low	High	Very High	3
TOMAS MONTE-VERDE	Commercial	7.82	66.10%	117,300,000.00	Low	Low	High	Very High	3
SAN ANTONIO	Residential	0.01	0.04%	100,000.00	Moderate	Moderate	High	Very High	1
SAN ANTONIO	Commercial	0.08	0.18%	1,200,000.00	Low	Low	High	Very High	2
UBALDE	Residential	0.93	15.66%	9,300,000.00	Moderate	Moderate	High	Very High	3
UBALDE	Commercial	0.37	24.18%	5,550,000.00	Low	Low	High	Very High	3
BAGUIO	Residential	8.10	67.33%	81,000,000.00	High	High	Moderate	Very High	3
BAGUIO	Agri-Industrial	3.03	49.11%	45,450,000.00	Low	Low	High	Very High	3
GUMALANG	Parks and Recreational	0.05	100.00%	750,000.00	Low	Low	High	Very High	2
GUMALANG	Agri-Industrial	0.30	1.41%	4,500,000.00	Low	Low	High	Very High	2
MALAGOS	Residential	4.89	27.15%	48,900,000.00	High	High	High	Very High	3
MALAGOS	Industrial	0.79	25.90%	11,850,000.00	Low	Low	High	Very High	3
MALAGOS	Tourism	0.95	7.04%	14,250,000.00	Low	Low	High	Very High	3
MALAGOS	Agri-Industrial	0.17	2.17%	2,550,000.00	Low	Low	High	Very High	2
BUHANGIN	Industrial	0.46	10.45%	6,900,000.00	Low	Low	High	Very High	3
BUHANGIN	Residential	9.41	2.81%	94,100,000.00	Moderate	Moderate	Moderate	Very High	3
BUHANGIN	Commercial	0.16	0.30%	2,400,000.00	Low	Low	High	Very High	2
BUHANGIN	Cemetery	0.25	2.83%	3,750,000.00	Low	Low	High	Very High	2
CABANTIAN	Residential	5.47	1.79%	54,700,000.00	Low	Low	Moderate	Very High	3

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
CABANTIAN	Industrial	0.04	0.15%	600,000.00	Low	Low	High	Very High	2
CABANTIAN	Commercial	0.07	0.30%	1,050,000.00	Low	Low	High	Very High	2
CALLAWA	Residential	0.11	1.39%	1,100,000.00	High	High	Moderate	Very High	2
COMMUNAL	Tourism	0.70	3.47%	10,500,000.00	Low	Low	High	Very High	3
COMMUNAL	Residential	7.08	4.35%	70,800,000.00	Residual	Residual	Moderate	Very High	3
COMMUNAL	Commercial	0.02	0.17%	300,000.00	Low	Low	High	Very High	1
INDANGAN	Tourism	0.005	50.00%	75,000.00	Low	Low	Moderate	Very High	1
INDANGAN	Commercial	0.45	26.32%	6,750,000.00	Low	Low	High	Very High	3
INDANGAN	Residential	0.40	0.16%	4,000,000.00	Residual	Residual	Moderate	Very High	2
MANDUG	Agri-Industrial	6.54	99.85%	98,100,000.00	Low	Low	High	Very High	3
MANDUG	Residential	20.99	12.46%	209,900,000.00	Moderate	Moderate	High	Very High	3
PAMPANGA	Tourism	2.99	100.00%	44,850,000.00	Low	Low	High	Very High	3
PAMPANGA	Industrial	25.60	95.92%	384,000,000.00	Low	Low	High	Very High	3
PAMPANGA	Commercial	11.31	100.00%	169,650,000.00	Low	Low	High	Very High	3
PAMPANGA	Residential	10.16	19.96%	101,600,000.00	Residual	Residual	High	Very High	3
SASA	Residential	47.18	20.76%	471,800,000.00	Moderate	Moderate	High	Very High	3
SASA	Industrial	10.27	10.95%	154,050,000.00	Low	Low	High	Very High	3
SASA	Commercial	13.92	23.95%	208,800,000.00	Low	Low	High	Very High	3
SASA	Parks and Recreational	0.02	9.52%	300,000.00	Low	Low	High	Very High	1
TIGATTO	Residential	102.74	40.08%	1,027,400,000.00	Moderate	Moderate	High	Very High	3
TIGATTO	Commercial	1.47	45.23%	22,050,000.00	Low	Low	High	Very High	3
TIGATTO	Industrial	3.76	28.86%	56,400,000.00	Low	Low	High	Very High	3
WAAN	Residential	21.29	55.33%	212,900,000.00	Very High	Very High	High	Very High	3
WAAN	Parks and Recreational	0.08	100.00%	1,200,000.00	Low	Low	High	Very High	2
A. ANGLIONGTO	Residential	6.30	4.05%	63,000,000.00	Low	Low	Moderate	Very High	3
A. ANGLIONGTO	Industrial	0.00002	0.0001%	300.00	Low	Low	Moderate	Very High	1

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
A. ANGLIONGTO	Commercial	0.51	1.32%	7,650,000.00	Low	Low	High	Very High	3
V. HIZON	Tourism	0.67	44.08%	10,050,000.00	Low	Low	High	Very High	3
V. HIZON	Commercial	13.51	53.50%	202,650,000.00	Low	Low	High	Very High	3
V. HIZON	Residential	17.98	15.15%	179,800,000.00	Moderate	Moderate	High	Very High	3
V. HIZON	Industrial	2.36	37.40%	35,400,000.00	Low	Low	High	Very High	3
BUNAWAN	Residential	35.10	28.18%	351,000,000.00	Very High	Very High	Moderate	Very High	3
BUNAWAN	Parks and Recreational	0.11	45.83%	1,650,000.00	Low	Low	High	Very High	2
BUNAWAN	Commercial	5.74	48.40%	86,100,000.00	Low	Low	High	Very High	3
BUNAWAN	Industrial	25.79	22.30%	386,850,000.00	Low	Low	High	Very High	3
BUNAWAN	Agri-Industrial	0.10	5.38%	1,500,000.00	Low	Low	High	Very High	2
GATUNGAN	Parks and Recreational	0.01	100.00%	150,000.00	Low	Low	High	Very High	1
GATUNGAN	Residential	0.04	2.01%	400,000.00	High	High	Moderate	Very High	1
ILANG	Residential	7.03	5.59%	70,300,000.00	High	High	Moderate	Very High	3
ILANG	Industrial	7.34	8.14%	110,100,000.00	Low	Low	High	Very High	3
LASANG	Residential	20.65	40.71%	206,500,000.00	Very High	Very High	High	Very High	3
LASANG	Parks and Recreational	0.07	100.00%	1,050,000.00	Low	Low	High	Very High	2
LASANG	Agri-Industrial	4.10	43.66%	61,500,000.00	Low	Low	High	Very High	3
LASANG	Industrial	6.57	17.20%	98,550,000.00	Low	Low	High	Very High	3
LASANG	Commercial	0.13	6.10%	1,950,000.00	Low	Low	High	Very High	2
MAHAYAG	Residential	0.74	1.28%	7,400,000.00	High	High	High	Very High	3
MAHAYAG	Industrial	1.17	4.47%	17,550,000.00	Low	Low	High	Very High	3

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
MUDIANG	Agri-Industrial	0.23	12.17%	3,450,000.00	Low	Low	High	Very High	2
MUDIANG	Residential	1.00	1.47%	10,000,000.00	Moderate	Moderate	High	Very High	3
PANACAN	Tourism	0.67	69.79%	10,050,000.00	Low	Low	High	Very High	3
PANACAN	Residential	31.89	12.20%	318,900,000.00	Moderate	Moderate	High	Very High	3
PANACAN	Parks and Recreational	1.06	15.21%	15,900,000.00	Low	Low	High	Very High	3
PANACAN	Industrial	15.16	12.58%	227,400,000.00	Low	Low	High	Very High	3
PANACAN	Commercial	0.91	12.17%	13,650,000.00	Low	Low	High	Very High	3
SAN ISIDRO	Residential	0.08	0.30%	800,000.00	Moderate	Moderate	High	Very High	2
SAN ISIDRO	Industrial	0.03	0.71%	450,000.00	Low	Low	High	Very High	1
TIBUNGCO	Residential	14.31	10.84%	143,100,000.00	Very High	Very High	High	Very High	3
TIBUNGCO	Industrial	10.48	25.11%	157,200,000.00	Low	Low	High	Very High	3
TIBUNGCO	Commercial	0.72	7.29%	10,800,000.00	Low	Low	High	Very High	3
TIBUNGCO	Agri-Industrial	0.13	3.12%	1,950,000.00	Low	Low	High	Very High	2
BIAO JOAQUIN	Residential	2.38	74.38%	23,800,000.00	High	High	Moderate	Very High	3
BIAO JOAQUIN	Agri-Industrial	16.06	79.70%	240,900,000.00	Low	Low	High	Very High	3
CALINAN	Residential	107.19	99.88%	1,071,900,000.00	Moderate	Moderate	Moderate	Very High	3
CALINAN	Parks and Recreational	0.75	100.00%	11,250,000.00	Low	Low	High	Very High	3
CALINAN	Industrial	2.17	100.00%	32,550,000.00	Low	Low	High	Very High	3
CALINAN	Commercial	19.53	100.00%	292,950,000.00	Low	Low	High	Very High	3
CALINAN	Cemetery	5.97	100.00%	89,550,000.00	Low	Low	High	Very High	3
CALINAN	Agri-Industrial	3.12	100.00%	46,800,000.00	Low	Low	High	Very High	3

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
CAWAYAN	Residential	0.30	16.30%	3,000,000.00	High	High	Moderate	Very High	2
DACUDAO	Agri-Industrial	6.60	17.49%	99,000,000.00	Low	Low	High	Very High	3
DACUDAO	Residential	0.29	4.07%	2,900,000.00	Very High	Very High	Moderate	Very High	2
DALAGDAG	Residential	1.18	46.46%	11,800,000.00	Very High	Very High	Moderate	Very High	3
DOMINGA	Residential	1.73	97.74%	17,300,000.00	Very High	Very High	Moderate	Very High	3
INAYANGAN	Residential	0.01	0.03%	100,000.00	Very High	Very High	Moderate	Very High	1
LACSON	Residential	1.30	25.19%	13,000,000.00	High	High	Moderate	Very High	3
LACSON	Agri-Industrial	1.06	9.62%	15,900,000.00	Low	Low	High	Very High	3
LAMANAN	Residential	0.06	1.32%	600,000.00	Very High	Very High	Moderate	Very High	2
LAMPIDANAO	Residential	0.29	13.55%	2,900,000.00	Very High	Very High	Moderate	Very High	2
MEGKAWAYAN	Residential	0.06	1.09%	600,000.00	Very High	Very High	High	Very High	2
PANGYAN	Residential	1.99	39.10%	19,900,000.00	High	High	High	Very High	3
RIVERSIDE	Residential	19.33	91.31%	193,300,000.00	High	High	High	Very High	3
RIVERSIDE	Parks and Recreational	0.07	100.00%	1,050,000.00	Low	Low	High	Very High	2
RIVERSIDE	Industrial	1.01	84.17%	15,150,000.00	Low	Low	High	Very High	3
RIVERSIDE	Commercial	1.11	100.00%	16,650,000.00	Low	Low	High	Very High	3
RIVERSIDE	Agri-Industrial	5.49	66.87%	82,350,000.00	Low	Low	High	Very High	3
RIVERSIDE	Cemetery	6.20	38.92%	93,000,000.00	Low	Low	High	Very High	3
SALOY	Residential	0.01	0.56%	100,000.00	Very High	Very High	High	Very High	1
SIRIB	Residential	1.96	25.93%	19,600,000.00	Very High	Very High	High	Very High	3
SUBASTA	Residential	6.61	69.14%	66,100,000.00	Very High	Very High	High	Very High	3

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
SUBASTA	Agri-Industrial	9.58	71.23%	143,700,000.00	Low	Low	High	Very High	3
TALOMO RIVER	Residential	19.81	90.79%	198,100,000.00	Moderate	Moderate	High	Very High	3
TALOMO RIVER	Industrial	0.67	100.00%	10,050,000.00	Low	Low	High	Very High	3
TALOMO RIVER	Commercial	0.30	100.00%	4,500,000.00	Low	Low	High	Very High	2
TALOMO RIVER	Agri-Industrial	7.49	40.84%	112,350,000.00	Low	Low	High	Very High	3
WANGAN	Residential	1.34	40.24%	13,400,000.00	High	High	High	Very High	3
WANGAN	Cemetery	0.71	100.00%	10,650,000.00	Low	Low	High	Very High	3
WANGAN	Agri-Industrial	0.59	12.55%	8,850,000.00	Low	Low	High	Very High	3
GUMITAN	Residential	0.03	0.36%	300,000.00	Residual	Residual	Moderate	Very High	1
MALAMBA	Residential	1.40	10.67%	14,000,000.00	Very High	Very High	High	Very High	3
MARILOG	Residential	0.10	0.11%	1,000,000.00	Residual	Residual	High	Very High	2
SALAYSAY	Residential	0.03	0.30%	300,000.00	Residual	Residual	High	Very High	1
SUAWAN	Agri-Industrial	1.15	6.02%	17,250,000.00	Low	Low	High	Very High	3
TAMUGAN	Residential	8.77	86.06%	87,700,000.00	Residual	Residual	High	Very High	3
TAMUGAN	Agri-Industrial	8.25	38.35%	123,750,000.00	Low	Low	High	Very High	3
MALABOG	Residential	0.03	0.16%	300,000.00	Residual	Residual	High	Very High	1
SALAPAWAN	Residential	0.01	0.33%	100,000.00	Residual	Residual	High	Very High	1
SUMIMAO	Residential	0.66	37.08%	6,600,000.00	Very High	Very High	High	Very High	3
TAPAK	Residential	1.93	10.34%	19,300,000.00	Very High	Very High	High	Very High	3
BAGO APLAYA	Residential	28.28	29.63%	282,800,000.00	Residual	Residual	Moderate	Very High	3
BAGO APLAYA	Industrial	5.86	36.08%	87,900,000.00	Low	Low	High	Very High	3

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
BAGO APLAYA	Commercial	4.13	31.99%	61,950,000.00	Low	Low	High	Very High	3
BAGO APLAYA	Parks and Recreational	0.40	7.34%	6,000,000.00	Low	Low	High	Very High	3
BAGO GALLERA	Residential	49.25	37.90%	492,500,000.00	Moderate	Moderate	Moderate	Very High	3
BAGO GALLERA	Industrial	0.11	91.67%	1,650,000.00	Low	Low	High	Very High	2
BAGO GALLERA	Commercial	0.28	43.08%	4,200,000.00	Low	Low	High	Very High	2
BAGO GALLERA	Parks and Recreational	11.63	18.32%	174,450,000.00	Low	Moderate	Moderate	Very High	3
BALIOK	Residential	14.12	18.24%	141,200,000.00	Residual	Residual	Moderate	Very High	3
BALIOK	Parks and Recreational	0.09	25.71%	1,350,000.00	Low	Low	High	Very High	2
BUCANA	Tourism	0.30	44.78%	4,500,000.00	Low	Low	High	Very High	2
BUCANA	Residential	86.42	39.83%	864,200,000.00	Very High	Very High	Moderate	Very High	3
BUCANA	Parks and Recreational	0.22	11.46%	3,300,000.00	Low	Low	High	Very High	2
BUCANA	Commercial	6.95	10.95%	104,250,000.00	Low	Low	High	Very High	3
CATALUNAN GRANDE	Residential	69.62	23.07%	696,200,000.00	High	High	Moderate	Very High	3
CATALUNAN GRANDE	Agri-Industrial	9.74	45.84%	146,100,000.00	Low	Low	High	Very High	3
CATALUNAN GRANDE	Parks and Recreational	1.82	31.38%	27,300,000.00	Low	Low	High	Very High	3
CATALUNAN GRANDE	Commercial	0.88	14.59%	13,200,000.00	Low	Low	High	Very High	3
CATALUNAN PEQUEÑO	Tourism	0.22	16.67%	3,300,000.00	Low	Low	High	Very High	2
CATALUNAN PEQUEÑO	Residential	26.64	13.50%	266,400,000.00	Moderate	Moderate	Moderate	Very High	3
CATALUNAN PEQUEÑO	Industrial	0.002	0.09%	30,000.00	Low	Low	High	Very High	1

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
CATALUNAN PEQUEÑO	Commercial	0.30	8.45%	4,500,000.00	Low	Low	High	Very High	2
CATALUNAN PEQUEÑO	Agri-Industrial	0.74	5.42%	11,100,000.00	Low	Low	High	Very High	3
DUMOY	Tourism	4.00	68.61%	60,000,000.00	Low	Low	High	Very High	3
DUMOY	Parks and Recreational	5.15	61.82%	77,250,000.00	Low	Low	High	Very High	3
DUMOY	Residential	28.49	17.50%	284,900,000.00	Residual	Residual	Moderate	Very High	3
DUMOY	Industrial	0.25	0.77%	3,750,000.00	Low	Low	High	Very High	2
LANGUB	Residential	0.01	0.07%	100,000.00	High	High	Moderate	Very High	1
MA-A	Residential	136.31	31.83%	1,363,100,000.00	High	High	High	Very High	3
MA-A	Parks and Recreational	5.36	41.26%	80,400,000.00	Low	Low	High	Very High	3
MA-A	Industrial	18.04	80.00%	270,600,000.00	Low	Low	High	Very High	3
MA-A	Tourism	5.60	33.82%	84,000,000.00	Low	Low	High	Very High	3
MA-A	Commercial	27.80	30.83%	417,000,000.00	Low	Low	High	Very High	3
MAGTUOD	Residential	10.06	18.63%	100,600,000.00	Very High	Very High	High	Very High	3
MAGTUOD	Parks and Recreational	0.41	3.91%	6,150,000.00	Low	Low	High	Very High	3
MAGTUOD	Commercial	0.004	0.52%	60,000.00	Low	Low	High	Very High	1
MATINA APLAYA	Residential	72.79	46.80%	727,900,000.00	High	High	High	Very High	3
MATINA APLAYA	Parks and Recreational	1.37	60.35%	20,550,000.00	Low	Low	High	Very High	3
MATINA APLAYA	Commercial	13.87	67.72%	208,050,000.00	Low	Low	High	Very High	3
MATINA APLAYA	Tourism	0.47	20.00%	7,050,000.00	Low	Low	High	Very High	3
MATINA APLAYA	Industrial	0.72	24.66%	10,800,000.00	Low	Low	High	Very High	3

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
MATINA CROSSING	Residential	66.49	26.55%	664,900,000.00	Low	Low	High	Very High	3
MATINA CROSSING	Commercial	20.99	41.27%	314,850,000.00	Low	Low	High	Very High	3
MATINA CROSSING	Industrial	1.33	23.21%	19,950,000.00	Low	Low	High	Very High	3
MATINA CROSSING	Parks and Recreational	0.01	0.05%	150,000.00	Low	Low	High	Very High	1
MATINA PANGI	Residential	51.00	33.51%	510,000,000.00	Very High	Very High	High	Very High	3
MATINA PANGI	Industrial	0.03	75.00%	450,000.00	Low	Low	High	Very High	1
MATINA PANGI	Parks and Recreational	0.10	18.52%	1,500,000.00	Low	Low	High	Very High	2
TALOMO	Tourism	1.29	83.23%	19,350,000.00	Low	Low	High	Very High	3
TALOMO	Residential	226.76	76.18%	2,267,600,000.00	High	High	High	Very High	3
TALOMO	Industrial	9.85	62.15%	147,750,000.00	Low	Low	High	Very High	3
TALOMO	Commercial	13.97	67.65%	209,550,000.00	Low	Low	High	Very High	3
TALOMO	Parks and Recreational	1.72	31.50%	25,800,000.00	Low	Low	High	Very High	3
ALAMBRE	Residential	0.09	1.14%	900,000.00	High	High	Moderate	Very High	2
ALAMBRE	Agri-Industrial	0.0003	0.0024%	4,500.00	Low	Low	Moderate	Very High	1
BANKAS HEIGHTS	Residential	18.61	63.32%	186,100,000.00	Residual	Residual	Moderate	Very High	3
BANKAS HEIGHTS	Agri-Industrial	0.18	10.78%	2,700,000.00	Low	Low	High	Very High	2
BATO	Commercial	0.33	70.21%	4,950,000.00	Low	Low	High	Very High	2
BATO	Residential	2.08	4.64%	20,800,000.00	Residual	Residual	Moderate	Very High	3
CROSSING BAYABAS	Residential	21.61	23.41%	216,100,000.00	High	High	Moderate	Very High	3
BINUGAO	Residential	26.77	50.70%	267,700,000.00	High	High	Moderate	Very High	3
BINUGAO	Parks and Recreational	1.34	100.00%	20,100,000.00	Low	Low	High	Very High	3

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
BINUGAO	Industrial	48.27	76.18%	724,050,000.00	Low	Low	High	Very High	3
BINUGAO	Commercial	1.44	41.86%	21,600,000.00	Low	Low	High	Very High	3
BINUGAO	Agri-Industrial	0.15	1.11%	2,250,000.00	Low	Low	High	Very High	2
CATIGAN	Residential	0.24	3.80%	2,400,000.00	Very High	Very High	Moderate	Very High	2
DALIAO	Tourism	1.46	81.56%	21,900,000.00	Low	Low	High	Very High	3
DALIAO	Residential	23.42	21.73%	351,300,000.00	Moderate	Moderate	Moderate	Very High	3
DALIAO	Parks and Recreational	0.07	43.75%	1,050,000.00	Low	Low	High	Very High	2
DALIAO	Industrial	7.84	53.15%	117,600,000.00	Low	Low	High	Very High	3
EDEN	Tourism	9.12	9.27%	136,800,000.00	Low	Low	High	Very High	3
EDEN	Residential	2.35	4.56%	23,500,000.00	Very High	Very High	Moderate	Very High	3
KILATE	Residential	0.11	4.21%	1,100,000.00	Very High	Very High	Moderate	Very High	2
LIZADA	Agri-Industrial	2.10	40.54%	31,500,000.00	Low	Low	High	Very High	3
LIZADA	Residential	19.82	19.63%	198,200,000.00	High	High	High	Very High	3
LIZADA	Industrial	1.42	10.57%	21,300,000.00	Low	Low	High	Very High	3
LUBOGAN	Residential	32.08	35.57%	481,200,000.00	Residual	Residual	High	Very High	3
LUBOGAN	Parks and Recreational	0.07	6.36%	1,050,000.00	Low	Low	High	Very High	2
LUBOGAN	Cemetery	0.09	1.59%	1,350,000.00	Low	Low	High	Very High	2
MARAPANGI	Tourism	0.02	100.00%	300,000.00	Low	Low	High	Very High	1
MARAPANGI	Agri-Industrial	8.44	85.69%	126,600,000.00	Low	Low	High	Very High	3
MARAPANGI	Residential	12.97	16.86%	129,700,000.00	High	High	High	Very High	3
SIBULAN	Residential	0.01	0.47%	100,000.00	Residual	Residual	High	Very High	1

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
SIRAWAN	Residential	22.25	26.51%	222,500,000.00	High	High	High	Very High	3
SIRAWAN	Parks and Recreational	0.04	100.00%	600,000.00	Low	Low	High	Very High	2
SIRAWAN	Agri-Industrial	6.23	7.31%	93,450,000.00	Low	Low	High	Very High	3
TAGAKPAN	Residential	6.82	70.53%	68,200,000.00	Very High	Very High	High	Very High	3
TAGAKPAN	Parks and Recreational	2.42	100.00%	36,300,000.00	Low	Low	High	Very High	3
TAGAKPAN	Agri-Industrial	0.61	100.00%	9,150,000.00	Low	Low	High	Very High	3
TAGLUNO	Residential	0.09	3.96%	900,000.00	High	High	High	Very High	2
TIBULOY	Agri-Industrial	1.20	15.48%	18,000,000.00	Low	Low	High	Very High	3
TUNGKALAN	Residential	0.05	1.30%	750,000.00	Residual	Residual	High	Very High	2
ANGALAN	Agri-Industrial	12.30	100.00%	184,500,000.00	Low	Low	High	Very High	3
ANGALAN	Residential	11.73	100.00%	117,300,000.00	High	High	Moderate	Very High	3
ANGALAN	Parks and Recreational	0.06	100.00%	900,000.00	Low	Low	High	Very High	2
BAGO OSHIRO	Residential	2.96	2.14%	29,600,000.00	Very High	Very High	Moderate	Very High	3
BALENGAENG	Agri-Industrial	35.49	100.00%	532,350,000.00	Low	Low	High	Very High	3
BALENGAENG	Residential	2.27	100.00%	22,700,000.00	Very High	Very High	High	Very High	3
BALENGAENG	Parks and Recreational	0.05	100.00%	750,000.00	Low	Low	High	Very High	2
BIAO ESCUELA	Parks and Recreational	0.04	100.00%	600,000.00	Low	Low	High	Very High	2
BIAO ESCUELA	Agri-Industrial	16.81	46.12%	252,150,000.00	Low	Low	High	Very High	3

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
BIAO ESCUELA	Residential	1.62	18.86%	16,200,000.00	Very High	Very High	Moderate	Very High	3
BIAO GUIANGA	Agri-Industrial	6.20	100.00%	93,000,000.00	Low	Low	High	Very High	3
BIAO GUIANGA	Residential	1.69	44.13%	16,900,000.00	Moderate	Moderate	Moderate	Very High	3
MATINA BIAO	Tourism	0.41	100.00%	6,150,000.00	Low	Low	High	Very High	3
MATINA BIAO	Residential	1.80	64.98%	18,000,000.00	Moderate	Moderate	High	Very High	3
MATINA BIAO	Parks and Recreational	0.06	100.00%	900,000.00	Low	Low	High	Very High	2
MATINA BIAO	Agri-Industrial	5.43	78.70%	81,450,000.00	Low	Low	High	Very High	3
LOS AMIGOS	Tourism	0.63	100.00%	9,450,000.00	Low	Low	High	Very High	3
LOS AMIGOS	Residential	38.62	96.57%	386,200,000.00	High	High	High	Very High	3
LOS AMIGOS	Industrial	3.31	100.00%	49,650,000.00	Low	Low	High	Very High	3
LOS AMIGOS	Commercial	1.03	100.00%	15,450,000.00	Low	Low	High	Very High	3
MANAMBULAN	Residential	9.10	94.30%	91,000,000.00	High	High	High	Very High	3
MANUEL GUIANGA	Agri-Industrial	1.69	37.39%	25,350,000.00	Low	Low	High	Very High	3
MANUEL GUIANGA	Residential	0.17	2.33%	1,700,000.00	Very High	Very High	High	Very High	2
MINTAL	Residential	65.05	43.31%	650,500,000.00	High	High	High	Very High	3
MINTAL	Parks and Recreational	0.30	73.17%	4,500,000.00	Low	Low	High	Very High	2
MINTAL	Commercial	6.08	100.00%	91,200,000.00	Low	Low	High	Very High	3
MINTAL	Industrial	0.03	2.11%	450,000.00	Low	Low	High	Very High	1
NEW CARMEN	Residential	13.17	84.21%	131,700,000.00	Very High	Very High	High	Very High	3
NEW VALENCIA	Residential	2.24	45.34%	22,400,000.00	Very High	Very High	High	Very High	3
STO. NIÑO	Commercial	2.86	69.25%	42,900,000.00	Low	Low	High	Very High	3

Table U-11. Urban Use Area, Degree of Impact Rating, Flood Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
STO. NIÑO	Residential	8.74	10.81%	87,400,000.00	High	High	High	Very High	3
TACUNAN	Residential	31.80	60.27%	318,000,000.00	High	High	High	Very High	3
TACUNAN	Parks and Recreational	3.96	98.51%	59,400,000.00	Low	Low	High	Very High	3
TACUNAN	Cemetery	0.003	100.00%	45,000.00	Low	Low	Moderate	Very High	1
TALANDANG	Residential	3.19	40.08%	31,900,000.00	Very High	Very High	High	Very High	3
TALANDANG	Agri-Industrial	6.23	25.26%	93,450,000.00	Low	Low	High	Very High	3
TUGBOK	Tourism	0.07	100.00%	1,050,000.00	Low	Low	High	Very High	2
TUGBOK	Residential	107.98	94.38%	1,079,800,000.00	High	High	High	Very High	3
TUGBOK	Industrial	0.75	100.00%	11,250,000.00	Low	Low	High	Very High	3
TUGBOK	Commercial	2.59	100.00%	38,850,000.00	Low	Low	High	Very High	3
TUGBOK	Cemetery	3.97	100.00%	59,550,000.00	Low	Low	High	Very High	3
TUGBOK	Agri-Industrial	3.83	81.49%	57,450,000.00	Low	Low	High	Very High	3
ULA	Residential	7.04	49.61%	70,400,000.00	High	High	High	Very High	3
ULA	Parks and Recreational	0.05	50.00%	750,000.00	Low	Low	High	Very High	2
ULA	Industrial	2.15	90.34%	32,250,000.00	Low	Low	High	Very High	3
ULA	Agri-Industrial	16.35	98.97%	245,250,000.00	Low	Low	High	Very High	3

LANDSLIDE

Out of the 90 barangays with residential use susceptible to landslide, 69 barangays have the highest degree of impact score. These identified barangays have a total area of 3,882.25 hectares which 28.44% of it is exposed to landslide. Exposed value is pegged at Php 114,041,000,000.

Residential sections in Ma-a, Matina Pangl, and Cabantian with exposed land areas of 101.76, 64.73, and 83.13 respectively are the top three barangays registered with high impact to landslide. The exposed value of the residential area in Ma-a is P10,176,000,000; Matina Pangl is P9,709,500,000; and at P8,313,000.000.

Table U-12. Urban Use Area, Degree of Impact Rating, Landslide Impact Areas, Davao City

Barangay	EXPOSURE				SENSITIVITY				IMPACT
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
19-B	Commercial	1.86	6.59%	279,000,000.00	low	low	moderate	very high	2
19-B	Residential	1.32	0.73%	132,000,000.00	moderate	moderate	low	very high	2
CARMEN	Residential	1.26	84.56%	126,000,000.00	very high	very high	low	very high	3
GUMALANG	Agri-Industrial	2.68	12.60%	402,000,000.00	moderate	moderate	moderate	very high	3
GUMALANG	Residential	0.38	8.33%	38,000,000.00	very high	very high	low	very high	2
MALAGOS	Agri-Industrial	0.43	5.99%	64,500,000.00	moderate	moderate	moderate	very high	3
MALAGOS	Tourism	0.12	0.89%	18,000,000.00	moderate	moderate	low	very high	2
TAMBOBONG	Residential	4.49	100.00%	449,000,000.00	very high	very high	low	very high	3
TAWAN-TAWAN	Residential	0.04	1.54%	4,000,000.00	very high	very high	low	very high	1
ACACIA	Residential	15.14	100.00%	1,514,000,000.00	high	high	low	very high	3
ACACIA	Parks and Recreational	0.04	95.24%	6,000,000.00	low	low	low	very high	2
BUHANGIN	Cemetery	7.54	85.29%	1,131,000,000.00	moderate	moderate	low	very high	3
BUHANGIN	Industrial	2.45	55.68%	367,500,000.00	low	low	moderate	very high	3
BUHANGIN	Parks and Recreational	0.26	27.08%	39,000,000.00	moderate	moderate	moderate	very high	2

Table U-12. Urban Use Area, Degree of Impact Rating, Landslide Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
BUHANGIN	Residential	36.71	10.95%	3,671,000,000.00	moderate	moderate	moderate	very high	3
BUHANGIN	Commercial	0.54	1.02%	81,000,000.00	low	low	moderate	very high	2
CABANTIAN	Cemetery	0.28	100.00%	42,000,000.00	moderate	moderate	low	very high	3
CABANTIAN	Residential	83.13	27.31%	8,313,000,000.00	low	low	low	very high	3
CABANTIAN	Commercial	3.71	16.06%	556,500,000.00	low	low	moderate	very high	3
CABANTIAN	Industrial	1.69	6.39%	253,500,000.00	low	low	moderate	very high	3
CALLAWA	Residential	0.68	8.61%	68,000,000.00	high	high	low	very high	2
COMMUNAL	Tourism	12.51	62.08%	1,876,500,000.00	moderate	moderate	moderate	very high	3
COMMUNAL	Residential	67.72	41.86%	6,772,000,000.00	low	low	low	very high	3
COMMUNAL	Commercial	1.26	10.51%	189,000,000.00	moderate	moderate	moderate	very high	3
COMMUNAL	Industrial	0.43	9.60%	64,500,000.00	low	low	moderate	very high	3
INDANGAN	Tourism	0.01	100.00%	1,500,000.00	moderate	moderate	low	very high	2
INDANGAN	Commercial	1.58	92.94%	237,000,000.00	moderate	moderate	moderate	very high	3
INDANGAN	Parks and Recreational	33.27	59.14%	4,990,500,000.00	moderate	moderate	low	very high	3
INDANGAN	Industrial	1.86	16.67%	279,000,000.00	moderate	moderate	moderate	very high	3
INDANGAN	Residential	23.10	9.33%	2,310,000,000.00	residual	residual	low	very high	3
MANDUG	Parks and Recreational	20.19	62.39%	3,028,500,000.00	moderate	moderate	low	very high	2
MANDUG	Residential	20.17	11.9781%	2,017,000,000.00	moderate	moderate	low	very high	3
MANDUG	Agri-Industrial	0.32	4.89%	48,000,000.00	moderate	moderate	moderate	very high	2
MANDUG	Industrial	0.90	4.50%	135,000,000.00	low	low	moderate	very high	3
SASA	Residential	1.14	0.51%	114,000,000.00	moderate	moderate	low	very high	2
TIGATTO	Industrial	7.17	55.07%	1,075,500,000.00	very high	very high	low	very high	3
TIGATTO	Residential	39.43	15.38%	3,943,000,000.00	low	low	moderate	very high	3
WAAN	Cemetery	3.83	100.00%	574,500,000.00	residual	residual	low	very high	3
WAAN	Residential	7.17	18.63%	717,000,000.00	high	high	low	very high	3
A. ANGLIONGTO	Residential	0.72	0.46%	72,000,000.00	low	low	moderate	very high	1

Table U-12. Urban Use Area, Degree of Impact Rating, Landslide Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
A. ANGLIONGTO	Industrial	0.01	0.06%	1,500,000.00	low	low	moderate	very high	1
BUNAWAN	Industrial	11.07	9.58%	1,660,500,000.00	low	low	moderate	very high	3
BUNAWAN	Residential	7.75	6.26%	775,000,000.00	very high	very high	low	very high	3
GATUNGAN	Agri-Industrial	2.17	100.00%	325,500,000.00	moderate	moderate	moderate	very high	3
GATUNGAN	Industrial	0.38	100.00%	57,000,000.00	low	low	moderate	very high	3
GATUNGAN	Parks and Recreational	0.01	100.00%	1,200,000.00	moderate	moderate	moderate	very high	1
GATUNGAN	Residential	1.70	85.86%	170,000,000.00	high	high	low	very high	3
ILANG	Residential	16.66	13.26%	1,666,000,000.00	high	high	low	very high	3
ILANG	Industrial	0.07	0.08%	10,500,000.00	low	low	moderate	very high	1
MAHAYAG	Agri-Industrial	6.41	24.48%	961,500,000.00	low	low	moderate	very high	3
MAHAYAG	Industrial	15.68	22.37%	2,352,000,000.00	low	low	moderate	very high	3
MAHAYAG	Residential	7.19	12.45%	719,000,000.00	high	high	low	very high	3
MAHAYAG	Commercial	0.39	4.52%	58,500,000.00	moderate	moderate	moderate	very high	3
MUDIANG	Residential	38.15	56.14%	3,815,000,000.00	high	high	moderate	very high	3
MUDIANG	Industrial	3.09	48.13%	463,500,000.00	moderate	moderate	moderate	very high	3
MUDIANG	Agri-Industrial	0.42	22.34%	63,000,000.00				very high	3
PANACAN	Residential	67.73	26.36%	6,773,000,000.00	high	high	moderate	very high	3
PANACAN	Industrial	21.00	17.45%	3,150,000,000.00	low	low	low	very high	3
SAN ISIDRO	Residential	3.40	12.85%	340,000,000.00	moderate	moderate	moderate	very high	3
SAN ISIDRO	Industrial	0.01	0.24%	1,500,000.00	very high	very high	low	very high	1
TIBUNGCO	Agri-Industrial	0.99	23.74%	148,500,000.00	very high	very high	low	very high	3
TIBUNGCO	Industrial	8.15	19.53%	1,222,500,000.00	low	low	moderate	very high	3
TIBUNGCO	Residential	18.18	13.77%	1,818,000,000.00	low	low	moderate	very high	3
BIAO JOAQUIN	Residential	0.82	25.71%	82,000,000.00	high	high	low	very high	2

Table U-12. Urban Use Area, Degree of Impact Rating, Landslide Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
BIAO JOAQUIN	Agri-Industrial	4.09	20.30%	613,500,000.00	moderate	moderate	moderate	very high	2
CALINAN	Residential	0.02	0.02%	2,000,000.00	moderate	moderate	low	very high	1
DACUDAO	Agri-Industrial	2.24	5.94%	336,000,000.00	moderate	moderate	moderate	very high	3
DALAGDAG	Residential	1.14	44.88%	114,000,000.00	very high	very high	low	very high	3
DOMINGA	Residential	0.11	6.25%	11,000,000.00	very high	very high	low	very high	2
INAYANGAN	Residential	1.89	62.58%	189,000,000.00	very high	very high	low	very high	3
LACSON	Agri-Industrial	6.44	58.44%	966,000,000.00	moderate	moderate	moderate	very high	3
LACSON	Residential	0.07	1.36%	7,000,000.00	high	high	low	very high	1
LAMANAN	Residential	4.47	98.68%	447,000,000.00	very high	very high	low	very high	3
LAMPIANAO	Residential	1.85	86.85%	185,000,000.00	very high	very high	low	very high	3
MEGKAWAYAN	Residential	5.51	100.00%	551,000,000.00	very high	very high	low	very high	3
MEGKAWAYAN	Tourism	1.93	100.00%	289,500,000.00	moderate	moderate	low	very high	3
PANGYAN	Residential	1.33	26.13%	133,000,000.00	very high	very high	low	very high	3
SALOY	Residential	1.77	99.44%	177,000,000.00	residual	residual	low	very high	3
SIRIB	Residential	0.90	11.90%	90,000,000.00	high	high	low	very high	3
TALOMO RIVER	Agri-Industrial	1.18	6.45%	177,000,000.00	high	high	low	very high	3
TALOMO RIVER	Residential	0.10	0.46%	10,000,000.00	moderate	moderate	moderate	very high	1
TAMAYONG	Residential	2.67	58.42%	267,000,000.00	moderate	moderate	low	very high	3
BAGANIHAN	Tourism	0.47	11.90%	70,500,000.00	moderate	moderate	moderate	very high	2
BAGANIHAN	Residential	0.16	5.19%	16,000,000.00	very high	very high	low	very high	2
BANTOL	Residential	2.61	100.00%	261,000,000.00	very high	very high	low	very high	3
BUDA	Residential	4.07	20.73%	407,000,000.00	very high	very high	low	very high	3
DALAG LUMOT	Residential	9.86	100.00%	986,000,000.00	very high	very high	low	very high	3
DATU SALUMAY	Residential	4.94	23.19%	494,000,000.00	very high	very high	low	very high	3
DATU SALUMAY	Tourism	0.29	3.28%	43,500,000.00	moderate	moderate	moderate	very high	3

Table U-12. Urban Use Area, Degree of Impact Rating, Landslide Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
GUMITAN	Residential	6.63	75.17%	663,000,000.00	very high	very high	low	very high	3
MAGSAYSAY	Residential	8.68	100.00%	868,000,000.00	very high	very high	low	very high	3
MAGSAYSAY	Tourism	0.99	100.00%	148,500,000.00	moderate	moderate	low	very high	3
MALAMBA	Residential	10.09	76.85%	1,009,000,000.00	very high	very high	low	very high	3
MARILOG	Residential	91.12	98.40%	9,112,000,000.00	residual	residual	low	very high	3
MARILOG	Tourism	26.29	87.66%	3,943,500,000.00	moderate	moderate	low	very high	3
SALAYSAY	Residential	10.00	99.40%	1,000,000,000.00	residual	residual	low	very high	3
SUAWAN	Residential	7.31	100.00%	731,000,000.00	moderate	moderate	moderate	very high	3
SUAWAN	Agri-Industrial	1.77	9.27%	265,500,000.00	very high	very high	low	very high	3
COLOSAS	Residential	9.65	99.79%	965,000,000.00	very high	very high	low	very high	3
FATIMA	Residential	7.61	77.65%	1,141,500,000.00	very high	very high	low	very high	3
LUMIAD	Residential	8.61	100.00%	861,000,000.00	very high	very high	low	very high	3
MABUHAY	Residential	0.68	9.25%	68,000,000.00	very high	very high	low	very high	2
MALABOG	Residential	18.21	100.00%	1,821,000,000.00	residual	residual	low	very high	3
MALABOG	Tourism	4.34	100.00%	651,000,000.00	moderate	moderate	low	very high	3
MAPULA	Residential	14.69	100.00%	1,469,000,000.00	residual	residual	low	very high	3
PANDAITAN	Residential	9.34	99.89%	934,000,000.00	moderate	moderate	moderate	very high	3
PAÑALUM	Residential	2.07	100.00%	207,000,000.00	very high	very high	low	very high	3
PAQUIBATO	Residential	12.53	100.00%	1,253,000,000.00	high	high	low	very high	3
PAQUIBATO	Tourism	0.99	100.00%	148,500,000.00	very high	very high	low	very high	3
PARADISE EMBAC	Residential	1.90	100.00%	190,000,000.00	high	high	low	very high	3
SALAPAWAN	Residential	3.03	99.67%	303,000,000.00	very high	very high	low	very high	3
SUMIMAO	Residential	1.77	100.00%	177,000,000.00	very high	very high	low	very high	3
TAPAK	Residential	18.46	98.88%	1,846,000,000.00	residual	residual	low	very high	3
CATALUNAN GRANDE	Residential	5.07	1.68%	507,000,000.00	high	high	low	very high	2
CATALUNAN GRANDE	Parks and Recreational	0.02	0.35%	3,000,000.00	moderate	moderate	low	very high	1
LANGUB	Parks and Recreational	2.13	100.00%	319,500,000.00	moderate	moderate	low	very high	3

Table U-12. Urban Use Area, Degree of Impact Rating, Landslide Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
LANGUB	Tourism	0.32	100.00%	48,000,000.00	moderate	moderate	moderate	very high	2
LANGUB	Commercial	0.01	100.00%	1,500,000.00	moderate	moderate	moderate	very high	2
LANGUB	Residential	13.48	99.04%	1,348,000,000.00	high	high	low	very high	3
MA-A	Tourism	6.86	41.45%	1,029,000,000.00	moderate	moderate	low	very high	3
MA-A	Parks and Recreational	4.05	31.18%	607,500,000.00	moderate	moderate	low	very high	3
MA-A	Residential	101.76	23.76%	10,176,000,000.00	high	high	low	very high	3
MA-A	Commercial	10.05	11.15%	1,507,500,000.00	low	low	moderate	very high	3
MA-A	Cemetery	2.15	8.46%	322,500,000.00	moderate	moderate	low	very high	3
MA-A	Industrial	0.09	0.40%	13,500,000.00	low	low	moderate	very high	2
MAGTUOD	Parks and Recreational	10.43	99.52%	1,564,500,000.00	moderate	moderate	low	very high	3
MAGTUOD	Cemetery	84.30	91.76%	12,645,000,000.00	moderate	moderate	low	very high	3
MAGTUOD	Residential	46.37	85.89%	4,637,000,000.00	very high	very high	low	very high	3
MAGTUOD	Commercial	0.11	14.29%	16,500,000.00	moderate	moderate	moderate	very high	3
MATINA CROSSING	Industrial	4.06	70.98%	609,000,000.00	low	low	low	very high	3
MATINA CROSSING	Residential	29.25	11.68%	2,925,000,000.00	low	low	low	very high	3
MATINA CROSSING	Commercial	0.21	0.41%	31,500,000.00	low	low	low	very high	1
MATINA PANGI	Commercial	4.88	100.00%	732,000,000.00	low	low	moderate	very high	3
MATINA PANGI	Parks and Recreational	0.40	75.47%	60,000,000.00	moderate	moderate	low	very high	3
MATINA PANGI	Tourism	0.31	56.36%	46,500,000.00	moderate	moderate	low	very high	3
MATINA PANGI	Residential	64.73	42.45%	9,709,500,000.00	very high	very high	low	very high	3
MATINA PANGI	Industrial	0.01	33.33%	1,500,000.00	low	low	moderate	very high	2
TALOMO	Industrial	2.61	16.48%	391,500,000.00	low	low	moderate	very high	2

Table U-12. Urban Use Area, Degree of Impact Rating, Landslide Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
TALOMO	Commercial	0.82	3.97%	123,000,000.00	moderate	moderate	low	very high	2
TALOMO	Residential	10.51	3.53%	1,051,000,000.00	low	low	moderate	very high	2
ALAMBRE	Residential	0.09	1.15%	9,000,000.00	high	high	low	very high	1
ATAN-AWE	Residential	0.88	100.00%	88,000,000.00	very high	very high	low	very high	3
BARACATAN	Residential	1.55	36.05%	155,000,000.00	very high	very high	low	very high	3
BATO	Residential	1.00	2.23%	100,000,000.00	low	low	low	very high	2
BAYABAS	Tourism	0.08	100.00%	12,000,000.00	moderate	moderate	low	very high	3
BAYABAS	Residential	2.05	61.38%	205,000,000.00	very high	very high	low	very high	2
BINUGAO	Agri-Industrial	10.65	78.89%	1,597,500,000.00	moderate	moderate	moderate	very high	3
BINUGAO	Residential	24.70	46.79%	2,470,000,000.00	high	high	low	very high	3
BINUGAO	Industrial	9.79	15.45%	1,468,500,000.00	low	low	moderate	very high	3
BINUGAO	Commercial	0.04	1.17%	6,000,000.00	low	low	moderate	very high	1
CAMANSI	Residential	1.73	70.90%	173,000,000.00	high	high	low	very high	3
CATIGAN	Residential	2.21	35.08%	221,000,000.00	very high	very high	low	very high	3
DALIAON PLANTATION	Residential	2.17	39.10%	217,000,000.00	very high	very high	low	very high	3
EDEN	Residential	51.48	100.00%	5,148,000,000.00	very high	very high	low	very high	3
EDEN	Agri-Industrial	1.27	100.00%	190,500,000.00	moderate	moderate	moderate	very high	3
EDEN	Parks and Recreational	0.55	100.00%	82,500,000.00	moderate	moderate	moderate	very high	3
EDEN	Commercial	0.08	100.00%	12,000,000.00	low	low	low	very high	3
EDEN	Tourism	94.89	96.43%	14,233,500,000.00	moderate	moderate	low	very high	3
KILATE	Residential	0.19	7.31%	19,000,000.00	very high	very high	low	very high	2
MARAPANGI	Tourism	0.07	36.84%	10,500,000.00	moderate	moderate	low	very high	3

Table U-12. Urban Use Area, Degree of Impact Rating, Landslide Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
MARAPANGI	Residential	1.99	2.59%	199,000,000.00	high	high	low	very high	3
SIBULAN	Residential	2.13	100.00%	213,000,000.00	moderate	moderate	low	very high	3
SIRAWAN	Agri-Industrial	14.86	17.43%	2,229,000,000.00	residual	residual	low	very high	3
SIRAWAN	Residential	7.50	8.93%	750,000,000.00	low	low	moderate	very high	3
TAGURANO	Residential	0.60	36.14%	60,000,000.00	very high	very high	low	very high	3
TIBULOY	Agri-Industrial	7.75	100.00%	1,162,500,000.00	high	high	low	very high	3
TIBULOY	Residential	3.57	94.95%	357,000,000.00	moderate	moderate	moderate	very high	3
TUNGKALAN	Residential	1.09	28.39%	109,000,000.00	moderate	moderate	low	very high	3
MATINA BIAO	Agri-Industrial	0.82	11.90%	123,000,000.00	moderate	moderate	moderate	very high	3
MATINA BIAO	Residential	0.05	1.81%	5,000,000.00	moderate	high	low	very high	1
MANAMBULAN	Residential	0.12	1.24%	12,000,000.00	high	high	low	very high	2
NEW CARMEN	Parks and Recreational	0.09	100.00%	13,500,000.00	moderate	moderate	low	very high	3
NEW CARMEN	Residential	2.26	14.45%	226,000,000.00	moderate	moderate	low	very high	3
NEW VALENCIA	Residential	1.00	20.28%	100,000,000.00	very high	very high	low	very high	3
TALANDANG	Agri-Industrial	8.55	34.69%	1,282,500,000.00	very high	very high	low	very high	3

LIQUEFACTION

Residential, commercial, and industrial urban uses have high degree of impact for liquefaction. As per evaluation, 70 out of 75 barangays with residential use have the highest score of 3 for the degree of impact. The percentage of exposure from the total area of residential use in the identified barangays is at 48.5%. Moreover, commercial uses in 70 barangays have also high degree of impact covering 82% of the 927.01 hectares total area of the identified barangays. Lastly, for the industrial uses with high degree of impact for liquefaction is present in 40 barangays. Such areas which could take on a lot of damage cover 57.7% of the 902.73 hectares total land area of barangays susceptible to liquefaction. Exposed values of each identified areas are Php 242,333,145,766.65, Php 113,995,599,455.82, and Php 78,196,203,399.46, respectively.

Table U-13. Urban Use Area, Degree of Impact Rating, Liquefaction Impact Areas, Davao City

Barangay	EXPOSURE				SENSITIVITY				IMPACT
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
1-A	Residential	6.69	96.19%	668,759,626.53	High	High	Low	Very High	3
1-A	Commercial	1.40	100.00%	210,517,192.30	Low	Low	Low	Very High	3
1-A	Parks and Recreational	0.08	97.85%	11,505,813.54	Low	Low	Low	Very High	3
2-A	Residential	1.61	99.34%	160,937,232.18	Very High	Very High	Low	Very High	3
2-A	Commercial	11.32	100.00%	1,697,980,810.46	Low	Low	Low	Very High	3
2-A	Parks and Recreational	0.44	100.00%	66,567,762.78	Low	Low	Low	Very High	3
3-A	Residential	0.55	100.00%	55,110,084.98	Low	Low	Low	Very High	3
3-A	Commercial	14.90	100.00%	2,234,645,239.30	Low	Low	Low	Very High	3
3-A	Parks and Recreational	0.10	100.00%	15,358,498.74	Low	Low	Low	Very High	3
4-A	Residential	2.93	100.00%	293,381,608.75	Very High	Very High	Low	Very High	3
4-A	Commercial	9.55	100.00%	1,432,224,807.14	Low	Low	Low	Very High	3
4-A	Parks and Recreational	4.00	100.00%	600,131,302.57	Low	Low	Low	Very High	3
4-A	Industrial	0.08	100.00%	12,539,491.89	Low	Low	Low	Very High	3

Table U-13. Urban Use Area, Degree of Impact Rating, Liquefaction Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
5-A	Residential	13.27	65.02%	1,327,255,535.69	Very High	Very High	Low	Very High	3
5-A	Parks and Recreational	0.01	100.00%	1,995,534.93	Low	Low	Low	Very High	3
5-A	Commercial	1.17	27.01%	175,965,313.03	Low	Low	Low	Very High	3
6-A	Residential	0.93	21.18%	92,966,603.62	High	High	Low	Very High	3
6-A	Industrial	0.06	100.00%	8,855,098.62	Low	Low	Low	Very High	3
6-A	Commercial	3.70	65.46%	555,622,734.63	Low	Low	Low	Very High	3
7-A	Residential	5.60	55.02%	560,224,332.89	Moderate	Moderate	Low	Very High	3
7-A	Commercial	6.73	99.01%	1,008,959,035.34	Low	Low	Low	Very High	3
8-A	Residential	34.14	41.22%	3,413,933,203.73	High	High	Low	Very High	3
8-A	Industrial	3.56	92.69%	533,886,321.61	Low	Low	Low	Very High	3
8-A	Commercial	4.38	77.59%	657,478,527.85	Low	Low	Low	Very High	3
8-A	Parks and Recreational	0.02	1.44%	2,513,790.82	Low	Low	Low	Very High	1
8-A	Cemetery	0.01	0.08%	2,187,504.64	Low	Low	Low	Very High	1
9-A	Residential	8.69	62.51%	869,383,869.54	Moderate	Moderate	Low	Very High	3
9-A	Industrial	0.22	100.00%	33,700,922.46	Low	Low	Low	Very High	3
9-A	Commercial	7.42	99.04%	1,113,063,974.88	Low	Low	Low	Very High	3
10-A	Residential	4.27	73.65%	426,663,756.87	Moderate	Moderate	Low	Very High	3
10-A	Industrial	0.26	100.00%	38,842,452.40	Low	Low	Low	Very High	3
10-A	Commercial	6.64	86.2234%	995,803,712.62	Low	Low	Low	Very High	3
11-B	Residential	2.56	100.00%	256,070,679.52	Very High	Very High	Low	Very High	3
11-B	Commercial	4.52	100.00%	678,304,676.37	Low	Low	Low	Very High	3
11-B	Industrial	0.61	100.00%	90,819,721.30	Low	Low	Low	Very High	3
12-B	Residential	1.20	100.00%	119,529,526.40	High	High	Low	Very High	3
12-B	Commercial	12.43	100.00%	1,864,538,807.44	Low	Low	Low	Very High	3
12-B	Parks and Recreational	0.06	100.00%	9,730,755.67	Low	Low	Low	Very High	3
12-B	Industrial	0.01	100.00%	1,832,308.60	Low	Low	Low	Very High	3

Table U-13. Urban Use Area, Degree of Impact Rating, Liquefaction Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
13-B	Residential	0.57	100.00%	57,417,430.57	Very High	Very High	Low	Very High	3
13-B	Commercial	8.52	100.00%	1,278,263,622.49	Low	Low	Low	Very High	3
14-B	Residential	3.09	100.00%	309,083,330.97	Moderate	Moderate	Low	Very High	3
14-B	Commercial	7.52	100.00%	1,128,353,743.17	Low	Low	Low	Very High	3
14-B	Industrial	0.30	100.00%	45,018,001.26	Low	Low	Low	Very High	3
15-B	Residential	1.46	100.00%	146,470,545.79	Very High	Very High	Low	Very High	3
15-B	Commercial	24.46	100.00%	3,668,268,076.75	Low	Low	Low	Very High	3
15-B	Parks and Recreational	0.19	100.00%	28,853,312.07	Low	Low	Low	Very High	3
15-B	Industrial	0.00011	100.00%	16,137.02					1
16-B	Residential	0.43	100.00%	42,608,316.39	Low	Low	Low	Very High	3
16-B	Commercial	3.38	100.00%	507,126,888.09	Low	Low	Low	Very High	3
17-B	Residential	0.53	100.00%	52,577,744.66	Low	Low	Low	Very High	3
17-B	Commercial	3.89	100.00%	583,679,837.63	Low	Low	Low	Very High	3
18-B	Residential	0.40	100.00%	40,499,797.62	Moderate	Moderate	Low	Very High	3
18-B	Commercial	8.95	100.00%	1,343,099,654.85	Low	Low	Low	Very High	3
18-B	Parks and Recreational	0.42	100.00%	63,521,647.83	Low	Low	Low	Very High	3
19-B	Residential	31.90	17.74%	3,189,532,024.73	Moderate	Moderate	Low	Very High	3
19-B	Tourism	0.23	100.00%	34,671,884.65	Low	Low	Low	Very High	3
19-B	Commercial	12.47	44.19%	1,871,180,694.53	Low	Low	Low	Very High	3
19-B	Parks and Recreational	0.10	28.85%	15,685,642.67	Low	Low	Low	Very High	2
19-B	Industrial	0.13	5.14%	19,144,453.15	Low	Low	Low	Very High	2
20-B	Residential	13.62	97.80%	1,362,240,617.82	Moderate	Moderate	Low	Very High	3
20-B	Commercial	24.30	84.95%	3,645,093,389.38	Low	Low	Low	Very High	3
20-B	Industrial	0.25	88.75%	37,559,267.30	Low	Low	Low	Very High	2
21-C	Residential	5.16	99.54%	515,854,291.85	High	High	Low	Very High	3
21-C	Commercial	0.30	100.00%	45,315,507.14	Low	Low	Low	Very High	3

Table U-13. Urban Use Area, Degree of Impact Rating, Liquefaction Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
21-C	Parks and Recreational	0.07	100.00%	10,759,658.32	Low	Low	Low	Very High	3
22-C	Residential	4.76	99.43%	475,661,619.70	High	High	Low	Very High	3
22-C	Commercial	0.50	100.00%	75,115,751.36	Low	Low	Low	Very High	3
22-C	Parks and Recreational	0.05	100.00%	6,881,766.47	Low	Low	Low	Very High	2
23-C	Residential	12.74	99.59%	1,273,965,335.14	Very High	Very High	Low	Very High	3
23-C	Commercial	0.87	100.00%	130,465,332.82	Low	Low	Low	Very High	3
23-C	Parks and Recreational	0.70	98.19%	105,641,066.53	Low	Low	Low	Very High	3
24-C	Residential	2.51	100.00%	251,444,449.30	Moderate	Moderate	Low	Very High	3
24-C	Commercial	3.60	100.00%	540,610,880.67	Low	Low	Low	Very High	3
24-C	Parks and Recreational	0.05	100.00%	7,246,289.48	Low	Low	Low	Very High	2
25-C	Residential	1.73	100.00%	172,897,030.99	High	High	Low	Very High	3
25-C	Commercial	2.24	100.00%	335,958,502.01	Low	Low	Low	Very High	3
26-C	Residential	2.23	100.00%	223,439,536.27	Moderate	Moderate	Low	Very High	3
26-C	Commercial	4.32	100.00%	648,391,002.94	Low	Low	Low	Very High	3
27-C	Residential	0.64	100.00%	64,430,739.12	High	High	Low	Very High	3
27-C	Commercial	18.61	100.00%	2,792,069,841.63	Low	Low	Low	Very High	3
27-C	Industrial	0.69	100.00%	103,892,418.99	Low	Low	Low	Very High	3
27-C	Parks and Recreational	3.97	96.80%	595,045,006.93	Low	Low	Low	Very High	3
27-C	Tourism	0.04	100.00%	6,481,597.18	Low	Low	Low	Very High	2
28-C	Residential	1.65	100.00%	164,904,371.86	Moderate	Moderate	Low	Very High	3
28-C	Commercial	3.95	100.00%	592,148,476.58	Low	Low	Low	Very High	3
29-C	Residential	1.07	100.00%	106,578,472.04	High	High	Low	Very High	3
29-C	Commercial	6.88	100.00%	1,032,303,551.14	Low	Low	Low	Very High	3
30-C	Residential	1.37	100.00%	136,706,623.40	Low	Low	Low	Very High	3

Table U-13. Urban Use Area, Degree of Impact Rating, Liquefaction Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
30-C	Commercial	14.96	100.00%	2,243,731,104.79	Low	Low	Low	Very High	3
30-C	Industrial	0.29	100.00%	43,726,588.70	Low	Low	Low	Very High	2
31-D	Residential	13.55	99.88%	1,354,516,309.29	Moderate	Moderate	Low	Very High	3
31-D	Commercial	0.61	100.00%	91,246,534.10	Low	Low	Low	Very High	3
31-D	Parks and Recreational	0.13	100.00%	19,561,711.58	Low	Low	Low	Very High	3
32-D	Residential	2.75	100.00%	274,985,420.10	Low	Low	Low	Very High	3
32-D	Commercial	5.17	100.00%	775,207,875.14	Low	Low	Low	Very High	3
32-D	Parks and Recreational	0.20	100.00%	29,385,028.90	Low	Low	Low	Very High	3
33-D	Residential	3.86	100.00%	386,250,542.28	High	High	Low	Very High	3
33-D	Commercial	2.89	100.00%	433,152,351.11	Low	Low	Low	Very High	3
34-D	Residential	0.37	100.00%	36,876,195.80	Low	Low	Low	Very High	3
34-D	Commercial	12.70	100.00%	1,905,014,679.50	Low	Low	Low	Very High	3
34-D	Parks and Recreational	0.00	100.00%	35,858.57	Low	Low	Low	Very High	1
35-D	Residential	0.04	100.00%	4,296,290.38	Very High	Very High	Low	Very High	2
35-D	Parks and Recreational	4.13	100.00%	620,121,371.22	Low	Low	Low	Very High	3
35-D	Commercial	2.48	100.00%	372,155,324.57	Low	Low	Low	Very High	3
36-D	Residential	2.39	100.00%	238,999,142.25	Moderate	Moderate	Low	Very High	3
36-D	Commercial	3.33	100.00%	499,363,982.22	Low	Low	Low	Very High	3
36-D	Parks and Recreational	0.07	100.00%	10,425,373.15	Low	Low	Low	Very High	2
37-D	Residential	3.54	100.00%	354,418,789.96	High	High	Low	Very High	3
37-D	Commercial	0.82	100.00%	123,129,696.28	Low	Low	Low	Very High	3
38-D	Residential	1.73	100.00%	172,640,113.76	Very High	Very High	Low	Very High	3
38-D	Commercial	3.10	100.00%	465,690,451.04	Low	Low	Low	Very High	3

Table U-13. Urban Use Area, Degree of Impact Rating, Liquefaction Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
38-D	Parks and Recreational	0.01	100.00%	1,032,136.18	Low	Low	Low	Very High	1
39-D	Residential	2.92	100.00%	292,022,357.47	Low	Low	Low	Very High	3
39-D	Commercial	5.34	100.00%	801,638,610.92	Low	Low	Low	Very High	3
39-D	Parks and Recreational	0.89	100.00%	133,631,679.19	Low	Low	Low	Very High	3
40-D	Residential	1.34	100.00%	133,947,735.42	Very High	Very High	Low	Very High	3
40-D	Commercial	6.05	100.00%	907,271,520.63	Low	Low	Low	Very High	3
AGDAO PROPER	Residential	7.62	100.00%	1,142,729,213.98	Very High	Very High	Low	Very High	3
AGDAO PROPER	Commercial	22.65	100.00%	3,397,577,978.24	Low	Low	Low	Very High	3
AGDAO PROPER	Industrial	1.29	100.00%	193,897,955.89	Low	Low	Low	Very High	3
AGDAO PROPER	Parks and Recreational	0.01	100.00%	1,612,503.96	Moderate	Moderate	Low	Very High	1
WILFREDO AQUINO	Residential	19.31	74.00%	1,931,007,597.92	Low	Low	Low	Very High	3
WILFREDO AQUINO	Parks and Recreational	1.06	100.00%	159,711,995.73	Moderate	Moderate	Low	Very High	3
WILFREDO AQUINO	Commercial	16.38	68.91%	2,457,340,460.18	Low	Low	Low	Very High	3
WILFREDO AQUINO	Industrial	0.11	99.03%	17,100,262.62	Low	Low	Low	Very High	2
PACIANO BANGOY	Residential	17.47	81.80%	1,747,224,664.29	High	High	Low	Very High	3
PACIANO BANGOY	Industrial	0.67	100.00%	100,104,649.30	Low	Low	Low	Very High	3
PACIANO BANGOY	Commercial	28.33	76.43%	4,249,211,221.59	Low	Low	Low	Very High	3
RAFAEL CASTILLO	Residential	11.86	100.00%	1,186,306,442.08	Moderate	Moderate	Low	Very High	3
RAFAEL CASTILLO	Commercial	16.41	100.00%	2,461,002,411.19	Low	Low	Low	Very High	3
RAFAEL CASTILLO	Industrial	9.33	100.00%	1,398,997,645.74	Low	Low	Low	Very High	3
RAFAEL CASTILLO	Parks and Recreational	0.02	100.00%	2,764,122.06	Moderate	Moderate	Low	Very High	2
CENTRO	Residential	22.37	98.48%	2,237,168,588.75	High	High	Low	Very High	3
CENTRO	Commercial	1.14	100.00%	170,319,260.99	Low	Low	Low	Very High	3
CENTRO	Industrial	10.60	98.81%	1,590,332,982.19	Low	Low	Low	Very High	3

Table U-13. Urban Use Area, Degree of Impact Rating, Liquefaction Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
CENTRO	Parks and Recreational	0.04	100.00%	6,174,813.88	Moderate	Moderate	Low	Very High	2
GOV. VICENTE DUTERTE	Residential	20.02	98.43%	2,001,596,458.56	High	High	Low	Very High	3
GOV. VICENTE DUTERTE	Industrial	12.56	100.00%	1,884,562,350.82	Low	Low	Low	Very High	3
GOV. VICENTE DUTERTE	Commercial	4.95	100.00%	741,989,967.31	Low	Low	Low	Very High	3
GOV. VICENTE DUTERTE	Parks and Recreational	0.06	100.00%	9,423,105.82	Low	Low	Low	Very High	2
LEON GARCIA SR.	Residential	12.04	100.00%	1,204,204,820.76	Low	Low	Low	Very High	3
LEON GARCIA SR.	Commercial	1.06	100.00%	158,606,156.97	Moderate	Moderate	Low	Very High	3
LEON GARCIA SR.	Industrial	0.29	100.00%	43,386,392.02	Low	Low	Low	Very High	3
LEON GARCIA SR.	Parks and Recreational	0.08	100.00%	11,720,015.13	Moderate	Moderate	Low	Very High	2
LAPU - LAPU	Residential	23.68	100.00%	2,367,807,745.32	Moderate	Moderate	Low	Very High	3
LAPU - LAPU	Commercial	1.61	100.00%	241,574,580.62	Low	Low	Low	Very High	3
LAPU - LAPU	Industrial	22.91	99.82%	3,435,992,158.31	Moderate	Moderate	Low	Very High	3
LAPU - LAPU	Parks and Recreational	0.04	100.00%	6,300,464.21	Moderate	Moderate	Low	Very High	1
TOMAS MONTEVERDE	Residential	2.09	100.00%	209,331,746.48	Very High	Very High	Low	Very High	3
TOMAS MONTEVERDE	Commercial	11.83	100.00%	1,774,600,141.53	Low	Low	Low	Very High	3
TOMAS MONTEVERDE	Industrial	0.83	100.00%	124,595,117.78	Low	Low	Low	Very High	3
SAN ANTONIO	Residential	25.28	100.00%	2,528,393,562.43	Low	Low	Low	Very High	3
SAN ANTONIO	Commercial	43.27	100.00%	6,490,728,043.48	Low	Low	Low	Very High	3
SAN ANTONIO	Industrial	10.51	100.00%	1,576,505,260.49	Moderate	Moderate	Low	Very High	3
SAN ANTONIO	Parks and Recreational	0.06	100.00%	8,476,887.60	Moderate	Moderate	Low	Very High	1
UBALDE	Residential	5.94	100.00%	593,870,521.72	Moderate	Moderate	Low	Very High	3
UBALDE	Commercial	1.53	100.00%	229,829,539.97	Low	Low	Low	Very High	3
UBALDE	Industrial	0.21	100.00%	31,293,522.98	Low	Low	Low	Very High	2
BUHANGIN	Residential	1.20	0.36%	120,062,974.52	Moderate	Moderate	Low	Very High	3

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BUHANGIN	Industrial	0.13	2.90%	19,185,313.05	Low	Low	Low	Very High	2
BUHANGIN	Commercial	0.0024	0.00%	365,546.33					1
MANDUG	Residential	14.09	8.37%	1,408,849,663.61	Moderate	Moderate	Low	Very High	3
MANDUG	Agri-Industrial	3.98	60.74%	596,994,165.02	Moderate	Moderate	Low	Very High	3
PAMPANGA	Commercial	11.31	100.00%	1,696,336,620.04	Moderate	Moderate	Low	Very High	3
PAMPANGA	Tourism	2.99	100.00%	447,772,687.45	Moderate	Moderate	Low	Very High	3
PAMPANGA	Industrial	23.90	89.57%	3,585,193,086.02	Moderate	Moderate	Low	Very High	3
PAMPANGA	Residential	0.05	0.11%	5,456,768.47	Low	Low	Low	Very High	1
SASA	Residential	25.93	11.59%	2,593,156,006.38	Moderate	Moderate	Low	Very High	3
SASA	Industrial	34.63	36.93%	5,193,798,341.78	Low	Low	Low	Very High	3
SASA	Commercial	20.86	35.96%	3,129,116,617.57	Low	Low	Low	Very High	3
SASA	Parks and Recreational	0.05	21.64%	6,879,260.67	Low	Low	Low	Very High	1
TIGATTO	Residential	156.38	61.02%	15,637,877,275.48	Moderate	Moderate	Low	Very High	3
TIGATTO	Commercial	2.91	89.48%	436,358,787.31	Low	Low	Low	Very High	3
TIGATTO	Industrial	5.15	39.52%	772,261,861.35	Low	Low	Low	Very High	3
WAAN	Residential	18.52	48.12%	1,851,715,453.66	Very High	Very High	Low	Very High	3
WAAN	Parks and Recreational	0.08	100.00%	11,568,767.90	Low	Low	Low	Very High	2
A. ANGLIONGTO	Residential	24.62	15.82%	2,462,151,601.11	Low	Low	Low	Very High	3
A. ANGLIONGTO	Commercial	31.98	82.53%	4,797,541,896.67	Low	Low	Low	Very High	3
A. ANGLIONGTO	Industrial	3.47	20.21%	520,142,547.01	Low	Low	Low	Very High	3
V. HIZON	Residential	52.73	44.42%	5,273,012,392.18	Moderate	Moderate	Low	Very High	3
V. HIZON	Industrial	6.31	100.00%	946,708,359.96	Low	Low	Low	Very High	3
V. HIZON	Commercial	25.13	99.53%	3,769,698,812.30	Low	Low	Low	Very High	3
V. HIZON	Tourism	0.69	45.20%	103,159,341.14	Moderate	Moderate	Low	Very High	3
BUNAWAN	Residential	89.65	72.44%	8,965,265,387.13	Very High	Very High	Low	Very High	3
BUNAWAN	Commercial	11.67	98.45%	1,751,033,615.40	Low	Low	Low	Very High	3

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BUNAWAN	Industrial	79.29	68.58%	11,892,753,831.92	Low	Low	Low	Very High	3
BUNAWAN	Agri-Industrial	1.18	63.19%	176,310,977.33	Low	Low	Low	Very High	3
BUNAWAN	Parks and Recreational	0.18	75.90%	27,636,409.51	Moderate	Moderate	Low	Very High	2
ILANG	Residential	10.88	8.65%	1,087,914,568.68	High	High	Low	Very High	3
ILANG	Industrial	33.50	37.10%	5,025,088,268.27	Low	Low	Low	Very High	3
ILANG	Commercial	0.41	18.58%	61,233,382.40	Moderate	Moderate	Low	Very High	3
LASANG	Residential	50.58	99.70%	5,058,098,233.04	Very High	Very High	Low	Very High	3
LASANG	Industrial	38.00	100.00%	5,700,555,728.53	Moderate	Moderate	Low	Very High	3
LASANG	Commercial	2.13	100.00%	318,954,077.54	Moderate	Moderate	Low	Very High	3
LASANG	Agri-Industrial	9.35	99.61%	1,403,109,661.19	Low	Low	Low	Very High	3
LASANG	Parks and Recreational	0.07	100.00%	10,756,125.65	Moderate	Moderate	Low	Very High	2
MAHAYAG	Residential	7.63	13.21%	763,277,727.56	High	High	Low	Very High	3
MAHAYAG	Industrial	1.04	1.48%	155,557,683.32	Low	Low	Low	Very High	3
PANACAN	Residential	51.96	20.22%	5,196,453,706.62	Moderate	Moderate	Low	Very High	3
PANACAN	Parks and Recreational	6.97	100.00%	1,045,707,938.01	Moderate	Moderate	Low	Very High	3
PANACAN	Cemetery	1.30	100.00%	195,635,496.94	Low	Low	Low	Very High	3
PANACAN	Industrial	70.20	58.32%	10,530,080,704.21	High	High	Low	Very High	3
PANACAN	Commercial	3.81	51.05%	571,287,446.10	Moderate	Moderate	Low	Very High	3
PANACAN	Tourism	0.45	46.80%	67,258,881.59	Low	Low	Low	Very High	3
SAN ISIDRO	Residential	18.25	68.95%	1,824,709,911.66	Moderate	Moderate	Low	Very High	3
SAN ISIDRO	Agri-Industrial	1.38	100.00%	207,366,014.96	Low	Low	Low	Very High	3
SAN ISIDRO	Industrial	2.74	65.07%	411,065,887.15	Moderate	Moderate	Low	Very High	3
SAN ISIDRO	Parks and Recreational	0.08	100.00%	11,270,954.85	Low	Low	Low	Very High	2

Table U-13. Urban Use Area, Degree of Impact Rating, Liquefaction Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
TIBUNGCO	Residential	1.24	0.94%	123,605,480.56	Very High	Very High	Low	Very High	3
TIBUNGCO	Industrial	3.77	9.03%	565,182,964.20	Low	Low	Low	Very High	3
BAGO APLAYA	Residential	94.69	99.20%	9,468,574,543.80	Low	Low	Low	Very High	3
BAGO GALLERA	Residential	1.56	1.20%	156,147,770.86	Moderate	Moderate	Low	Very High	3
BAGO APLAYA	Industrial	16.24	100.00%	2,436,509,741.16	Moderate	Moderate	Low	Very High	3
BAGO APLAYA	Commercial	12.82	99.29%	1,922,278,391.94	Low	Low	Low	Very High	3
BAGO APLAYA	Parks and Recreational	5.25	96.35%	788,103,884.73	Moderate	Moderate	Low	Very High	3
BAGO GALLERA	Parks and Recreational	9.3802	14.78%	1,407,032,731.74	Moderate	Moderate	Low	Very High	3
BAGO GALLERA	Commercial	0.0002	0.03%	26,869.93					1
BUCANA	Residential	216.58	99.83%	21,657,754,187.75	Very High	Very High	Low	Very High	3
BUCANA	Parks and Recreational	1.92	100.00%	287,500,120.02	Moderate	Moderate	Low	Very High	3
BUCANA	Commercial	63.09	99.44%	9,464,086,291.80	Moderate	Moderate	Low	Very High	3
BUCANA	Tourism	0.66	99.35%	99,239,738.21	Moderate	Moderate	Low	Very High	3
BUCANA	Industrial	0.12	100.00%	17,514,521.14	Low	Low	Low	Very High	2
CATALUNAN GRANDE	Residential	0.01	0.00%	608,697.75	High	High	Low	Very High	1
DUMOY	Residential	82.31	50.56%	8,230,754,277.10	Low	Low	Low	Very High	3
DUMOY	Tourism	5.83	100.00%	874,001,152.47	Moderate	Moderate	Low	Very High	3
DUMOY	Parks and Recreational	8.04	96.50%	1,205,607,293.55	Moderate	Moderate	Low	Very High	3
DUMOY	Commercial	5.79	70.86%	869,242,941.13	Low	Low	Low	Very High	3
DUMOY	Industrial	16.42	50.44%	2,463,477,068.57	Low	Low	Low	Very High	3
MATINA APLAYA	Residential	154.67	99.46%	15,466,659,751.19	High	High	Low	Very High	3
MATINA APLAYA	Tourism	2.34	99.55%	351,540,934.99	Moderate	Moderate	Low	Very High	3

Table U-13. Urban Use Area, Degree of Impact Rating, Liquefaction Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
TALOMO	Industrial	2.23	14.07%	334,394,932.65	Low	Low	Low	Very High	3
CROSSING BAYABAS	Residential	0.01	0.01%	863,460.12	High	High	Low	Very High	1
CROSSING BAYABAS	Commercial	0.01	0.06%	806,367.26	Low	Low	Low	Very High	1
BINUGAO	Residential	15.57	29.49%	1,556,937,502.14	High	High	Low	Very High	3
BINUGAO	Parks and Recreational	1.31	98.08%	196,714,670.75	Moderate	Moderate	Low	Very High	3
BINUGAO	Commercial	3.05	88.77%	457,874,584.52	Low	Low	Low	Very High	3
BINUGAO	Industrial	53.20	83.96%	7,980,233,775.99	Low	Low	Low	Very High	3
BINUGAO	Agri-Industrial	0.22	1.63%	33,107,063.92	Moderate	Moderate	Low	Very High	2
DALIAO	Residential	106.80	99.09%	10,680,348,977.07	Moderate	Moderate	Low	Very High	3
DALIAO	Industrial	14.75	100.00%	2,213,132,533.61	Moderate	Moderate	Low	Very High	3
DALIAO	Tourism	1.79	100.00%	268,157,597.97	Moderate	Moderate	Low	Very High	3
DALIAO	Parks and Recreational	0.16	100.00%	23,834,181.92	Moderate	Moderate	Low	Very High	2
DALIAO	Commercial	0.07	100.00%	10,872,775.79	Moderate	Moderate	Low	Very High	2
LIZADA	Residential	98.22	97.28%	9,821,953,362.16	High	High	Low	Very High	3
LIZADA	Industrial	13.44	100.00%	2,015,844,149.64	Low	Low	Low	Very High	3
LIZADA	Commercial	2.79	100.00%	418,663,206.86	Low	Low	Low	Very High	3
LIZADA	Parks and Recreational	0.19	100.00%	28,055,563.27	Moderate	Moderate	Low	Very High	2
LIZADA	Tourism	0.08	100.00%	12,102,495.64	Low	Low	Low	Very High	2
LIZADA	Agri-Industrial	0.04	0.83%	6,423,153.77	Low	Low	Low	Very High	1
SIRAWAN	Residential	24.35	29.01%	2,435,005,448.17	High	High	Low	Very High	3
SIRAWAN	Agri-Industrial	1.74	2.04%	261,050,376.78	Low	Low	Low	Very High	3

Table U-13. Urban Use Area, Degree of Impact Rating, Liquefaction Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
MATINA APLAYA	Commercial	20.34	99.33%	3,050,355,113.13	Low	Low	Low	Very High	3
MATINA APLAYA	Industrial	2.87	98.82%	430,643,771.07	Low	Low	Low	Very High	3
MATINA APLAYA	Parks and Recreational	2.21	97.55%	332,186,534.95	Moderate	Moderate	Low	Very High	3
MATINA CROSSING	Residential	170.46	68.07%	17,045,624,248.24	Low	Low	Low	Very High	3
MATINA CROSSING	Commercial	40.51	79.66%	6,076,973,082.65	Low	Low	Low	Very High	3
MATINA CROSSING	Industrial	1.45	25.37%	217,986,259.43	Low	Low	Low	Very High	3
MATINA CROSSING	Parks and Recreational	3.91	21.29%	587,219,779.47	Low	Low	Low	Very High	3
MATINA CROSSING	Tourism	0.02	5.44%	2,885,957.22	Low	Low	Low	Very High	1
MATINA PANGI	Residential	42.34	27.77%	4,234,146,266.64	Very High	Very High	Low	Very High	3
MATINA PANGI	Industrial	0.03	79.94%	4,496,776.71	Low	Low	Low	Very High	2
MATINA PANGI	Parks and Recreational	0.10	18.24%	14,718,941.42	Moderate	Moderate	Low	Very High	2
TALOMO	Residential	226.37	76.08%	22,636,705,778.28	High	High	Low	Very High	3
MA-A	Residential	232.93	54.39%	23,293,021,468.97	High	High	Low	Very High	3
MA-A	Industrial	21.06	93.46%	3,159,224,523.44	Low	Low	Low	Very High	3
MA-A	Cemetery	14.51	57.08%	2,176,100,238.35	Moderate	Moderate	Low	Very High	3
MA-A	Commercial	51.11	56.68%	7,665,881,304.79	Low	Low	Low	Very High	3
TALOMO	Tourism	0.84	54.26%	126,092,259.32	Moderate	Moderate	Low	Very High	3
TALOMO	Commercial	9.98	48.33%	1,497,362,859.58	Low	Low	Low	Very High	3
MA-A	Parks and Recreational	5.92	45.58%	888,246,652.98	Moderate	Moderate	Low	Very High	3
MA-A	Tourism	5.54	33.43%	830,268,413.78	Moderate	Moderate	Low	Very High	3
TALOMO	Parks and Recreational	1.31	23.92%	195,905,297.94	Moderate	Moderate	Low	Very High	3

Table U-13. Urban Use Area, Degree of Impact Rating, Liquefaction Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
SIRAWAN	Industrial	0.06	3.48%	9,673,389.54	Low	Low	Low	Very High	2
SIRAWAN	Parks and Recreational	0.04	100.00%	6,667,004.87	Moderate	Moderate	Low	Very High	1
SIRAWAN	Commercial	0.01	1.00%	1,243,126.00	Low	Low	Low	Very High	1
TORIL	Residential	48.61	69.97%	4,860,613,368.09	High	High	Low	Very High	3
TORIL	Industrial	2.86	100.00%	428,606,130.51	Low	Low	Low	Very High	3
TORIL	Commercial	14.72	60.01%	2,208,388,947.16	Low	Low	Low	Very High	3
NEW CARMEN	Residential	11.98	76.58%	1,197,922,126.49	Very High	Very High	Low	Very High	3

STORM SURGE

The top three urban use areas with a high degree of impact are residential, commercial and industrial area. As per evaluation, only one barangay with residential use susceptible to liquefaction does not have high degree of impact. Same holds true in commercial area wherein 64 out of 65 exposed barangays have high degree of impact. In industrial area, 36 out of 39 barangays susceptible to storm surge have high degree of impact. As for the residential area, the total area of the 71 barangays measure up to 3,616.34 hectares wherein 36.71% is expected to take greater damage from storm surge with a corresponding exposed value of Php 134,806,687,845.64. On the other hand, damage in exposed commercial areas may reach up to P80, 491,650,929.35 as areas with high degree of impact take up 61% of the 879.25 hectares total commercial area of barangays identified. The industrial areas with high degree of impact take up 41.6% of the total area industrial area of barangays affected with expected damage cost of Php 49,070,553,869.38.

Table U-14. Urban Use Area, Degree of Impact Rating, Storm Surge Impact Areas, Davao City

Barangay	EXPOSURE				SENSITIVITY				IMPACT
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
1-A	Commercial	1.14	81.43%	171,000,000.00	Low	Low	Low	Very High	3
1-A	Parks and Recreational	0.08	100.00%	12,000,000.00	Moderate	Moderate	Low	Very High	3
1-A	Residential	6.95	100.00%	695,000,000.00	High	High	Low	Very High	3
2-A	Commercial	9.14	80.79%	1,371,732,731.02	Low	Low	Low	Very High	3
2-A	Parks and Recreational	0.44	100.00%	66,567,818.65	Moderate	Moderate	Low	Very High	3
2-A	Residential	1.62	99.89%	161,836,733.90	Very High	Very High	Low	Very High	3
3-A	Commercial	14.90	100.00%	2,234,604,689.15	Low	Low	Low	Very High	3
3-A	Parks and Recreational	0.10	100.00%	15,358,451.09	Moderate	Moderate	Low	Very High	3
3-A	Residential	0.55	100.00%	55,110,065.12	Low	Low	Low	Very High	3
4-A	Commercial	9.55	100.00%	1,432,224,844.85	Low	Low	Low	Very High	3
4-A	Industrial	0.08	100.00%	12,539,491.89	Low	Low	Low	Very High	3
4-A	Parks and Recreational	4.00	100.00%	600,131,108.50	Moderate	Moderate	Low	Very High	3

Table U-14. Urban Use Area, Degree of Impact Rating, Storm Surge Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
4-A	Residential	2.93	100.00%	293,381,599.56	Very High	Very High	Low	Very High	3
5-A	Commercial	1.51	34.67%	225,891,312.78	Low	Low	Low	Very High	3
5-A	Residential	10.31	50.50%	1,030,738,916.39	Very High	Very High	Low	Very High	3
6-A	Commercial	0.78	13.78%	116,980,567.71	Low	Low	Low	Very High	3
6-A	Residential	0.51	11.53%	50,627,731.15	High	High	Low	Very High	3
7-A	Commercial	3.25	47.78%	486,873,588.36	Low	Low	Low	Very High	3
7-A	Residential	0.59	5.83%	59,402,194.99	Moderate	Moderate	moderate	Very High	3
8-A	Residential	9.24	11.15%	923,606,706.71	High	High	Low	Very High	3
9-A	Commercial	0.66	0.27%	99,000,000.00	Moderate	Moderate	Low	Very High	2
9-A	Industrial	0.66	8.86%	99,572,259.48	Low	Low	Low	Very High	3
9-A	Residential	0.21	91.54%	20,567,176.36	Low	Low	Low	Very High	3
10-A	Commercial	5.52	72.63%	828,000,000.00	Low	Low	Low	Very High	3
10-A	Industrial	0.25	100.00%	37,500,000.00	Low	Low	Low	Very High	3
10-A	Residential	3.30	56.99%	330,000,000.00	Moderate	Moderate	moderate	Very High	3
11-B	Commercial	4.52	100.00%	678,000,000.00	Low	Low	Low	Very High	3
11-B	Industrial	0.61	100.00%	91,500,000.00	Low	Low	Low	Very High	3
11-B	Residential	2.56	100.00%	256,000,000.00	Very High	Very High	Low	Very High	3
12-B	Commercial	12.31	99.03%	1,846,500,000.00	Low	Low	Low	Very High	3
12-B	Industrial	0.01	100.00%	1,500,000.00	Low	Low	Low	Very High	1
12-B	Parks and Recreational	0.06	100.0000 %	9,000,000.00	Low	Low	Low	Very High	2
12-B	Residential	1.20	100.00%	120,000,000.00	High	High	Low	Very High	3
13-B	Commercial	8.52	100.00%	1,278,000,000.00	Low	Low	Low	Very High	3
13-B	Residential	0.57	100.00%	57,000,000.00	Very High	Very High	Low	Very High	3
14-B	Commercial	7.52	100.00%	1,128,000,000.00	Low	Low	Low	Very High	3
14-B	Industrial	0.30	100.00%	45,000,000.00	Low	Low	Low	Very High	3
14-B	Residential	3.09	100.00%	309,000,000.00	Moderate	Moderate	moderate	Very High	3
15-B	Commercial	24.46	100.00%	3,669,000,000.00	Low	Low	Low	Very High	3
15-B	Parks and Recreational	0.19	100.00%	28,500,000.00	Moderate	Moderate	Low	Very High	3

Table U-14. Urban Use Area, Degree of Impact Rating, Storm Surge Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
15-B	Residential	1.46	100.00%	146,000,000.00	Very High	Very High	Low	Very High	3
16-B	Commercial	3.38	100.00%	507,000,000.00	Low	Low	Low	Very High	3
16-B	Residential	0.42	100.00%	42,000,000.00	Low	Low	Low	Very High	3
17-B	Commercial	3.89	100.00%	583,500,000.00	Low	Low	Low	Very High	3
17-B	Residential	0.52	100.00%	52,000,000.00	Low	Low	Low	Very High	3
18-B	Commercial	8.95	100.00%	1,342,500,000.00	Low	Low	Low	Very High	3
18-B	Parks and Recreational	0.42	100.00%	63,000,000.00	Moderate	Moderate	Low	Very High	3
18-B	Residential	0.40	100.00%	40,000,000.00	Moderate	Moderate	moderate	Very High	3
19-B	Commercial	2.58	9.14%	387,000,000.00	Low	Low	Low	Very High	3
20-B	Commercial	11.85	41.43%	1,777,500,000.00	Low	Low	Low	Very High	3
20-B	Residential	8.94	64.22%	894,000,000.00	Moderate	Moderate	moderate	Very High	3
21-C	Commercial	0.30	100.00%	45,000,000.00	Low	Low	Low	Very High	3
21-C	Parks and Recreational	0.07	100.00%	10,500,000.00	Moderate	Moderate	Low	Very High	3
21-C	Residential	5.18	100.00%	518,000,000.00	High	High	Low	Very High	3
22-C	Commercial	0.50	100.00%	75,000,000.00	Low	Low	Low	Very High	3
22-C	Parks and Recreational	0.05	100.00%	7,500,000.00	Moderate	Moderate	Low	Very High	2
22-C	Residential	4.78	100.00%	478,000,000.00	High	High	Low	Very High	3
23-C	Commercial	0.87	100.00%	130,500,000.00	Low	Low	Low	Very High	3
23-C	Parks and Recreational	0.72	100.00%	108,000,000.00	Moderate	Moderate	Low	Very High	3
23-C	Residential	12.79	100.00%	1,279,000,000.00	Very High	Very High	Low	Very High	3
24-C	Commercial	3.60	100.00%	540,000,000.00	Low	Low	Low	Very High	3
24-C	Parks and Recreational	0.05	100.00%	7,500,000.00	Moderate	Moderate	Low	Very High	2
24-C	Residential	2.51	69.72%	251,000,000.00	Moderate	Moderate	moderate	Very High	3
25-C	Commercial	2.24	100.00%	336,000,000.00	Low	Low	Low	Very High	3

Table U-14. Urban Use Area, Degree of Impact Rating, Storm Surge Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
25-C	Residential	1.73	100.00%	173,000,000.00	High	High	Low	Very High	3
26-C	Commercial	4.32	100.00%	648,000,000.00	Low	Low	Low	Very High	3
26-C	Residential	2.23	100.00%	223,000,000.00	Moderate	Moderate	moderate	Very High	3
27-C	Commercial	18.61	100.00%	2,791,500,000.00	Low	Low	Low	Very High	3
27-C	Industrial	0.69	100.00%	103,500,000.00	Low	Low	Low	Very High	3
27-C	Parks and Recreational	4.10	100.00%	615,000,000.00	Moderate	Moderate	Low	Very High	3
27-C	Residential	0.64	100.00%	64,430,783.06	High	High	Low	Very High	3
27-C	Tourism	0.04	100.00%	6,481,597.18	Moderate	Moderate	moderate	Very High	3
28-C	Commercial	3.95	100.00%	592,148,326.85	Low	Low	Low	Very High	3
28-C	Residential	1.65	100.00%	164,904,358.72	Moderate	Moderate	moderate	Very High	3
29-C	Commercial	6.88	100.00%	1,032,303,475.68	Low	Low	Low	Very High	3
29-C	Residential	1.07	100.00%	106,578,556.98	High	High	Low	Very High	3
30-C	Commercial	14.96	100.00%	2,243,730,999.11	Low	Low	Low	Very High	3
30-C	Industrial	0.29	100.00%	43,726,594.40	Low	Low	Low	Very High	3
30-C	Residential	1.37	100.00%	136,706,617.66	Low	Low	Low	Very High	3
31-D	Commercial	0.61	100.00%	91,246,593.76	Low	Low	Low	Very High	3
31-D	Parks and Recreational	0.13	100.00%	19,561,694.62	Moderate	Moderate	Low	Very High	3
31-D	Residential	13.56	100.00%	1,356,101,073.23	Moderate	Moderate	moderate	Very High	3
32-D	Commercial	5.17	100.00%	775,208,195.52	Low	Low	Low	Very High	3
32-D	Parks and Recreational	0.20	100.00%	29,385,040.36	Moderate	Moderate	Low	Very High	3
32-D	Residential	2.75	100.00%	274,985,473.05	Low	Low	Low	Very High	3
33-D	Commercial	2.89	100.00%	433,152,447.07	Low	Low	Low	Very High	3
33-D	Residential	3.86	100.00%	386,250,546.69	High	High	Low	Very High	3
34-D	Commercial	12.70	100.00%	1,905,014,792.46	Low	Low	Low	Very High	3
34-D	Industrial	0.00	100.00%	35,858.57	Low	Low	moderate	Very High	1
34-D	Parks and Recreational	0.3688	100.00%	55,314,292.62	Moderate	Moderate	Low	Very High	3

Table U-14. Urban Use Area, Degree of Impact Rating, Storm Surge Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
34-D	Residential	2.48	100.00%	248,103,494.79	Low	Low	Low	Very High	3
35-D	Commercial	4.13	100.00%	620,121,662.03	Low	Low	Low	Very High	3
35-D	Parks and Recreational	0.04	100.00%	6,444,448.78	Moderate	Moderate	Low	Very High	2
35-D	Residential	0.35	100.00%	34,684,421.49	Very High	Very High	Low	Very High	3
36-D	Commercial	3.33	100.00%	499,363,988.12	Low	Low	Low	Very High	3
36-D	Parks and Recreational	0.07	100.00%	10,425,406.61	Moderate	Moderate	Low	Very High	3
36-D	Residential	2.39	100.00%	238,999,142.25	Moderate	Moderate	moderate	Very High	3
37-D	Commercial	0.82	100.00%	123,129,455.68	Low	Low	Low	Very High	3
37-D	Residential	3.54	100.00%	354,418,912.16	High	High	Low	Very High	3
38-D	Commercial	3.10	100.00%	465,690,522.39	Low	Low	Low	Very High	3
38-D	Parks and Recreational	0.01	100.00%	1,032,136.18	Moderate	Moderate	Low	Very High	1
38-D	Residential	1.73	100.00%	172,640,143.97	Very High	Very High	Low	Very High	3
39-D	Commercial	5.34	100.00%	801,638,866.43	Low	Low	Low	Very High	3
39-D	Parks and Recreational	0.89	100.00%	133,631,730.63	Moderate	Moderate	Low	Very High	3
39-D	Residential	2.92	100.00%	292,022,426.40	Low	Low	Low	Very High	3
40-D	Commercial	6.05	100.00%	907,271,894.76	Low	Low	Low	Very High	3
40-D	Residential	1.34	100.00%	133,947,526.34	Very High	Very High	Low	Very High	3
AGDAO PROPER	Commercial	22.65	100.00%	3,397,578,352.27	Low	Low	Low	Very High	3
AGDAO PROPER	Industrial	1.29	100.00%	193,897,927.91	Low	Low	Low	Very High	3
AGDAO PROPER	Parks and Recreational	0.01	100.00%	1,612,487.80	Moderate	Moderate	Low	Very High	1
AGDAO PROPER	Residential	7.62	100.00%	761,819,333.62	Very High	Very High	Low	Very High	3
WILFREDO AQUINO	Commercial	11.73	49.33%	1,759,265,765.79	Low	Low	Low	Very High	3
WILFREDO AQUINO	Industrial	0.11	98.60%	17,026,982.97	Low	Low	Low	Very High	3
WILFREDO AQUINO	Parks and Recreational	0.21	19.74%	31,522,470.25	Moderate	Moderate	Low	Very High	3

Table U-14. Urban Use Area, Degree of Impact Rating, Storm Surge Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
WILFREDO AQUINO	Residential	8.59	32.93%	859,283,570.24	Low	Low	Low	Very High	3
PACIANO BANGOY	Commercial	26.00	70.14%	3,899,437,527.29	Low	Low	Low	Very High	3
PACIANO BANGOY	Industrial	0.67	100.00%	100,104,760.91	Low	Low	Low	Very High	3
PACIANO BANGOY	Residential	14.39	67.35%	1,438,505,620.27	High	High	Low	Very High	3
RAFAEL CASTILLO	Commercial	16.34	99.58%	2,450,664,622.06	Low	Low	Low	Very High	3
RAFAEL CASTILLO	Industrial	9.33	100.00%	1,398,997,714.83	Low	Low	Low	Very High	3
RAFAEL CASTILLO	Parks and Recreational	0.02	100.00%	2,764,122.06	Moderate	Moderate	Low	Very High	2
RAFAEL CASTILLO	Residential	11.86	100.00%	1,186,306,694.99	Moderate	Moderate	moderate	Very High	3
CENTRO	Commercial	1.14	100.00%	170,319,219.74	Low	Low	Low	Very High	3
CENTRO	Industrial	10.73	100.00%	1,609,490,361.01	Low	Low	Low	Very High	3
CENTRO	Parks and Recreational	0.04	100.00%	6,174,813.88	Moderate	Moderate	Low	Very High	2
CENTRO	Residential	22.72	100.00%	2,271,589,342.20	High	High	Low	Very High	3
GOV. VICENTE DUTERTE	Commercial	4.95	100.00%	741,990,041.23	Low	Low	Low	Very High	3
GOV. VICENTE DUTERTE	Industrial	12.56	100.00%	1,884,562,137.22	Low	Low	Low	Very High	3
GOV. VICENTE DUTERTE	Parks and Recreational	0.06	100.00%	9,423,105.42	Low	Low	Low	Very High	2
GOV. VICENTE DUTERTE	Residential	20.34	100.00%	2,033,555,834.25	Very High	Very High	Low	Very High	3
LEON GARCIA SR.	Commercial	1.06	100.00%	158,606,120.04	Moderate	Moderate	Low	Very High	3
LEON GARCIA SR.	Industrial	0.29	100.00%	43,386,408.60	Low	Low	Low	Very High	3
LEON GARCIA SR.	Parks and Recreational	0.08	100.00%	11,720,018.15	Moderate	Moderate	Low	Very High	3
LEON GARCIA SR.	Residential	12.04	100.00%	1,204,204,893.53	Low	Low	Low	Very High	3
LAPU - LAPU	Commercial	1.61	100.00%	241,574,388.17	Low	Low	Low	Very High	3
LAPU - LAPU	Industrial	22.95	100.00%	3,442,184,815.31	Moderate	Moderate	Low	Very High	3

Table U-14. Urban Use Area, Degree of Impact Rating, Storm Surge Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
LAPU - LAPU	Parks and Recreational	0.04	100.00%	6,300,480.75	Moderate	Moderate	Low	Very High	2
LAPU - LAPU	Residential	23.68	100.00%	2,367,807,879.40	Moderate	Moderate	moderate	Very High	3
TOMAS MONTEVERDE	Commercial	11.83	100.00%	1,774,599,927.95	Low	Low	Low	Very High	3
TOMAS MONTEVERDE	Industrial	0.83	100.00%	124,595,134.07	Low	Low	Low	Very High	3
TOMAS MONTEVERDE	Residential	2.09	100.00%	209,331,813.25	Very High	Very High	Low	Very High	3
SAN ANTONIO	Commercial	40.77	94.23%	6,116,149,628.24	Low	Low	Low	Very High	3
SAN ANTONIO	Industrial	10.51	100.00%	1,576,505,130.86	Moderate	Moderate	Low	Very High	3
SAN ANTONIO	Parks and Recreational	0.06	100.00%	8,476,891.29	Moderate	Moderate	Low	Very High	2
SAN ANTONIO	Residential	25.28	100.00%	2,528,310,391.01	Low	Low	Low	Very High	3
UBALDE	Commercial	1.53	100.00%	229,829,626.68	Low	Low	Low	Very High	3
UBALDE	Industrial	0.21	100.00%	31,293,618.69	Low	Low	Low	Very High	3
UBALDE	Residential	5.94	100.00%	593,870,630.71	Moderate	Moderate	moderate	Very High	3
PAMPANGA	Commercial	9.68	85.59%	1,451,849,595.57	Moderate	Moderate	Low	Very High	3
PAMPANGA	Industrial	22.14	82.98%	3,321,504,237.62	Moderate	Moderate	Low	Very High	3
PAMPANGA	Residential	0.07	0.13%	6,650,659.71	Moderate	Moderate	moderate	Very High	2
PAMPANGA	Tourism	2.99	100.00%	447,772,676.38	Moderate	Moderate	moderate	Very High	3
SASA	Commercial	9.87	17.02%	1,481,011,406.31	Low	Low	Low	Very High	3
SASA	Industrial	7.96	8.49%	1,193,938,159.28	Low	Moderate	moderate	Very High	2
SASA	Residential	15.53	6.94%	1,553,348,198.72	Moderate	Moderate	moderate	Very High	3
A. ANGLIONGTO	Commercial	16.74	43.20%	2,511,503,441.71	Low	Low	Low	Very High	3
A. ANGLIONGTO	Industrial	2.95	17.19%	442,465,662.96	Low	Low	Low	Very High	3
A. ANGLIONGTO	Residential	3.71	2.39%	371,340,252.39	Low	Low	Low	Very High	3
V. HIZON	Commercial	22.61	89.55%	3,391,652,239.64	Low	Low	Low	Very High	3

Table U-14. Urban Use Area, Degree of Impact Rating, Storm Surge Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
V. HIZON	Industrial	6.29	99.73%	944,162,773.44	Low	Low	Low	Very High	3
V. HIZON	Residential	34.45	29.02%	3,445,009,803.24	Moderate	Moderate	moderate	Very High	3
V. HIZON	Tourism	0.69	45.20%	103,159,309.35	Moderate	Moderate	moderate	Very High	3
BUNAWAN	Agri-Industrial	1.18	63.19%	176,310,936.40	Low	Low	Low	Very High	3
BUNAWAN	Commercial	10.44	88.01%	1,565,375,961.43	Low	Low	Low	Very High	3
BUNAWAN	Industrial	71.18	61.57%	10,677,533,101.42	Low	Low	Low	Very High	3
BUNAWAN	Parks and Recreational	0.18	75.90%	27,636,318.14	Moderate	Moderate	Low	Very High	3
BUNAWAN	Residential	73.00	58.98%	7,299,529,543.00	Very High	Very High	Low	Very High	3
ILANG	Industrial	20.88	23.17%	3,132,663,525.14	Low	Low	Low	Very High	3
ILANG	Residential	11.24	8.95%	1,124,445,330.35	High	High	Low	Very High	3
LASANG	Commercial	0.59	27.59%	87,993,359.55	Moderate	Moderate	Low	Very High	3
LASANG	Industrial	10.51	27.64%	1,575,904,231.58	Moderate	Moderate	Low	Very High	3
LASANG	Parks and Recreational	0.07	100.00%	10,756,125.65	Moderate	Moderate	Low	Very High	3
LASANG	Residential	37.91	74.73%	3,791,015,974.16	Very High	Very High	Low	Very High	3
MAHAYAG	Industrial	2.18	3.12%	327,490,389.66	Low	Low	Low	Very High	3
MAHAYAG	Residential	8.08	13.99%	808,039,809.18	High	High	Low	Very High	3
PANACAN	Commercial	3.53	47.37%	530,072,420.12	Moderate	Moderate	Low	Very High	3
PANACAN	Industrial	39.42	32.75%	5,913,217,853.51	High	High	Low	Very High	3
PANACAN	Parks and Recreational	6.91	99.07%	1,035,970,786.26	Moderate	Moderate	Low	Very High	3
PANACAN	Residential	32.21	12.53%	3,221,054,544.67	Moderate	Moderate	moderate	Very High	3
PANACAN	Tourism	0.76	79.24%	113,878,781.56	Low	Low	Low	Very High	3
TIBUNGCO	Industrial	5.60	13.42%	840,477,503.05	Low	Low	Low	Very High	3

Table U-14. Urban Use Area, Degree of Impact Rating, Storm Surge Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
TIBUNGCO	Residential	11.83	100.00%	1,183,066,618.64	Very High	Very High	Low	Very High	3
BAGO APLAYA	Commercial	9.29	71.96%	1,392,984,605.26	Moderate	Moderate	Low	Very High	3
BAGO APLAYA	Industrial	15.91	97.95%	2,386,594,737.70	Moderate	Moderate	Low	Very High	3
BAGO APLAYA	Parks and Recreational	5.45	99.89%	817,011,372.54	Moderate	Moderate	Low	Very High	3
BAGO APLAYA	Residential	83.51	87.48%	8,350,523,697.88	Low	Low	Low	Very High	3
BAGO GALLERA	Parks and Recreational	20.79	32.76%	3,119,077,919.81	Moderate	Moderate	Low	Very High	3
BAGO GALLERA	Residential	1.52	1.17%	151,684,311.52	Moderate	Moderate	moderate	Very High	3
BUCANA	Commercial	53.33	84.04%	7,999,105,327.65	Moderate	Moderate	Low	Very High	3
BUCANA	Industrial	0.12	100.00%	17,514,521.14	Low	Low	Low	Very High	3
BUCANA	Parks and Recreational	1.84	96.21%	276,608,516.54	Moderate	Moderate	Low	Very High	3
BUCANA	Residential	189.27	87.24%	18,927,308,315.83	Very High	Very High	Low	Very High	3
BUCANA	Tourism	0.67	100.00%	99,886,927.88	Moderate	Moderate	moderate	Very High	3
DUMOY	Commercial	2.03	24.80%	304,280,609.76	Low	Low	Low	Very High	3
DUMOY	Industrial	3.85	11.83%	577,795,389.33	Low	Low	Low	Very High	3
DUMOY	Parks and Recreational	8.04	96.50%	1,205,608,019.16	Moderate	Moderate	Low	Very High	3
DUMOY	Residential	40.74	25.03%	6,111,718,427.68	Low	Low	Low	Very High	3
DUMOY	Tourism	5.83	100.00%	582,667,328.21	Moderate	Moderate	moderate	Very High	3
MA-A	Commercial	2.88	3.19%	431,464,196.51	Low	Low	Low	Very High	3
MA-A	Industrial	2.08	9.22%	311,738,761.33	Low	Low	Low	Very High	3
MA-A	Parks and Recreational	0.05	0.41%	8,003,319.22	Moderate	Moderate	Low	Very High	2
MA-A	Residential	7.45	1.74%	744,643,837.80	High	High	Low	Very High	3

Table U-14. Urban Use Area, Degree of Impact Rating, Storm Surge Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
MATINA APLAYA	Commercial	15.77	77.01%	2,364,923,678.33	Low	Low	Low	Very High	3
MATINA APLAYA	Industrial	2.65	91.29%	397,836,146.49	Low	Low	Low	Very High	3
MATINA APLAYA	Parks and Recreational	1.51	66.30%	225,771,374.70	Moderate	Moderate	Low	Very High	3
MATINA APLAYA	Residential	131.23	84.39%	13,122,695,931.23	High	High	Low	Very High	3
MATINA APLAYA	Tourism	1.79	75.83%	267,773,888.10	Moderate	Moderate	moderate	Very High	3
MATINA CROSSING	Commercial	1.06	2.08%	158,999,255.72	Low	Low	Low	Very High	3
MATINA CROSSING	Residential	20.70	8.26%	2,069,535,118.57	Low	Low	Low	Very High	3
TALOMO	Commercial	4.99	24.18%	749,217,882.81	Low	Low	Low	Very High	3
TALOMO	Industrial	2.63	16.61%	394,878,666.01	Low	Low	Low	Very High	3
TALOMO	Parks and Recreational	1.19	21.79%	178,456,030.72	Moderate	Moderate	Low	Very High	3
TALOMO	Residential	202.72	68.13%	20,271,618,543.12	High	High	Low	Very High	3
TALOMO	Tourism	0.84	54.26%	126,092,259.60	Moderate	Moderate	moderate	Very High	3
BINUGAO	Industrial	28.66	45.24%	4,299,580,048.70	Low	Low	Low	Very High	3
BINUGAO	Parks and Recreational	1.27	94.94%	190,405,495.62	Moderate	Moderate	Low	Very High	3
BINUGAO	Residential	5.83	11.04%	582,772,276.73	High	High	Low	Very High	3
DALIAO	Commercial	0.07	100.00%	10,872,775.79	Moderate	Moderate	Low	Very High	3
DALIAO	Industrial	13.79	93.47%	2,068,701,954.04	Moderate	Moderate	Low	Very High	3
DALIAO	Parks and Recreational	0.16	100.00%	23,834,181.92	Moderate	Moderate	Low	Very High	3
DALIAO	Residential	48.79	45.27%	4,879,317,807.20	Moderate	Moderate	moderate	Very High	3
DALIAO	Tourism	1.79	100.00%	268,157,669.73	Moderate	Moderate	moderate	Very High	3
LIZADA	Industrial	3.90	29.03%	585,111,028.13	Low	Low	Low	Very High	3
LIZADA	Parks and Recreational	0.11	61.34%	17,208,696.54	Moderate	Moderate	Low	Very High	3

Table U-14. Urban Use Area, Degree of Impact Rating, Storm Surge Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
LIZADA	Residential	71.85	71.16%	7,184,785,765.72	High	High	Low	Very High	3
LIZADA	Tourism	0.08	100.00%	12,102,495.64	Low	Low	Low	Very High	3
SIRAWAN	Parks and Recreational	0.04	100.00%	6,667,004.87	High	Moderate	Low	Very High	2
SIRAWAN	Residential	17.36	20.68%	1,735,603,133.59	High	High	Low	Very High	3

FAULTLINE

As per data evaluation, 4 (four) out of the 25 barangays located in the residential area which are susceptible to active fault have a degree of impact score of 3, which is the highest score among the urban use areas. The four barangays have a total land area of 438.05 hectares in which 0.67% of it is highly exposed to the hazard. Exposed value is set at Php 294,951,425.

Table U-15. Urban Use Area, Degree of Impact Rating, Fault line Impact Areas, Davao City

Barangay	EXPOSURE				SENSITIVITY				IMPACT
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
MALAGOS	Residential	0.08	0.43%	7,680,265	High	High	Moderate	Moderate	2
BIAO JOAQUIN	Agri-Industrial	0.32	1.61%	48,712,383	Low	Low	Moderate	Moderate	1
CALINAN	Residential	0.16	0.15%	16,452,449	Moderate	Moderate	Moderate	Moderate	1
CALINAN	Commercial	0.05	0.26%	5,000,000	Low	Low	Moderate	Moderate	1
CAWAYAN	Agri-Industrial	0.27	4.51%	40,475,177	Low	Low	Moderate	Moderate	2
PANGYAN	Residential	0.11	2.13%	10,829,847	High	High	Moderate	Moderate	2
RIVERSIDE	Residential	0.74	3.48%	73,649,697	High	High	Moderate	Moderate	2
RIVERSIDE	Parks and Recreational	0.01	12.96%	1,360,320	Low	Low	Moderate	Moderate	1
RIVERSIDE	Commercial	0.04	3.84%	6,391,537	Low	Low	Moderate	Moderate	1
SUBASTA	Residential	0.15	1.58%	15,140,439	Very High	Very High	Moderate	Moderate	3
TALOMO RIVER	Residential	0.15	0.69%	14,974,448	Moderate	Moderate	Moderate	Moderate	2
TALOMO RIVER	Agri-Industrial	0.16	0.89%	24,507,299	Low	Low	Moderate	Moderate	1
WANGAN	Residential	0.05	1.35%	4,504,294	High	High	Moderate	Moderate	2
TAMUGAN	Residential	0.16	1.60%	16,308,833	Residual	Residual	Moderate	Moderate	1
TAMUGAN	Agri-Industrial	0.22	1.02%	33,081,754	Low	Low	Moderate	Moderate	1
LOS AMIGOS	Residential	0.16	0.39%	15,603,212	High	High	Moderate	Moderate	2

Table U-15. Urban Use Area, Degree of Impact Rating, Fault line Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
LOS AMIGOS	Tourism	0.03	5.10%	4,824,029	Low	Low	Moderate	Moderate	1
LOS AMIGOS	Commercial	0.01	0.74%	1,140,000	Low	Low	Moderate	Moderate	1
MALABOG	Residential	0.00	0.02%	439,318	Residual	Residual	Moderate	Moderate	1
PANALUM	Residential	0.00	0.01%	11,734	Residual	Residual	Moderate	Moderate	1
SUMIMAO	Residential	0.01	0.41%	734,094	Very High	Very High	Moderate	Moderate	2
BALIOK	Industrial	0.02	0.29%	2,805,000	Low	Low	Moderate	Moderate	1
CATALUNAN GRANDE	Residential	0.49	0.16%	48,595,846	High	High	Moderate	Moderate	2
CATALUNAN PEQUENO	Residential	1.26	0.64%	126,446,559	Moderate	Moderate	Moderate	Moderate	3
CATALUNAN PEQUENO	Tourism	0.02	1.37%	2,714,630	Low	Low	Moderate	Moderate	1
CATALUNAN PEQUENO	Agri-Industrial	0.13	0.93%	19,105,760	Low	Low	Moderate	Moderate	1
TALOMO	Residential	0.38	0.13%	38,445,207	High	High	Moderate	Moderate	2
BANKAS HEIGHTS	Residential	0.07	0.24%	7,181,899	Residual	Residual	Moderate	Moderate	1
BINUGAO	Residential	0.59	1.12%	58,901,751	High	High	Moderate	Moderate	2
BINUGAO	Industrial	0.58	0.92%	87,022,225	Low	Low	Moderate	Moderate	2
BINUGAO	Commercial	0.04	1.16%	6,000,000	Low	Low	Moderate	Moderate	1
LIZADA	Residential	0.0004	0.0004%	42,717	High	High	Moderate	Moderate	2
SIRAWAN	Residential	0.54	0.64%	53,525,360	High	High	Moderate	Moderate	2
SIRAWAN	Agri-Industrial	0.01	0.01%	1,245,258	Low	Low	Moderate	Moderate	1
ANGALAN	Residential	0.01	0.11%	1,300,000	High	High	Moderate	Moderate	2
BAGO OSHIRO	Residential	0.10	0.07%	10,218,057	Very High	Very High	Moderate	Moderate	2
BIAO ESCUELA	Agri-Industrial	0.08	0.23%	12,548,263	Low	Low	Moderate	Moderate	1
MINTAL	Residential	1.06	0.71%	106,353,159	High	High	Moderate	Moderate	3
MINTAL	Parks and Recreational	0.04	9.78%	6,011,713	Low	Low	Moderate	Moderate	1
STO. NINO	Residential	0.47	0.58%	47,011,269	High	High	Moderate	Moderate	3
TAGAKPAN	Residential	0.04	0.38%	3,697,376	Very High	Very High	Moderate	Moderate	2

Table U-15. Urban Use Area, Degree of Impact Rating, Fault line Impact Areas, Davao City

EXPOSURE					SENSITIVITY				IMPACT
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Proportion of buildings with walls with light to salvageable materials	Proportion of Buldings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	No access/area coverage to infrastructure related hazard mitigation measures	Degree of Impact Average
TAGAKPAN	Parks and Recreational	0.01	0.47%	1,690,592	Low	Low	Moderate	Moderate	1
TALANDANG	Agri-Industrial	0.29	1.16%	43,063,860	Low	Low	Moderate	Moderate	2
TUGBOK	Residential	0.75	0.66%	75,294,413	High	High	Moderate	Moderate	2
TUGBOK	Cemetery	0.22	5.53%	32,949,319	Low	Low	Moderate	Moderate	1
TUGBOK	Agri-Industrial	0.04	0.78%	5,487,579	Low	Low	Moderate	Moderate	1

ADAPTIVE CAPACITY

FLOOD

The same numbers of barangays in the residential area, which have the high degree of impact, are recorded to have the lowest adaptive capacity. Capacities vary on the three (3) variables indicated below in terms of: a.) capacity and willing to retrofit or relocate or conform to new regulations; b.) insurance coverage, and c.) available alternative sites. Those with low adaptive capacity have no capacity and willingness to retrofit or relocate or conform to new regulations and no insurance coverage. However, these barangays have alternative sites and Most of the 231 barangays have available government resources at their disposal and are empowered to implement zoning regulations. Among the top three (3) barangays whose residential areas have low adaptive capacity are 1-A, 2-A, 5-A.

Table U-16. Urban Use Area, Adaptive Capacity Score, Flood Impact Areas, Davao City

Barangay	Land Use Category	EXPOSURE			IMPACT	ADAPTIVE CAPACITY					
		Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score Average	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
1-A	Residential	6.94	99.86%	69,400,000.00	3	NO	NO	YES	YES	YES	3
1-A	Parks and Recreational	0.08	100.00%	1,200,000.00	2	YES	YES	NO	YES	YES	2
1-A	Commercial	1.02	72.34%	15,300,000.00	3	YES	YES	NO	YES	YES	3
2-A	Residential	1.23	75.93%	12,300,000.00	3	NO	NO	YES	YES	YES	3
2-A	Commercial	1.53	13.52%	22,950,000.00	3	YES	YES	NO	YES	YES	3
5-A	Residential	14.12	69.18%	141,200,000.00	3	NO	NO	YES	YES	YES	3
5-A	Parks and Recreational	0.01	100.00%	150,000.00	1	YES	YES	NO	YES	YES	1
5-A	Commercial	0.14	3.23%	2,100,000.00	2	YES	YES	NO	YES	YES	2
8-A	Residential	47.94	57.88%	479,400,000.00	3	NO	NO	YES	YES	YES	3
8-A	Industrial	3.84	100.00%	57,600,000.00	3	YES	YES	NO	YES	YES	3
8-A	Commercial	4.29	75.93%	64,350,000.00	3	YES	YES	NO	YES	YES	3
8-A	Cemetery	3.17	16.77%	47,550,000.00	3	YES	YES	NO	YES	YES	3
8-A	Parks and Recreational	0.04	3.42%	600,000.00	2	YES	YES	NO	YES	YES	2
15-B	Residential	0.22	15.07%	2,200,000.00	2	NO	NO	YES	YES	YES	2

Table U-16. Urban Use Area, Adaptive Capacity Score, Flood Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
15-B	Commercial	1.2	4.91%	18,000,000.00	3	YES	YES	NO	YES	YES	3
19-B	Residential	40.47	22.51%	404,700,000.00	3	NO	NO	YES	YES	YES	3
19-B	Parks and Recreational	0.1	27.78%	1,500,000.00	2	YES	YES	NO	YES	YES	2
19-B	Commercial	4.9	17.36%	73,500,000.00	3	YES	YES	NO	YES	YES	3
19-B	Industrial	0.16	6.45%	2,400,000.00	2	YES	YES	NO	YES	YES	2
21-C	Residential	1.32	25.48%	13,200,000.00	3	NO	NO	YES	YES	YES	3
22-C	Residential	3.53	73.85%	35,300,000.00	3	NO	NO	YES	YES	YES	3
22-C	Parks and Recreational	0.001	2.00%	15,000.00	1	YES	YES	NO	YES	YES	1
23-C	Residential	11.18	87.41%	111,800,000.00	3	NO	NO	YES	YES	YES	3
23-C	Parks and Recreational	0.43	59.72%	6,450,000.00	3	YES	YES	NO	YES	YES	3
27-C	Tourism	0.04	100.00%	600,000.00	2	YES	NO	YES	YES	YES	2
27-C	Parks and Recreational	3.01	73.41%	45,150,000.00	3	YES	YES	NO	YES	YES	3
31-D	Residential	7.74	57.08%	77,400,000.00	3	NO	NO	YES	YES	YES	3
31-D	Parks and Recreational	0.11	84.62%	1,650,000.00	2	YES	YES	NO	YES	YES	2
37-D	Residential	0.76	21.41%	7,600,000.00	3	NO	NO	YES	YES	YES	3
39-D	Residential	2.53	86.35%	25,300,000.00	3	NO	NO	YES	YES	YES	3
39-D	Commercial	3.03	56.64%	45,450,000.00	3	YES	YES	NO	YES	YES	3
39-D	Parks and Recreational	0.16	17.98%	2,400,000.00	2	YES	YES	NO	YES	YES	2
40-D	Residential	1.30	97.01%	13,000,000.00	3	NO	NO	YES	YES	YES	3
40-D	Commercial	6.04	99.83%	90,600,000.00	3	YES	YES	NO	YES	YES	3
AGDAO PROPER	Residential	7.62	100.00%	76,200,000.00	3	NO	NO	YES	YES	YES	3
AGDAO PROPER	Parks and Recreational	0.01	100.00%	150,000.00	1	YES	YES	NO	YES	YES	1
AGDAO PROPER	Industrial	1.29	100.00%	19,350,000.00	3	YES	YES	NO	YES	YES	3

Table U-16. Urban Use Area, Adaptive Capacity Score, Flood Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
AGDAO PROPER	Commercial	19.23	84.90%	288,450,000.00	3	YES	YES	NO	YES	YES	3
WILFREDO AQUINO	Residential	1.51	5.78%	15,100,000.00	3	NO	NO	YES	YES	YES	3
WILFREDO AQUINO	Commercial	9.33	39.20%	139,950,000.00	3	YES	YES	NO	YES	YES	3
WILFREDO AQUINO	Industrial	0.01	8.33%	150,000.00	1	YES	YES	NO	YES	YES	1
PACIANO BANGOY	Residential	17.65	82.63%	176,500,000.00	3	NO	NO	YES	YES	YES	3
PACIANO BANGOY	Industrial	0.67	100.00%	10,050,000.00	3	YES	YES	NO	YES	YES	3
PACIANO BANGOY	Commercial	20.06	54.13%	300,900,000.00	3	YES	YES	NO	YES	YES	3
RAFAEL CASTILLO	Residential	7.41	62.43%	74,100,000.00	3	NO	NO	YES	YES	YES	3
RAFAEL CASTILLO	Commercial	1.77	10.78%	26,550,000.00	3	YES	YES	NO	YES	YES	3
RAFAEL CASTILLO	Industrial	0.18	1.93%	2,700,000.00	2	YES	YES	NO	YES	YES	2
CENTRO	Residential	18.39	80.94%	183,900,000.00	3	NO	NO	YES	YES	YES	3
CENTRO	Parks and Recreational	0.04	100.00%	600,000.00	2	YES	YES	NO	YES	YES	2
CENTRO	Industrial	8.83	82.29%	132,450,000.00	3	YES	YES	NO	YES	YES	3
CENTRO	Commercial	0.26	22.81%	3,900,000.00	2	YES	YES	NO	YES	YES	2
GOV. VICENTE DUTERTE	Residential	14.16	69.62%	141,600,000.00	3	NO	NO	YES	YES	YES	3
GOV. VICENTE DUTERTE	Commercial	2.49	50.30%	37,350,000.00	3	YES	YES	NO	YES	YES	3
GOV. VICENTE DUTERTE	Industrial	3.99	31.74%	59,850,000.00	3	YES	YES	NO	YES	YES	3
LEON GARCIA SR.	Residential	10.85	90.12%	108,500,000.00	3	NO	NO	YES	YES	YES	3
LEON GARCIA SR.	Parks and Recreational	0.08	100.00%	1,200,000.00	2	YES	YES	NO	YES	YES	2
LEON GARCIA SR.	Industrial	0.29	100.00%	4,350,000.00	3	YES	YES	NO	YES	YES	3
LEON GARCIA SR.	Commercial	0.82	77.36%	12,300,000.00	3	YES	YES	NO	YES	YES	3
LAPU - LAPU	Residential	17.27	72.93%	172,700,000.00	3	NO	NO	YES	YES	YES	3
LAPU - LAPU	Parks and Recreational	0.04	100.00%	600,000.00	2	YES	YES	NO	YES	YES	2
LAPU - LAPU	Commercial	0.89	55.28%	13,350,000.00	3	YES	YES	NO	YES	YES	3

Table U-16. Urban Use Area, Adaptive Capacity Score, Flood Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
LAPU - LAPU	Industrial	5.97	26.01%	89,550,000.00	3	YES	YES	NO	YES	YES	3
TOMAS MONTEVERDE	Residential	1.69	80.86%	16,900,000.00	3	NO	NO	YES	YES	YES	3
TOMAS MONTEVERDE	Industrial	0.83	100.00%	12,450,000.00	3	YES	YES	NO	YES	YES	3
TOMAS MONTEVERDE	Commercial	7.82	66.10%	117,300,000.00	3	YES	YES	NO	YES	YES	3
SAN ANTONIO	Residential	0.01	0.04%	100,000.00	1	NO	NO	YES	YES	YES	1
SAN ANTONIO	Commercial	0.08	0.18%	1,200,000.00	2	YES	YES	NO	YES	YES	2
UBALDE	Residential	0.93	15.66%	9,300,000.00	3	NO	NO	YES	YES	YES	3
UBALDE	Commercial	0.37	24.18%	5,550,000.00	3	YES	YES	NO	YES	YES	3
BAGUIO	Residential	8.10	67.33%	81,000,000.00	3	NO	NO	YES	YES	YES	3
BAGUIO	Agri-Industrial	3.03	49.11%	45,450,000.00	3	YES	YES	NO	YES	YES	3
GUMALANG	Parks and Recreational	0.05	100.00%	750,000.00	2	YES	YES	NO	YES	YES	2
GUMALANG	Agri-Industrial	0.30	1.41%	4,500,000.00	2	YES	YES	NO	YES	YES	2
MALAGOS	Residential	4.89	27.15%	48,900,000.00	3	NO	NO	YES	YES	YES	3
MALAGOS	Industrial	0.79	25.90%	11,850,000.00	3	YES	YES	NO	YES	YES	3
MALAGOS	Tourism	0.95	7.04%	14,250,000.00	3	YES	NO	YES	YES	YES	3
MALAGOS	Agri-Industrial	0.17	2.17%	2,550,000.00	2	YES	YES	NO	YES	YES	2
BUHANGIN	Industrial	0.46	10.45%	6,900,000.00	3	YES	YES	NO	YES	YES	3
BUHANGIN	Residential	9.41	2.81%	94,100,000.00	3	NO	NO	YES	YES	YES	3
BUHANGIN	Commercial	0.16	0.30%	2,400,000.00	2	YES	YES	NO	YES	YES	2
BUHANGIN	Cemetery	0.25	2.83%	3,750,000.00	2	YES	YES	NO	YES	YES	2
CABANTIAN	Residential	5.47	1.79%	54,700,000.00	3	NO	NO	YES	YES	YES	3
CABANTIAN	Industrial	0.04	0.15%	600,000.00	2	YES	YES	NO	YES	YES	2
CABANTIAN	Commercial	0.07	0.30%	1,050,000.00	2	YES	YES	NO	YES	YES	2
CALLAWA	Residential	0.11	1.39%	1,100,000.00	2	NO	NO	YES	YES	YES	2
COMMUNAL	Tourism	0.70	3.47%	10,500,000.00	3	YES	NO	YES	YES	YES	3
COMMUNAL	Residential	7.08	4.35%	70,800,000.00	3	NO	NO	YES	YES	YES	3

Table U-16. Urban Use Area, Adaptive Capacity Score, Flood Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
COMMUNAL	Commercial	0.02	0.17%	300,000.00	1	YES	YES	NO	YES	YES	1
INDANGAN	Tourism	0.005	50.00%	75,000.00	1	YES	YES	NO	YES	YES	1
INDANGAN	Commercial	0.45	26.32%	6,750,000.00	3	YES	YES	NO	YES	YES	3
INDANGAN	Residential	0.40	0.16%	4,000,000.00	2	NO	NO	YES	YES	YES	2
MANDUG	Agri-Industrial	6.54	99.85%	98,100,000.00	3	YES	YES	NO	YES	YES	3
MANDUG	Residential	20.99	12.46%	209,900,000.00	3	NO	NO	YES	YES	YES	3
PAMPANGA	Tourism	2.99	100.00%	44,850,000.00	3	YES	NO	YES	YES	YES	3
PAMPANGA	Industrial	25.60	95.92%	384,000,000.00	3	YES	YES	NO	YES	YES	3
PAMPANGA	Commercial	11.31	100.00%	169,650,000.00	3	YES	YES	NO	YES	YES	3
PAMPANGA	Residential	10.16	19.96%	101,600,000.00	3	NO	NO	YES	YES	YES	3
SASA	Residential	47.18	20.76%	471,800,000.00	3	NO	NO	YES	YES	YES	3
SASA	Industrial	10.27	10.95%	154,050,000.00	3	YES	YES	NO	YES	YES	3
SASA	Commercial	13.92	23.95%	208,800,000.00	3	YES	YES	NO	YES	YES	3
SASA	Parks and Recreational	0.02	9.52%	300,000.00	1	YES	YES	NO	YES	YES	1
TIGATTO	Residential	102.74	40.08%	1,027,400,000.00	3	NO	NO	YES	YES	YES	3
TIGATTO	Commercial	1.47	45.23%	22,050,000.00	3	YES	YES	NO	YES	YES	3
TIGATTO	Industrial	3.76	28.86%	56,400,000.00	3	YES	YES	NO	YES	YES	3
WAAN	Residential	21.29	55.33%	212,900,000.00	3	NO	NO	YES	YES	YES	3
WAAN	Parks and Recreational	0.08	100.00%	1,200,000.00	2	YES	YES	NO	YES	YES	2
A. ANGLIONGTO	Residential	6.30	4.05%	63,000,000.00	3	NO	NO	YES	YES	YES	3
A. ANGLIONGTO	Industrial	0.00002	0.0001%	300.00	1	YES	YES	NO	YES	YES	1
A. ANGLIONGTO	Commercial	0.51	1.32%	7,650,000.00	3	YES	YES	NO	YES	YES	3
V. HIZON	Tourism	0.67	44.08%	10,050,000.00	3	YES	NO	YES	YES	YES	3
V. HIZON	Commercial	13.51	53.50%	202,650,000.00	3	YES	YES	NO	YES	YES	3
V. HIZON	Residential	17.98	15.15%	179,800,000.00	3	NO	NO	YES	YES	YES	3
V. HIZON	Industrial	2.36	37.40%	35,400,000.00	3	YES	YES	NO	YES	YES	3
BUNAWAN	Residential	35.10	28.18%	351,000,000.00	3	NO	NO	YES	YES	YES	3

Table U-16. Urban Use Area, Adaptive Capacity Score, Flood Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
BUNAWAN	Parks and Recreational	0.11	45.83%	1,650,000.00	2	YES	YES	NO	YES	YES	2
BUNAWAN	Commercial	5.74	48.40%	86,100,000.00	3	YES	YES	NO	YES	YES	3
BUNAWAN	Industrial	25.79	22.30%	386,850,000.00	3	YES	YES	NO	YES	YES	3
BUNAWAN	Agri-Industrial	0.10	5.38%	1,500,000.00	2	YES	YES	NO	YES	YES	2
GATUNGAN	Parks and Recreational	0.01	100.00%	150,000.00	1	YES	YES	NO	YES	YES	1
GATUNGAN	Residential	0.04	2.01%	400,000.00	1	NO	NO	YES	YES	YES	1
ILANG	Residential	7.03	5.59%	70,300,000.00	3	NO	NO	YES	YES	YES	3
ILANG	Industrial	7.34	8.14%	110,100,000.00	3	YES	YES	NO	YES	YES	3
LASANG	Residential	20.65	40.71%	206,500,000.00	3	NO	NO	YES	YES	YES	3
LASANG	Parks and Recreational	0.07	100.00%	1,050,000.00	2	YES	YES	NO	YES	YES	2
LASANG	Agri-Industrial	4.10	43.66%	61,500,000.00	3	YES	YES	NO	YES	YES	3
LASANG	Industrial	6.57	17.20%	98,550,000.00	3	YES	YES	NO	YES	YES	3
LASANG	Commercial	0.13	6.10%	1,950,000.00	2	YES	YES	NO	YES	YES	2
MAHAYAG	Residential	0.74	1.28%	7,400,000.00	3	NO	NO	YES	YES	YES	3
MAHAYAG	Industrial	1.17	4.47%	17,550,000.00	3	YES	YES	NO	YES	YES	3
MUDIANG	Agri-Industrial	0.23	12.17%	3,450,000.00	2	YES	YES	NO	YES	YES	2
MUDIANG	Residential	1.00	1.47%	10,000,000.00	3	NO	NO	YES	YES	YES	3
PANACAN	Tourism	0.67	69.79%	10,050,000.00	3	YES	NO	YES	YES	YES	3
PANACAN	Residential	31.89	12.20%	318,900,000.00	3	NO	NO	YES	YES	YES	3
PANACAN	Parks and Recreational	1.06	15.21%	15,900,000.00	3	YES	YES	NO	YES	YES	3
PANACAN	Industrial	15.16	12.58%	227,400,000.00	3	YES	YES	NO	YES	YES	3
PANACAN	Commercial	0.91	12.17%	13,650,000.00	3	YES	YES	NO	YES	YES	3
SAN ISIDRO	Residential	0.08	0.30%	800,000.00	2	NO	NO	YES	YES	YES	2

Table U-16. Urban Use Area, Adaptive Capacity Score, Flood Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
SAN ISIDRO	Industrial	0.03	0.71%	450,000.00	1	YES	YES	NO	YES	YES	1
TIBUNGCO	Residential	14.31	10.84%	143,100,000.00	3	NO	NO	YES	YES	YES	3
TIBUNGCO	Industrial	10.48	25.11%	157,200,000.00	3	YES	YES	NO	YES	YES	3
TIBUNGCO	Commercial	0.72	7.29%	10,800,000.00	3	YES	YES	NO	YES	YES	3
TIBUNGCO	Agri-Industrial	0.13	3.12%	1,950,000.00	2	YES	YES	NO	YES	YES	2
BIAO JOAQUIN	Residential	2.38	74.38%	23,800,000.00	3	NO	NO	YES	YES	YES	3
BIAO JOAQUIN	Agri-Industrial	16.06	79.70%	240,900,000.00	3	YES	YES	NO	YES	YES	3
CALINAN	Residential	107.19	99.88%	1,071,900,000.00	3	NO	NO	YES	YES	YES	3
CALINAN	Parks and Recreational	0.75	100.00%	11,250,000.00	3	YES	YES	NO	YES	YES	3
CALINAN	Industrial	2.17	100.00%	32,550,000.00	3	YES	YES	NO	YES	YES	3
CALINAN	Commercial	19.53	100.00%	292,950,000.00	3	YES	YES	NO	YES	YES	3
CALINAN	Cemetery	5.97	100.00%	89,550,000.00	3	YES	YES	NO	YES	YES	3
CALINAN	Agri-Industrial	3.12	100.00%	46,800,000.00	3	YES	YES	NO	YES	YES	3
CAWAYAN	Residential	0.30	16.30%	3,000,000.00	2	NO	NO	YES	YES	YES	2
DACUDAO	Agri-Industrial	6.60	17.49%	99,000,000.00	3	YES	YES	NO	YES	YES	3
DACUDAO	Residential	0.29	4.07%	2,900,000.00	2	NO	NO	YES	YES	YES	2
DALAGDAG	Residential	1.18	46.46%	11,800,000.00	3	NO	NO	YES	YES	YES	3
DOMINGA	Residential	1.73	97.74%	17,300,000.00	3	NO	NO	YES	YES	YES	3
INAYANGAN	Residential	0.01	0.03%	100,000.00	1	NO	NO	YES	YES	YES	1
LACSON	Residential	1.30	25.19%	13,000,000.00	3	NO	NO	YES	YES	YES	3
LACSON	Agri-Industrial	1.06	9.62%	15,900,000.00	3	YES	YES	NO	YES	YES	3
LAMANAN	Residential	0.06	1.32%	600,000.00	2	NO	NO	YES	YES	YES	2
LAMPIANAO	Residential	0.29	13.55%	2,900,000.00	2	NO	NO	YES	YES	YES	2
MEGKAWAYAN	Residential	0.06	1.09%	600,000.00	2	NO	NO	YES	YES	YES	2

Table U-16. Urban Use Area, Adaptive Capacity Score, Flood Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
PANGYAN	Residential	1.99	39.10%	19,900,000.00	3	NO	NO	YES	YES	YES	3
RIVERSIDE	Residential	19.33	91.31%	193,300,000.00	3	NO	NO	YES	YES	YES	3
RIVERSIDE	Parks and Recreational	0.07	100.00%	1,050,000.00	2	YES	YES	NO	YES	YES	2
RIVERSIDE	Industrial	1.01	84.17%	15,150,000.00	3	YES	YES	NO	YES	YES	3
RIVERSIDE	Commercial	1.11	100.00%	16,650,000.00	3	YES	YES	NO	YES	YES	3
RIVERSIDE	Agri-Industrial	5.49	66.87%	82,350,000.00	3	YES	YES	NO	YES	YES	3
RIVERSIDE	Cemetery	6.20	38.92%	93,000,000.00	3	YES	YES	NO	YES	YES	3
SALOY	Residential	0.01	0.56%	100,000.00	1	NO	NO	YES	YES	YES	1
SIRIB	Residential	1.96	25.93%	19,600,000.00	3	NO	NO	YES	YES	YES	3
SUBASTA	Residential	6.61	69.14%	66,100,000.00	3	NO	NO	YES	YES	YES	3
SUBASTA	Agri-Industrial	9.58	71.23%	143,700,000.00	3	YES	YES	NO	YES	YES	3
TALOMO RIVER	Residential	19.81	90.79%	198,100,000.00	3	NO	NO	YES	YES	YES	3
TALOMO RIVER	Industrial	0.67	100.00%	10,050,000.00	3	YES	YES	NO	YES	YES	3
TALOMO RIVER	Commercial	0.30	100.00%	4,500,000.00	2	YES	YES	NO	YES	YES	2
TALOMO RIVER	Agri-Industrial	7.49	40.84%	112,350,000.00	3	YES	YES	NO	YES	YES	3
WANGAN	Residential	1.34	40.24%	13,400,000.00	3	NO	NO	YES	YES	YES	3
WANGAN	Cemetery	0.71	100.00%	10,650,000.00	3	YES	YES	NO	YES	YES	3
WANGAN	Agri-Industrial	0.59	12.55%	8,850,000.00	3	YES	YES	NO	YES	YES	3
GUMITAN	Residential	0.03	0.36%	300,000.00	1	NO	NO	YES	YES	NO	1
MALAMBA	Residential	1.40	10.67%	14,000,000.00	3	NO	NO	YES	YES	NO	3
MARILOG	Residential	0.10	0.11%	1,000,000.00	2	NO	NO	YES	YES	NO	2
SALAYSAY	Residential	0.03	0.30%	300,000.00	1	NO	NO	YES	YES	NO	1
SUAWAN	Agri-Industrial	1.15	6.02%	17,250,000.00	3	YES	YES	NO	YES	NO	3
TAMUGAN	Residential	8.77	86.06%	87,700,000.00	3	NO	NO	YES	YES	NO	3

Table U-16. Urban Use Area, Adaptive Capacity Score, Flood Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
TAMUGAN	Agri-Industrial	8.25	38.35%	123,750,000.00	3	YES	YES	NO	YES	NO	3
MALABOG	Residential	0.03	0.16%	300,000.00	1	NO	NO	YES	YES	NO	1
SALAPAWAN	Residential	0.01	0.33%	100,000.00	1	NO	NO	YES	YES	NO	1
SUMIMAO	Residential	0.66	37.08%	6,600,000.00	3	NO	NO	YES	YES	NO	3
TAPAK	Residential	1.93	10.34%	19,300,000.00	3	NO	NO	YES	YES	NO	3
BAGO APLAYA	Residential	28.28	29.63%	282,800,000.00	3	NO	NO	YES	YES	YES	3
BAGO APLAYA	Industrial	5.86	36.08%	87,900,000.00	3	YES	YES	NO	YES	YES	3
BAGO APLAYA	Commercial	4.13	31.99%	61,950,000.00	3	YES	YES	NO	YES	YES	3
BAGO APLAYA	Parks and Recreational	0.40	7.34%	6,000,000.00	3	YES	YES	NO	YES	YES	3
BAGO GALLERA	Residential	49.25	37.90%	492,500,000.00	3	NO	NO	YES	YES	YES	3
BAGO GALLERA	Industrial	0.11	91.67%	1,650,000.00	2	YES	YES	NO	YES	YES	2
BAGO GALLERA	Commercial	0.28	43.08%	4,200,000.00	2	YES	YES	NO	YES	YES	2
BAGO GALLERA	Parks and Recreational	11.63	18.32%	174,450,000.00	3	YES	YES	NO	YES	YES	3
BALIOK	Residential	14.12	18.24%	141,200,000.00	3	NO	NO	YES	YES	YES	3
BALIOK	Parks and Recreational	0.09	25.71%	1,350,000.00	2	YES	YES	NO	YES	YES	2
BUCANA	Tourism	0.30	44.78%	4,500,000.00	2	YES	NO	YES	YES	YES	2
BUCANA	Residential	86.42	39.83%	864,200,000.00	3	NO	NO	YES	YES	YES	3
BUCANA	Parks and Recreational	0.22	11.46%	3,300,000.00	2	YES	YES	NO	YES	YES	2
BUCANA	Commercial	6.95	10.95%	104,250,000.00	3	YES	YES	NO	YES	YES	3
CATALUNAN GRANDE	Residential	69.62	23.07%	696,200,000.00	3	NO	NO	YES	YES	YES	3
CATALUNAN GRANDE	Agri-Industrial	9.74	45.84%	146,100,000.00	3	YES	YES	NO	YES	YES	3
CATALUNAN GRANDE	Parks and Recreational	1.82	31.38%	27,300,000.00	3	YES	YES	NO	YES	YES	3
CATALUNAN GRANDE	Commercial	0.88	14.59%	13,200,000.00	3	YES	YES	NO	YES	YES	3

Table U-16. Urban Use Area, Adaptive Capacity Score, Flood Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
CATALUNAN PEQUEÑO	Tourism	0.22	16.67%	3,300,000.00	2	YES	NO	YES	YES	YES	2
CATALUNAN PEQUEÑO	Residential	26.64	13.50%	266,400,000.00	3	NO	NO	YES	YES	YES	3
CATALUNAN PEQUEÑO	Industrial	0.002	0.09%	30,000.00	1	YES	YES	NO	YES	YES	1
CATALUNAN PEQUEÑO	Commercial	0.30	8.45%	4,500,000.00	2	YES	YES	NO	YES	YES	2
CATALUNAN PEQUEÑO	Agri-Industrial	0.74	5.42%	11,100,000.00	3	YES	YES	NO	YES	YES	3
DUMOY	Tourism	4.00	68.61%	60,000,000.00	3	YES	NO	YES	YES	YES	3
DUMOY	Parks and Recreational	5.15	61.82%	77,250,000.00	3	YES	YES	NO	YES	YES	3
DUMOY	Residential	28.49	17.50%	284,900,000.00	3	NO	NO	YES	YES	YES	3
DUMOY	Industrial	0.25	0.77%	3,750,000.00	2	YES	YES	NO	YES	YES	2
LANGUB	Residential	0.01	0.07%	100,000.00	1	NO	NO	YES	YES	YES	1
MA-A	Residential	136.31	31.83%	1,363,100,000.00	3	NO	NO	YES	YES	YES	3
MA-A	Parks and Recreational	5.36	41.26%	80,400,000.00	3	YES	YES	NO	YES	YES	3
MA-A	Industrial	18.04	80.00%	270,600,000.00	3	YES	YES	NO	YES	YES	3
MA-A	Tourism	5.60	33.82%	84,000,000.00	3	YES	NO	YES	YES	YES	3
MA-A	Commercial	27.80	30.83%	417,000,000.00	3	YES	YES	NO	YES	YES	3
MAGTUOD	Residential	10.06	18.63%	100,600,000.00	3	NO	NO	YES	YES	YES	3
MAGTUOD	Parks and Recreational	0.41	3.91%	6,150,000.00	3	YES	YES	NO	YES	YES	3
MAGTUOD	Commercial	0.004	0.52%	60,000.00	1	YES	YES	NO	YES	YES	1
MATINA APLAYA	Residential	72.79	46.80%	727,900,000.00	3	NO	NO	YES	YES	YES	3
MATINA APLAYA	Parks and Recreational	1.37	60.35%	20,550,000.00	3	YES	YES	NO	YES	YES	3
MATINA APLAYA	Commercial	13.87	67.72%	208,050,000.00	3	YES	YES	NO	YES	YES	3

Table U-16. Urban Use Area, Adaptive Capacity Score, Flood Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
MATINA APLAYA	Tourism	0.47	20.00%	7,050,000.00	3	YES	NO	YES	YES	YES	3
MATINA APLAYA	Industrial	0.72	24.66%	10,800,000.00	3	YES	YES	NO	YES	YES	3
MATINA CROSSING	Residential	66.49	26.55%	664,900,000.00	3	NO	NO	YES	YES	YES	3
MATINA CROSSING	Commercial	20.99	41.27%	314,850,000.00	3	YES	YES	NO	YES	YES	3
MATINA CROSSING	Industrial	1.33	23.21%	19,950,000.00	3	YES	YES	NO	YES	YES	3
MATINA CROSSING	Parks and Recreational	0.01	0.05%	150,000.00	1	YES	YES	NO	YES	YES	1
MATINA PANGI	Residential	51.00	33.51%	510,000,000.00	3	NO	NO	YES	YES	YES	3
MATINA PANGI	Industrial	0.03	75.00%	450,000.00	1	YES	YES	NO	YES	YES	1
MATINA PANGI	Parks and Recreational	0.10	18.52%	1,500,000.00	2	YES	YES	NO	YES	YES	2
TALOMO	Tourism	1.29	83.23%	19,350,000.00	3	YES	NO	YES	YES	YES	3
TALOMO	Residential	226.76	76.18%	2,267,600,000.00	3	NO	NO	YES	YES	YES	3
TALOMO	Industrial	9.85	62.15%	147,750,000.00	3	YES	YES	NO	YES	YES	3
TALOMO	Commercial	13.97	67.65%	209,550,000.00	3	YES	YES	NO	YES	YES	3
TALOMO	Parks and Recreational	1.72	31.50%	25,800,000.00	3	YES	YES	NO	YES	YES	3
ALAMBRE	Residential	0.09	1.14%	900,000.00	2	NO	NO	YES	YES	YES	2
ALAMBRE	Agri-Industrial	0.0003	0.0024%	4,500.00	1	YES	YES	NO	YES	YES	1
BANKAS HEIGHTS	Residential	18.61	63.32%	186,100,000.00	3	NO	NO	YES	YES	YES	3
BANKAS HEIGHTS	Agri-Industrial	0.18	10.78%	2,700,000.00	2	YES	YES	NO	YES	YES	2
BATO	Commercial	0.33	70.21%	4,950,000.00	2	YES	YES	NO	YES	YES	2
BATO	Residential	2.08	4.64%	20,800,000.00	3	NO	NO	YES	YES	YES	3
CROSSING BAYABAS	Residential	21.61	23.41%	216,100,000.00	3	NO	NO	YES	YES	YES	3
BINUGAO	Residential	26.77	50.70%	267,700,000.00	3	NO	NO	YES	YES	YES	3

Table U-16. Urban Use Area, Adaptive Capacity Score, Flood Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
BINUGAO	Parks and Recreational	1.34	100.00%	20,100,000.00	3	YES	YES	NO	YES	YES	3
BINUGAO	Industrial	48.27	76.18%	724,050,000.00	3	YES	YES	NO	YES	YES	3
BINUGAO	Commercial	1.44	41.86%	21,600,000.00	3	YES	YES	NO	YES	YES	3
BINUGAO	Agri-Industrial	0.15	1.11%	2,250,000.00	2	YES	YES	NO	YES	YES	2
CATIGAN	Residential	0.24	3.80%	2,400,000.00	2	NO	NO	YES	YES	YES	2
DALIAO	Tourism	1.46	81.56%	21,900,000.00	3	YES	NO	YES	YES	YES	3
DALIAO	Residential	23.42	21.73%	351,300,000.00	3	NO	NO	YES	YES	YES	3
DALIAO	Parks and Recreational	0.07	43.75%	1,050,000.00	2	YES	YES	NO	YES	YES	2
DALIAO	Industrial	7.84	53.15%	117,600,000.00	3	YES	YES	NO	YES	YES	3
EDEN	Tourism	9.12	9.27%	136,800,000.00	3	YES	NO	YES	YES	YES	3
EDEN	Residential	2.35	4.56%	23,500,000.00	3	NO	NO	YES	YES	YES	3
KILATE	Residential	0.11	4.21%	1,100,000.00	2	NO	NO	YES	YES	YES	2
LIZADA	Agri-Industrial	2.10	40.54%	31,500,000.00	3	YES	YES	NO	YES	YES	3
LIZADA	Residential	19.82	19.63%	198,200,000.00	3	NO	NO	YES	YES	YES	3
LIZADA	Industrial	1.42	10.57%	21,300,000.00	3	YES	YES	NO	YES	YES	3
LUBOGAN	Residential	32.08	35.57%	481,200,000.00	3	NO	NO	YES	YES	YES	3
LUBOGAN	Parks and Recreational	0.07	6.36%	1,050,000.00	2	YES	YES	NO	YES	YES	2
LUBOGAN	Cemetery	0.09	1.59%	1,350,000.00	2	YES	YES	NO	YES	YES	2
MARAPANGI	Tourism	0.02	100.00%	300,000.00	1	YES	NO	YES	YES	YES	1
MARAPANGI	Agri-Industrial	8.44	85.69%	126,600,000.00	3	YES	YES	NO	YES	YES	3
MARAPANGI	Residential	12.97	16.86%	129,700,000.00	3	NO	NO	YES	YES	YES	3

Table U-16. Urban Use Area, Adaptive Capacity Score, Flood Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
SIBULAN	Residential	0.01	0.47%	100,000.00	1	NO	NO	YES	YES	YES	1
SIRAWAN	Residential	22.25	26.51%	222,500,000.00	3	NO	NO	YES	YES	YES	3
SIRAWAN	Parks and Recreational	0.04	100.00%	600,000.00	2	YES	YES	NO	YES	YES	2
SIRAWAN	Agri-Industrial	6.23	7.31%	93,450,000.00	3	YES	YES	NO	YES	YES	3
TAGAKPAN	Residential	6.82	70.53%	68,200,000.00	3	NO	NO	YES	YES	YES	3
TAGAKPAN	Parks and Recreational	2.42	100.00%	36,300,000.00	3	YES	YES	NO	YES	YES	3
TAGAKPAN	Agri-Industrial	0.61	100.00%	9,150,000.00	3	YES	YES	NO	YES	YES	3
TAGLUNO	Residential	0.09	3.96%	900,000.00	2	NO	NO	YES	YES	YES	2
TIBULOY	Agri-Industrial	1.20	15.48%	18,000,000.00	3	YES	YES	NO	YES	YES	3
TUNGKALAN	Residential	0.05	1.30%	750,000.00	2	NO	NO	YES	YES	YES	2
ANGALAN	Agri-Industrial	12.30	100.00%	184,500,000.00	3	YES	YES	NO	YES	YES	3
ANGALAN	Residential	11.73	100.00%	117,300,000.00	3	NO	NO	YES	YES	YES	3
ANGALAN	Parks and Recreational	0.06	100.00%	900,000.00	2	YES	YES	NO	YES	YES	2
BAGO OSHIRO	Residential	2.96	2.14%	29,600,000.00	3	NO	NO	YES	YES	YES	3
BALENGAENG	Agri-Industrial	35.49	100.00%	532,350,000.00	3	YES	YES	NO	YES	YES	3
BALENGAENG	Residential	2.27	100.00%	22,700,000.00	3	NO	NO	YES	YES	YES	3
BALENGAENG	Parks and Recreational	0.05	100.00%	750,000.00	2	YES	YES	NO	YES	YES	2
BIAO ESCUELA	Parks and Recreational	0.04	100.00%	600,000.00	2	YES	YES	NO	YES	YES	2

Table U-16. Urban Use Area, Adaptive Capacity Score, Flood Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
STO. NIÑO	Commercial	2.86	69.25%	42,900,000.00	3	YES	YES	NO	YES	YES	3
STO. NIÑO	Residential	8.74	10.81%	87,400,000.00	3	NO	NO	YES	YES	YES	3
TACUNAN	Residential	31.80	60.27%	318,000,000.00	3	NO	NO	YES	YES	YES	3
TACUNAN	Parks and Recreational	3.96	98.51%	59,400,000.00	3	YES	YES	NO	YES	YES	3
TACUNAN	Cemetery	0.003	100.00%	45,000.00	1	NO	NO	NO	YES	YES	1
TALANDANG	Residential	3.19	40.08%	31,900,000.00	3	NO	NO	YES	YES	YES	3
TALANDANG	Agri-Industrial	6.23	25.26%	93,450,000.00	3	YES	YES	NO	YES	YES	3
TUGBOK	Tourism	0.07	100.00%	1,050,000.00	2	YES	NO	YES	YES	YES	2
TUGBOK	Residential	107.98	94.38%	1,079,800,000.00	3	NO	NO	YES	YES	YES	3
TUGBOK	Industrial	0.75	100.00%	11,250,000.00	3	YES	YES	NO	YES	YES	3
TUGBOK	Commercial	2.59	100.00%	38,850,000.00	3	YES	YES	NO	YES	YES	3
TUGBOK	Cemetery	3.97	100.00%	59,550,000.00	3	YES	YES	NO	YES	YES	3
TUGBOK	Agri-Industrial	3.83	81.49%	57,450,000.00	3	YES	YES	NO	YES	YES	3
ULA	Residential	7.04	49.61%	70,400,000.00	3	NO	NO	YES	YES	YES	3
ULA	Parks and Recreational	0.05	50.00%	750,000.00	2	YES	YES	NO	YES	YES	2
ULA	Industrial	2.15	90.34%	32,250,000.00	3	YES	YES	NO	YES	YES	3
ULA	Agri-Industrial	16.35	98.97%	245,250,000.00	3	YES	YES	NO	YES	YES	3

Table U-16. Urban Use Area, Adaptive Capacity Score, Flood Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
BIAO ESCUELA	Agri-Industrial	16.81	46.12%	252,150,000.00	3	YES	YES	NO	YES	YES	3
BIAO ESCUELA	Residential	1.62	18.86%	16,200,000.00	3	NO	NO	YES	YES	YES	3
BIAO GUIANGA	Agri-Industrial	6.20	100.00%	93,000,000.00	3	YES	YES	NO	YES	YES	3
BIAO GUIANGA	Residential	1.69	44.13%	16,900,000.00	3	NO	NO	YES	YES	YES	3
MATINA BIAO	Tourism	0.41	100.00%	6,150,000.00	3	YES	NO	YES	YES	YES	3
MATINA BIAO	Residential	1.80	64.98%	18,000,000.00	3	NO	NO	YES	YES	YES	3
MATINA BIAO	Parks and Recreational	0.06	100.00%	900,000.00	2	YES	YES	NO	YES	YES	2
MATINA BIAO	Agri-Industrial	5.43	78.70%	81,450,000.00	3	YES	YES	NO	YES	YES	3
LOS AMIGOS	Tourism	0.63	100.00%	9,450,000.00	3	YES	NO	YES	YES	YES	3
LOS AMIGOS	Residential	38.62	96.57%	386,200,000.00	3	NO	NO	YES	YES	YES	3
LOS AMIGOS	Industrial	3.31	100.00%	49,650,000.00	3	YES	YES	NO	YES	YES	3
LOS AMIGOS	Commercial	1.03	100.00%	15,450,000.00	3	YES	YES	NO	YES	YES	3
MANAMBULAN	Residential	9.10	94.30%	91,000,000.00	3	NO	NO	YES	YES	YES	3
MANUEL GUIANGA	Agri-Industrial	1.69	37.39%	25,350,000.00	3	YES	YES	NO	YES	YES	3
MANUEL GUIANGA	Residential	0.17	2.33%	1,700,000.00	2	NO	NO	YES	YES	YES	2
MINTAL	Residential	65.05	43.31%	650,500,000.00	3	NO	NO	YES	YES	YES	3
MINTAL	Parks and Recreational	0.30	73.17%	4,500,000.00	2	YES	YES	NO	YES	YES	2
MINTAL	Commercial	6.08	100.00%	91,200,000.00	3	YES	YES	NO	YES	YES	3
MINTAL	Industrial	0.03	2.11%	450,000.00	1	YES	YES	NO	YES	YES	1
NEW CARMEN	Residential	13.17	84.21%	131,700,000.00	3	NO	NO	YES	YES	YES	3
NEW VALENCIA	Residential	2.24	45.34%	22,400,000.00	3	NO	NO	YES	YES	YES	3

LANDSLIDE

Out of the 90 exposed barangays, 79 barangays have the lowest adaptive capacity. The above identified barangays have a total area of 4,954.82 hectares with 22.76% of it is highly susceptible to landslide which costs an exposed value of Php 116,384,000,000. Comparing the data between the degree of impact and the adaptive capacity, a result can be concluded that the adaptive capacity of the residential area is at its lowest due to the very high level of no access/area coverage to infrastructure related hazard mitigation measures of the area.

Table U-17. Urban Use Area, Adaptive Capacity Score, Landslide Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score Average	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
19-B	Commercial	1.86	6.59%	279,000,000.00	2	Yes	Yes	No	Yes	Yes	2
19-B	Residential	1.32	0.73%	132,000,000.00	2	No	No	Yes	Yes	Yes	3
CARMEN	Residential	1.26	84.56%	126,000,000.00	3	No	No	Yes	Yes	Yes	3
GUMALANG	Agri-Industrial	2.68	12.60%	402,000,000.00	3	Yes	Yes	No	Yes	Yes	3
GUMALANG	Residential	0.38	8.33%	38,000,000.00	2	No	No	Yes	Yes	Yes	2
MALAGOS	Agri-Industrial	0.43	5.99%	64,500,000.00	3	Yes	Yes	No	Yes	Yes	3
MALAGOS	Tourism	0.12	0.89%	18,000,000.00	2	Yes	Yes	No	Yes	Yes	2
TAMBOBONG	Residential	4.49	100.00%	449,000,000.00	3	No	No	Yes	Yes	Yes	3
TAWAN-TAWAN	Residential	0.04	1.54%	4,000,000.00	1	No	No	Yes	Yes	Yes	2
ACACIA	Residential	15.14	100.00%	1,514,000,000.00	3	No	No	Yes	Yes	Yes	3
ACACIA	Parks and Recreational	0.04	95.24%	6,000,000.00	2	Yes	Yes	No	Yes	Yes	2
BUHANGIN	Cemetery	7.54	85.29%	1,131,000,000.00	3	Yes	Yes	No	Yes	Yes	3
BUHANGIN	Industrial	2.45	55.68%	367,500,000.00	3	Yes	Yes	No	Yes	Yes	3
BUHANGIN	Parks and Recreational	0.26	27.08%	39,000,000.00	2	Yes	Yes	No	Yes	Yes	2
BUHANGIN	Residential	36.71	10.95%	3,671,000,000.00	3	No	No	Yes	Yes	Yes	3
BUHANGIN	Commercial	0.54	1.02%	81,000,000.00	2	Yes	Yes	No	Yes	Yes	3

Table U-17. Urban Use Area, Adaptive Capacity Score, Landslide Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
CABANTIAN	Cemetery	0.28	100.00%	42,000,000.00	3	Yes	Yes	No	Yes	Yes	2
CABANTIAN	Residential	83.13	27.31%	8,313,000,000.00	3	No	No	Yes	Yes	Yes	3
CABANTIAN	Commercial	3.71	16.06%	556,500,000.00	3	Yes	Yes	No	Yes	Yes	3
CABANTIAN	Industrial	1.69	6.39%	253,500,000.00	3	Yes	Yes	No	Yes	Yes	3
CALLAWA	Residential	0.68	8.61%	68,000,000.00	2	No	No	Yes	Yes	Yes	3
COMMUNAL	Tourism	12.51	62.08%	1,876,500,000.00	3	Yes	Yes	No	Yes	Yes	3
COMMUNAL	Residential	67.72	41.86%	6,772,000,000.00	3	No	No	Yes	Yes	Yes	3
COMMUNAL	Commercial	1.26	10.51%	189,000,000.00	3	Yes	Yes	No	Yes	Yes	3
COMMUNAL	Industrial	0.43	9.60%	64,500,000.00	3	Yes	Yes	No	Yes	Yes	3
INDANGAN	Tourism	0.01	100.00%	1,500,000.00	2	Yes	Yes	No	Yes	Yes	2
INDANGAN	Commercial	1.58	92.94%	237,000,000.00	3	Yes	Yes	No	Yes	Yes	3
INDANGAN	Parks and Recreational	33.27	59.14%	4,990,500,000.00	3	Yes	Yes	No	Yes	Yes	3
INDANGAN	Industrial	1.86	16.67%	279,000,000.00	3	Yes	Yes	No	Yes	Yes	3
INDANGAN	Residential	23.10	9.33%	2,310,000,000.00	3	No	No	Yes	Yes	Yes	3
MANDUG	Parks and Recreational	20.19	62.39%	3,028,500,000.00	2	Yes	Yes	No	Yes	Yes	3
MANDUG	Residential	20.17	11.9781%	2,017,000,000.00	3	No	No	Yes	Yes	Yes	3
MANDUG	Agri-Industrial	0.32	4.89%	48,000,000.00	2	Yes	Yes	No	Yes	Yes	2
MANDUG	Industrial	0.90	4.50%	135,000,000.00	3	Yes	Yes	No	Yes	Yes	3
SASA	Residential	1.14	0.51%	114,000,000.00	2	No	No	Yes	Yes	Yes	3
TIGATTO	Industrial	7.17	55.07%	1,075,500,000.00	3	No	No	Yes	Yes	Yes	3
TIGATTO	Residential	39.43	15.38%	3,943,000,000.00	3	Yes	Yes	No	Yes	Yes	3
WAAN	Cemetery	3.83	100.00%	574,500,000.00	3	No	No	Yes	Yes	Yes	3
WAAN	Residential	7.17	18.63%	717,000,000.00	3	Yes	Yes	No	Yes	Yes	3
A. ANGLIONGTO	Residential	0.72	0.46%	72,000,000.00	1	No	No	Yes	Yes	Yes	2
A. ANGLIONGTO	Industrial	0.01	0.06%	1,500,000.00	1	Yes	Yes	No	Yes	Yes	2
BUNAWAN	Industrial	11.07	9.58%	1,660,500,000.00	3	Yes	Yes	No	Yes	Yes	3
BUNAWAN	Residential	7.75	6.26%	775,000,000.00	3	No	No	Yes	Yes	Yes	3

Table U-17. Urban Use Area, Adaptive Capacity Score, Landslide Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
GATUNGAN	Agri-Industrial	2.17	100.00%	325,500,000.00	3	Yes	Yes	No	Yes	Yes	3
GATUNGAN	Industrial	0.38	100.00%	57,000,000.00	3	Yes	Yes	No	Yes	Yes	3
GATUNGAN	Parks and Recreational	0.01	100.00%	1,200,000.00	1	Yes	Yes	No	Yes	Yes	2
GATUNGAN	Residential	1.70	85.86%	170,000,000.00	3	No	No	Yes	Yes	Yes	3
ILANG	Residential	16.66	13.26%	1,666,000,000.00	3	No	No	Yes	Yes	Yes	3
ILANG	Industrial	0.07	0.08%	10,500,000.00	1	Yes	Yes	No	Yes	Yes	2
MAHAYAG	Agri-Industrial	6.41	24.48%	961,500,000.00	3	Yes	Yes	No	Yes	Yes	3
MAHAYAG	Industrial	15.68	22.37%	2,352,000,000.00	3	Yes	Yes	No	Yes	Yes	3
MAHAYAG	Residential	7.19	12.45%	719,000,000.00	3	No	No	Yes	Yes	Yes	3
MAHAYAG	Commercial	0.39	4.52%	58,500,000.00	3	Yes	Yes	No	Yes	Yes	3
MUDIANG	Residential	38.15	56.14%	3,815,000,000.00	3	Yes	Yes	No	Yes	Yes	3
MUDIANG	Industrial	3.09	48.13%	463,500,000.00	3	Yes	Yes	No	Yes	Yes	3
MUDIANG	Agri-Industrial	0.42	22.34%	63,000,000.00	3	No	No	Yes	Yes	Yes	3
PANACAN	Residential	67.73	26.36%	6,773,000,000.00	3	Yes	Yes	No	Yes	Yes	3
PANACAN	Industrial	21.00	17.45%	3,150,000,000.00	3	No	No	Yes	Yes	Yes	3
SAN ISIDRO	Residential	3.40	12.85%	340,000,000.00	3	Yes	Yes	No	Yes	Yes	3
SAN ISIDRO	Industrial	0.01	0.24%	1,500,000.00	1	No	No	Yes	Yes	Yes	2
TIBUNGCO	Agri-Industrial	0.99	23.74%	148,500,000.00	3	No	No	Yes	Yes	Yes	3
TIBUNGCO	Industrial	8.15	19.53%	1,222,500,000.00	3	Yes	Yes	No	Yes	Yes	3
TIBUNGCO	Residential	18.18	13.77%	1,818,000,000.00	3	Yes	Yes	No	Yes	Yes	3
BIAO JOAQUIN	Residential	0.82	25.71%	82,000,000.00	2	No	No	Yes	Yes	Yes	3
BIAO JOAQUIN	Agri-Industrial	4.09	20.30%	613,500,000.00	2	Yes	Yes	No	Yes	Yes	3
CALINAN	Residential	0.02	0.02%	2,000,000.00	1	No	No	Yes	Yes	Yes	2
DACUDAO	Agri-Industrial	2.24	5.94%	336,000,000.00	3	Yes	Yes	No	Yes	Yes	3

Table U-17. Urban Use Area, Adaptive Capacity Score, Landslide Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
DALAGDAG	Residential	1.14	44.88%	114,000,000.00	3	No	No	Yes	Yes	Yes	3
DOMINGA	Residential	0.11	6.25%	11,000,000.00	2	No	No	Yes	Yes	Yes	2
INAYANGAN	Residential	1.89	62.58%	189,000,000.00	3	No	No	Yes	Yes	Yes	3
LACSON	Agri-Industrial	6.44	58.44%	966,000,000.00	3	Yes	Yes	No	Yes	Yes	3
LACSON	Residential	0.07	1.36%	7,000,000.00	1	No	No	Yes	Yes	Yes	2
LAMANAN	Residential	4.47	98.68%	447,000,000.00	3	No	No	Yes	Yes	Yes	3
LAMPINANAO	Residential	1.85	86.85%	185,000,000.00	3	No	No	Yes	Yes	Yes	3
MEGKAWAYAN	Residential	5.51	100.00%	551,000,000.00	3	No	No	Yes	Yes	Yes	3
MEGKAWAYAN	Tourism	1.93	100.00%	289,500,000.00	3	Yes	Yes	No	Yes	Yes	3
PANGYAN	Residential	1.33	26.13%	133,000,000.00	3	No	No	Yes	Yes	Yes	3
SALOY	Residential	1.77	99.44%	177,000,000.00	3	No	No	Yes	Yes	Yes	3
SIRIB	Residential	0.90	11.90%	90,000,000.00	3	No	No	Yes	Yes	Yes	3
TALOMO RIVER	Agri-Industrial	1.18	6.45%	177,000,000.00	3	No	No	Yes	Yes	Yes	3
TALOMO RIVER	Residential	0.10	0.46%	10,000,000.00	1	Yes	Yes	No	Yes	Yes	2
TAMAYONG	Residential	2.67	58.42%	267,000,000.00	3	No	No	Yes	Yes	Yes	3
BAGANIHAN	Tourism	0.47	11.90%	70,500,000.00	2	Yes	Yes	No	Yes	Yes	3
BAGANIHAN	Residential	0.16	5.19%	16,000,000.00	2	No	No	Yes	Yes	Yes	3
BANTOL	Residential	2.61	100.00%	261,000,000.00	3	No	No	Yes	Yes	Yes	3
BUDA	Residential	4.07	20.73%	407,000,000.00	3	No	No	Yes	Yes	Yes	3
DALAG LUMOT	Residential	9.86	100.00%	986,000,000.00	3	No	No	Yes	Yes	Yes	3
DATU SALUMAY	Residential	4.94	23.19%	494,000,000.00	3	No	No	Yes	Yes	Yes	3
DATU SALUMAY	Tourism	0.29	3.28%	43,500,000.00	3	Yes	Yes	No	Yes	Yes	2
GUMITAN	Residential	6.63	75.17%	663,000,000.00	3	No	No	Yes	Yes	Yes	3
MAGSAYSAY	Residential	8.68	100.00%	868,000,000.00	3	No	No	Yes	Yes	Yes	3
MAGSAYSAY	Tourism	0.99	100.00%	148,500,000.00	3	Yes	Yes	No	Yes	Yes	3
MALAMBA	Residential	10.09	76.85%	1,009,000,000.00	3	No	No	Yes	Yes	Yes	3
MARILOG	Residential	91.12	98.40%	9,112,000,000.00	3	No	No	Yes	Yes	No	3
MARILOG	Tourism	26.29	87.66%	3,943,500,000.00	3	Yes	Yes	No	Yes	No	3

Table U-17. Urban Use Area, Adaptive Capacity Score, Landslide Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
SALAYSAY	Residential	10.00	99.40%	1,000,000,000.00	3	No	No	Yes	Yes	Yes	3
SUAWAN	Residential	7.31	100.00%	731,000,000.00	3	Yes	Yes	No	Yes	Yes	3
SUAWAN	Agri-Industrial	1.77	9.27%	265,500,000.00	3	No	No	Yes	Yes	Yes	3
COLOSAS	Residential	9.65	99.79%	965,000,000.00	3	No	No	Yes	Yes	Yes	3
FATIMA	Residential	7.61	77.65%	1,141,500,000.00	3	No	No	Yes	Yes	Yes	3
LUMIAD	Residential	8.61	100.00%	861,000,000.00	3	No	No	Yes	Yes	Yes	3
MABUHAY	Residential	0.68	9.25%	68,000,000.00	2	No	No	Yes	Yes	Yes	3
MALABOG	Residential	18.21	100.00%	1,821,000,000.00	3	No	No	Yes	Yes	Yes	3
MALABOG	Tourism	4.34	100.00%	651,000,000.00	3	Yes	Yes	No	Yes	Yes	3
MAPULA	Residential	14.69	100.00%	1,469,000,000.00	3	No	No	Yes	Yes	Yes	3
PANDAITAN	Residential	9.34	99.89%	934,000,000.00	3	No	No	Yes	Yes	Yes	3
PAÑALUM	Residential	2.07	100.00%	207,000,000.00	3	No	No	Yes	Yes	Yes	3
PAQUIBATO	Residential	12.53	100.00%	1,253,000,000.00	3	No	No	Yes	Yes	Yes	3
PAQUIBATO	Tourism	0.99	100.00%	148,500,000.00	3	No	No	Yes	Yes	Yes	3
PARADISE EMBAC	Residential	1.90	100.00%	190,000,000.00	3	Yes	Yes	No	Yes	Yes	3
SALAPAWAN	Residential	3.03	99.67%	303,000,000.00	3	No	No	Yes	Yes	Yes	3
SUMIMAO	Residential	1.77	100.00%	177,000,000.00	3	No	No	Yes	Yes	Yes	3
TAPAK	Residential	18.46	98.88%	1,846,000,000.00	3	No	No	Yes	Yes	Yes	3
CATALUNAN GRANDE	Residential	5.07	1.68%	507,000,000.00	2	No	No	Yes	Yes	Yes	3
CATALUNAN GRANDE	Parks and Recreational	0.02	0.35%	3,000,000.00	1	Yes	Yes	No	Yes	Yes	2
LANGUB	Parks and Recreational	2.13	100.00%	319,500,000.00	3	Yes	Yes	No	Yes	Yes	3
LANGUB	Tourism	0.32	100.00%	48,000,000.00	2	Yes	Yes	No	Yes	Yes	2
LANGUB	Commercial	0.01	100.00%	1,500,000.00	2	Yes	Yes	No	Yes	Yes	2

Table U-17. Urban Use Area, Adaptive Capacity Score, Landslide Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
LANGUB	Residential	13.48	99.04%	1,348,000,000.00	3	No	No	Yes	Yes	Yes	3
MA-A	Tourism	6.86	41.45%	1,029,000,000.00	3	Yes	Yes	No	Yes	Yes	3
MA-A	Parks and Recreational	4.05	31.18%	607,500,000.00	3	Yes	Yes	No	Yes	Yes	3
MA-A	Residential	101.76	23.76%	10,176,000,000.00	3	No	No	Yes	Yes	Yes	3
MA-A	Commercial	10.05	11.15%	1,507,500,000.00	3	Yes	Yes	No	Yes	Yes	3
MA-A	Cemetery	2.15	8.46%	322,500,000.00	3	Yes	Yes	No	Yes	Yes	3
MA-A	Industrial	0.09	0.40%	13,500,000.00	2	Yes	Yes	No	Yes	Yes	2
MAGTUOD	Parks and Recreational	10.43	99.52%	1,564,500,000.00	3	Yes	Yes	No	Yes	Yes	3
MAGTUOD	Cemetery	84.30	91.76%	12,645,000,000.00	3	Yes	Yes	No	Yes	Yes	3
MAGTUOD	Residential	46.37	85.89%	4,637,000,000.00	3	No	No	Yes	Yes	Yes	3
MAGTUOD	Commercial	0.11	14.29%	16,500,000.00	3	Yes	Yes	No	Yes	Yes	2
MATINA CROSSING	Industrial	4.06	70.98%	609,000,000.00	3	Yes	Yes	No	Yes	Yes	3
MATINA CROSSING	Residential	29.25	11.68%	2,925,000,000.00	3	No	No	Yes	Yes	Yes	3
MATINA CROSSING	Commercial	0.21	0.41%	31,500,000.00	1	Yes	Yes	No	Yes	Yes	2
MATINA PANGI	Commercial	4.88	100.00%	732,000,000.00	3	Yes	Yes	No	Yes	Yes	3
MATINA PANGI	Parks and Recreational	0.40	75.47%	60,000,000.00	3	Yes	Yes	No	Yes	Yes	3
MATINA PANGI	Tourism	0.31	56.36%	46,500,000.00	3	Yes	Yes	No	Yes	Yes	2
MATINA PANGI	Residential	64.73	42.45%	9,709,500,000.00	3	No	No	Yes	Yes	Yes	3
MATINA PANGI	Industrial	0.01	33.33%	1,500,000.00	2	Yes	Yes	No	Yes	Yes	2
TALOMO	Industrial	2.61	16.48%	391,500,000.00	2	Yes	Yes	No	Yes	Yes	2
TALOMO	Commercial	0.82	3.97%	123,000,000.00	2	Yes	Yes	No	Yes	Yes	2
TALOMO	Residential	10.51	3.53%	1,051,000,000.00	2	No	No	Yes	Yes	Yes	3
ALAMBRE	Residential	0.09	1.15%	9,000,000.00	1	No	No	Yes	Yes	Yes	2

Table U-17. Urban Use Area, Adaptive Capacity Score, Landslide Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
ATAN-AWE	Residential	0.88	100.00%	88,000,000.00	3	No	No	Yes	Yes	Yes	3
BARACATAN	Residential	1.55	36.05%	155,000,000.00	3	No	No	Yes	Yes	Yes	3
BATO	Residential	1.00	2.23%	100,000,000.00	2	No	No	Yes	Yes	Yes	3
BAYABAS	Tourism	0.08	100.00%	12,000,000.00	3	Yes	Yes	No	Yes	Yes	2
BAYABAS	Residential	2.05	61.38%	205,000,000.00	2	No	No	Yes	Yes	Yes	3
BINUGAO	Agri-Industrial	10.65	78.89%	1,597,500,000.00	3	Yes	Yes	No	Yes	Yes	3
BINUGAO	Residential	24.70	46.79%	2,470,000,000.00	3	No	No	Yes	Yes	Yes	3
BINUGAO	Industrial	9.79	15.45%	1,468,500,000.00	3	Yes	Yes	No	Yes	Yes	3
BINUGAO	Commercial	0.04	1.17%	6,000,000.00	1	Yes	Yes	No	Yes	Yes	2
CAMANSI	Residential	1.73	70.90%	173,000,000.00	3	No	No	Yes	Yes	Yes	3
CATIGAN	Residential	2.21	35.08%	221,000,000.00	3	No	No	Yes	Yes	Yes	3
DALIAON PLANTATION	Residential	2.17	39.10%	217,000,000.00	3	No	No	Yes	Yes	Yes	3
EDEN	Residential	51.48	100.00%	5,148,000,000.00	3	No	No	Yes	Yes	Yes	3
EDEN	Agri-Industrial	1.27	100.00%	190,500,000.00	3	Yes	Yes	No	Yes	Yes	3
EDEN	Parks and Recreational	0.55	100.00%	82,500,000.00	3	Yes	Yes	No	Yes	Yes	3
EDEN	Commercial	0.08	100.00%	12,000,000.00	3	Yes	Yes	No	Yes	Yes	2
EDEN	Tourism	94.89	96.43%	14,233,500,000.00	3	Yes	Yes	No	Yes	Yes	3
KILATE	Residential	0.19	7.31%	19,000,000.00	2	No	No	Yes	Yes	Yes	2
MARAPANGI	Tourism	0.07	36.84%	10,500,000.00	3	Yes	Yes	No	Yes	Yes	2
MARAPANGI	Residential	1.99	2.59%	199,000,000.00	3	No	No	Yes	Yes	Yes	3
SIBULAN	Residential	2.13	100.00%	213,000,000.00	3	No	No	Yes	Yes	Yes	3
SIRAWAN	Agri-Industrial	14.86	17.43%	2,229,000,000.00	3	No	No	Yes	Yes	Yes	3

Table U-17. Urban Use Area, Adaptive Capacity Score, Landslide Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
SIRAWAN	Residential	7.50	8.93%	750,000,000.00	3	Yes	Yes	No	Yes	Yes	3
TAGURANO	Residential	0.60	36.14%	60,000,000.00	3	No	No	Yes	Yes	Yes	3
TIBULOY	Agri-Industrial	7.75	100.00%	1,162,500,000.00	3	No	No	Yes	Yes	Yes	3
TIBULOY	Residential	3.57	94.95%	357,000,000.00	3	Yes	Yes	No	Yes	Yes	3
TUNGKALAN	Residential	1.09	28.39%	109,000,000.00	3	No	No	Yes	Yes	Yes	3
MATINA BIAO	Agri-Industrial	0.82	11.90%	123,000,000.00	3	Yes	Yes	No	Yes	Yes	3
MATINA BIAO	Residential	0.05	1.81%	5,000,000.00	1	No	No	Yes	Yes	Yes	2
MANAMBULAN	Residential	0.12	1.24%	12,000,000.00	2	No	No	Yes	Yes	Yes	2
NEW CARMEN	Parks and Recreational	0.09	100.00%	13,500,000.00	3	No	No	Yes	Yes	Yes	2
NEW CARMEN	Residential	2.26	14.45%	226,000,000.00	3	Yes	Yes	No	Yes	Yes	3
NEW VALENCIA	Residential	1.00	20.28%	100,000,000.00	3	No	No	Yes	Yes	Yes	3
TALANDANG	Agri-Industrial	8.55	34.69%	1,282,500,000.00	3	No	No	Yes	Yes	Yes	3

LIQUEFACTION

Top three urban areas residential, commercial and industrial with high degree of impact also have the low adaptive capacity. Residential areas have low structure employing hazard resistant/adaptation design and no capacity or willingness to retrofit or relocate or conform to new regulations.

Table U-18. Urban Use Area, Adaptive Capacity Score, Liquefaction Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score Average	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
1-A	Residential	6.69	96.19%	668,759,626.53	3	NO	NO	YES	YES	YES	3
1-A	Commercial	1.40	100.00%	210,517,192.30	3	YES	YES	NO	YES	YES	2
1-A	Parks and Recreational	0.08	97.85%	11,505,813.54	3	YES	YES	NO	YES	YES	2
2-A	Residential	1.61	99.34%	160,937,232.18	3	NO	NO	YES	YES	YES	3
2-A	Commercial	11.32	100.00%	1,697,980,810.46	3	YES	YES	NO	YES	YES	2
2-A	Parks and Recreational	0.44	100.00%	66,567,762.78	3	YES	YES	NO	YES	YES	2
3-A	Residential	0.55	100.00%	55,110,084.98	3	NO	NO	YES	YES	YES	3
3-A	Commercial	14.90	100.00%	2,234,645,239.30	3	YES	YES	NO	YES	YES	2
3-A	Parks and Recreational	0.10	100.00%	15,358,498.74	3	YES	YES	NO	YES	YES	2
4-A	Residential	2.93	100.00%	293,381,608.75	3	NO	NO	YES	YES	YES	3
4-A	Commercial	9.55	100.00%	1,432,224,807.14	3	YES	YES	NO	YES	YES	2
4-A	Parks and Recreational	4.00	100.00%	600,131,302.57	3	YES	YES	NO	YES	YES	2
4-A	Industrial	0.08	100.00%	12,539,491.89	3	YES	YES	NO	YES	YES	2
5-A	Residential	13.27	65.02%	1,327,255,535.69	3	NO	NO	YES	YES	YES	3
5-A	Parks and Recreational	0.01	100.00%	1,995,534.93	3	YES	YES	NO	YES	YES	2
5-A	Commercial	1.17	27.01%	175,965,313.03	3	YES	YES	NO	YES	YES	2

Table U-18. Urban Use Area, Adaptive Capacity Score, Liquefaction Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score Average	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
6-A	Residential	0.93	21.18%	92,966,603.62	3	NO	NO	YES	YES	YES	3
6-A	Industrial	0.06	100.00%	8,855,098.62	3	YES	YES	NO	YES	YES	2
6-A	Commercial	3.70	65.46%	555,622,734.63	3	YES	YES	NO	YES	YES	2
7-A	Residential	5.60	55.02%	560,224,332.89	3	NO	NO	YES	YES	YES	3
7-A	Commercial	6.73	99.01%	1,008,959,035.34	3	YES	YES	NO	YES	YES	2
8-A	Residential	34.14	41.22%	3,413,933,203.73	3	NO	NO	YES	YES	YES	3
8-A	Industrial	3.56	92.69%	533,886,321.61	3	YES	YES	NO	YES	YES	2
8-A	Commercial	4.38	77.59%	657,478,527.85	3	YES	YES	NO	YES	YES	2
8-A	Parks and Recreational	0.02	1.44%	2,513,790.82	1	YES	YES	NO	YES	YES	2
8-A	Cemetery	0.01	0.08%	2,187,504.64	1	YES	YES	NO	YES	YES	2
9-A	Residential	8.69	62.51%	869,383,869.54	3	NO	NO	YES	YES	YES	3
9-A	Industrial	0.22	100.00%	33,700,922.46	3	YES	YES	NO	YES	YES	2
9-A	Commercial	7.42	99.04%	1,113,063,974.88	3	YES	YES	NO	YES	YES	2
10-A	Residential	4.27	73.65%	426,663,756.87	3	NO	NO	YES	YES	YES	3
10-A	Industrial	0.26	100.00%	38,842,452.40	3	YES	YES	NO	YES	YES	2
10-A	Commercial	6.64	86.2234%	995,803,712.62	3	YES	YES	NO	YES	YES	2
11-B	Residential	2.56	100.00%	256,070,679.52	3	NO	NO	YES	YES	YES	3
11-B	Commercial	4.52	100.00%	678,304,676.37	3	YES	YES	NO	YES	YES	2
11-B	Industrial	0.61	100.00%	90,819,721.30	3	YES	YES	NO	YES	YES	2
12-B	Residential	1.20	100.00%	119,529,526.40	3	NO	NO	YES	YES	YES	3
12-B	Commercial	12.43	100.00%	1,864,538,807.44	3	YES	YES	NO	YES	YES	2
12-B	Parks and Recreational	0.06	100.00%	9,730,755.67	3	YES	YES	NO	YES	YES	2
12-B	Industrial	0.01	100.00%	1,832,308.60	3	YES	YES	NO	YES	YES	2
13-B	Residential	0.57	100.00%	57,417,430.57	3	NO	NO	YES	YES	YES	3
13-B	Commercial	8.52	100.00%	1,278,263,622.49	3	YES	YES	NO	YES	YES	2
14-B	Residential	3.09	100.00%	309,083,330.97	3	NO	NO	YES	YES	YES	3

Table U-18. Urban Use Area, Adaptive Capacity Score, Liquefaction Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
14-B	Commercial	7.52	100.00%	1,128,353,743.17	3	YES	YES	NO	YES	YES	2
14-B	Industrial	0.30	100.00%	45,018,001.26	3	YES	YES	NO	YES	YES	2
15-B	Residential	1.46	100.00%	146,470,545.79	3	NO	NO	YES	YES	YES	3
15-B	Commercial	24.46	100.00%	3,668,268,076.75	3	YES	YES	NO	YES	YES	2
15-B	Parks and Recreational	0.19	100.00%	28,853,312.07	3	YES	YES	NO	YES	YES	2
15-B	Industrial	0.00011	100.00%	16,137.02	1	YES	YES	NO	YES	YES	2
16-B	Residential	0.43	100.00%	42,608,316.39	3	NO	NO	YES	YES	YES	3
16-B	Commercial	3.38	100.00%	507,126,888.09	3	YES	YES	NO	YES	YES	2
17-B	Residential	0.53	100.00%	52,577,744.66	3	NO	NO	YES	YES	YES	3
17-B	Commercial	3.89	100.00%	583,679,837.63	3	YES	YES	NO	YES	YES	2
18-B	Residential	0.40	100.00%	40,499,797.62	3	NO	NO	YES	YES	YES	3
18-B	Commercial	8.95	100.00%	1,343,099,654.85	3	YES	YES	NO	YES	YES	2
18-B	Parks and Recreational	0.42	100.00%	63,521,647.83	3	YES	YES	NO	YES	YES	2
19-B	Residential	31.90	17.74%	3,189,532,024.73	3	NO	NO	YES	YES	YES	3
19-B	Tourism	0.23	100.00%	34,671,884.65	3	YES	YES	NO	YES	YES	2
19-B	Commercial	12.47	44.19%	1,871,180,694.53	3	YES	YES	NO	YES	YES	2
19-B	Parks and Recreational	0.10	28.85%	15,685,642.67	2	YES	YES	NO	YES	YES	2
19-B	Industrial	0.13	5.14%	19,144,453.15	2	YES	YES	NO	YES	YES	2
20-B	Residential	13.62	97.80%	1,362,240,617.82	3	NO	NO	YES	YES	YES	3
20-B	Commercial	24.30	84.95%	3,645,093,389.38	3	YES	YES	NO	YES	YES	2
20-B	Industrial	0.25	88.75%	37,559,267.30	2	YES	YES	NO	YES	YES	2
21-C	Residential	5.16	99.54%	515,854,291.85	3	NO	NO	YES	YES	YES	3
21-C	Commercial	0.30	100.00%	45,315,507.14	3	YES	YES	NO	YES	YES	2
21-C	Parks and Recreational	0.07	100.00%	10,759,658.32	3	YES	YES	NO	YES	YES	2

Table U-18. Urban Use Area, Adaptive Capacity Score, Liquefaction Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score Average	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
22-C	Residential	4.76	99.43%	475,661,619.70	3	NO	NO	YES	YES	YES	3
22-C	Commercial	0.50	100.00%	75,115,751.36	3	YES	YES	NO	YES	YES	2
22-C	Parks and Recreational	0.05	100.00%	6,881,766.47	2	YES	YES	NO	YES	YES	2
23-C	Residential	12.74	99.59%	1,273,965,335.14	3	NO	NO	YES	YES	YES	3
23-C	Commercial	0.87	100.00%	130,465,332.82	3	YES	YES	NO	YES	YES	2
23-C	Parks and Recreational	0.70	98.19%	105,641,066.53	3	YES	YES	NO	YES	YES	2
24-C	Residential	2.51	100.00%	251,444,449.30	3	NO	NO	YES	YES	YES	3
24-C	Commercial	3.60	100.00%	540,610,880.67	3	YES	YES	NO	YES	YES	2
24-C	Parks and Recreational	0.05	100.00%	7,246,289.48	2	YES	YES	NO	YES	YES	2
25-C	Residential	1.73	100.00%	172,897,030.99	3	NO	NO	YES	YES	YES	3
25-C	Commercial	2.24	100.00%	335,958,502.01	3	YES	YES	NO	YES	YES	2
26-C	Residential	2.23	100.00%	223,439,536.27	3	NO	NO	YES	YES	YES	3
26-C	Commercial	4.32	100.00%	648,391,002.94	3	YES	YES	NO	YES	YES	2
27-C	Residential	0.64	100.00%	64,430,739.12	3	NO	NO	YES	YES	YES	3
27-C	Commercial	18.61	100.00%	2,792,069,841.63	3	YES	YES	NO	YES	YES	2
27-C	Industrial	0.69	100.00%	103,892,418.99	3	YES	YES	NO	YES	YES	2
27-C	Parks and Recreational	3.97	96.80%	595,045,006.93	3	YES	YES	NO	YES	YES	2
27-C	Tourism	0.04	100.00%	6,481,597.18	2	YES	YES	NO	YES	YES	2
28-C	Residential	1.65	100.00%	164,904,371.86	3	NO	NO	YES	YES	YES	3
28-C	Commercial	3.95	100.00%	592,148,476.58	3	YES	YES	NO	YES	YES	2
29-C	Residential	1.07	100.00%	106,578,472.04	3	NO	NO	YES	YES	YES	3
29-C	Commercial	6.88	100.00%	1,032,303,551.14	3	YES	YES	NO	YES	YES	2
30-C	Residential	1.37	100.00%	136,706,623.40	3	NO	NO	YES	YES	YES	3
30-C	Commercial	14.96	100.00%	2,243,731,104.79	3	YES	YES	NO	YES	YES	2

Table U-18. Urban Use Area, Adaptive Capacity Score, Liquefaction Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score Average	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
30-C	Industrial	0.29	100.00%	43,726,588.70	2	YES	YES	NO	YES	YES	2
31-D	Residential	13.55	99.88%	1,354,516,309.29	3	NO	NO	YES	YES	YES	3
31-D	Commercial	0.61	100.00%	91,246,534.10	3	YES	YES	NO	YES	YES	2
31-D	Parks and Recreational	0.13	100.00%	19,561,711.58	3	YES	YES	NO	YES	YES	2
32-D	Residential	2.75	100.00%	274,985,420.10	3	NO	NO	YES	YES	YES	3
32-D	Commercial	5.17	100.00%	775,207,875.14	3	YES	YES	NO	YES	YES	2
32-D	Parks and Recreational	0.20	100.00%	29,385,028.90	3	YES	YES	NO	YES	YES	2
33-D	Residential	3.86	100.00%	386,250,542.28	3	NO	NO	YES	YES	YES	3
33-D	Commercial	2.89	100.00%	433,152,351.11	3	YES	YES	NO	YES	YES	2
34-D	Residential	0.37	100.00%	36,876,195.80	3	NO	NO	YES	YES	YES	3
34-D	Commercial	12.70	100.00%	1,905,014,679.50	3	YES	YES	NO	YES	YES	2
34-D	Parks and Recreational	0.00	100.00%	35,858.57	1	YES	YES	NO	YES	YES	2
35-D	Residential	0.04	100.00%	4,296,290.38	2	NO	NO	YES	YES	YES	3
35-D	Parks and Recreational	4.13	100.00%	620,121,371.22	3	YES	YES	NO	YES	YES	2
35-D	Commercial	2.48	100.00%	372,155,324.57	3	YES	YES	NO	YES	YES	2
36-D	Residential	2.39	100.00%	238,999,142.25	3	NO	NO	YES	YES	YES	3
36-D	Commercial	3.33	100.00%	499,363,982.22	3	YES	YES	NO	YES	YES	2
36-D	Parks and Recreational	0.07	100.00%	10,425,373.15	2	YES	YES	NO	YES	YES	2
37-D	Residential	3.54	100.00%	354,418,789.96	3	NO	NO	YES	YES	YES	3
37-D	Commercial	0.82	100.00%	123,129,696.28	3	YES	YES	NO	YES	YES	2
38-D	Residential	1.73	100.00%	172,640,113.76	3	NO	NO	YES	YES	YES	3
38-D	Commercial	3.10	100.00%	465,690,451.04	3	YES	YES	NO	YES	YES	2
38-D	Parks and Recreational	0.01	100.00%	1,032,136.18	1	YES	YES	NO	YES	YES	2

Table U-18. Urban Use Area, Adaptive Capacity Score, Liquefaction Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
39-D	Residential	2.92	100.00%	292,022,357.47	3	NO	NO	YES	YES	YES	3
39-D	Commercial	5.34	100.00%	801,638,610.92	3	YES	YES	NO	YES	YES	2
39-D	Parks and Recreational	0.89	100.00%	133,631,679.19	3	YES	YES	NO	YES	YES	2
40-D	Residential	1.34	100.00%	133,947,735.42	3	NO	NO	YES	YES	YES	3
40-D	Commercial	6.05	100.00%	907,271,520.63	3	YES	YES	NO	YES	YES	2
AGDAO PROPER	Residential	7.62	100.00%	1,142,729,213.98	3	NO	NO	YES	YES	YES	3
AGDAO PROPER	Commercial	22.65	100.00%	3,397,577,978.24	3	YES	YES	NO	YES	YES	2
AGDAO PROPER	Industrial	1.29	100.00%	193,897,955.89	3	YES	YES	NO	YES	YES	2
AGDAO PROPER	Parks and Recreational	0.01	100.00%	1,612,503.96	1	YES	YES	NO	YES	YES	2
WILFREDO AQUINO	Residential	19.31	74.00%	1,931,007,597.92	3	NO	NO	YES	YES	YES	3
WILFREDO AQUINO	Parks and Recreational	1.06	100.00%	159,711,995.73	3	YES	YES	NO	YES	YES	2
WILFREDO AQUINO	Commercial	16.38	68.91%	2,457,340,460.18	3	YES	YES	NO	YES	YES	2
WILFREDO AQUINO	Industrial	0.11	99.03%	17,100,262.62	2	YES	YES	NO	YES	YES	2
PACIANO BANGOY	Residential	17.47	81.80%	1,747,224,664.29	3	NO	NO	YES	YES	YES	3
PACIANO BANGOY	Industrial	0.67	100.00%	100,104,649.30	3	YES	YES	NO	YES	YES	2
PACIANO BANGOY	Commercial	28.33	76.43%	4,249,211,221.59	3	YES	YES	NO	YES	YES	2
RAFAEL CASTILLO	Residential	11.86	100.00%	1,186,306,442.08	3	NO	NO	YES	YES	YES	3
RAFAEL CASTILLO	Commercial	16.41	100.00%	2,461,002,411.19	3	YES	YES	NO	YES	YES	2
RAFAEL CASTILLO	Industrial	9.33	100.00%	1,398,997,645.74	3	YES	YES	NO	YES	YES	2
RAFAEL CASTILLO	Parks and Recreational	0.02	100.00%	2,764,122.06	2	YES	YES	NO	YES	YES	2
CENTRO	Residential	22.37	98.48%	2,237,168,588.75	3	NO	NO	YES	YES	YES	3
CENTRO	Commercial	1.14	100.00%	170,319,260.99	3	YES	YES	NO	YES	YES	2

Table U-18. Urban Use Area, Adaptive Capacity Score, Liquefaction Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
CENTRO	Industrial	10.60	98.81%	1,590,332,982.19	3	YES	YES	NO	YES	YES	2
CENTRO	Parks and Recreational	0.04	100.00%	6,174,813.88	2	YES	YES	NO	YES	YES	2
GOV. VICENTE DUTERTE	Residential	20.02	98.43%	2,001,596,458.56	3	NO	NO	YES	YES	YES	3
GOV. VICENTE DUTERTE	Industrial	12.56	100.00%	1,884,562,350.82	3	YES	YES	NO	YES	YES	2
GOV. VICENTE DUTERTE	Commercial	4.95	100.00%	741,989,967.31	3	YES	YES	NO	YES	YES	2
GOV. VICENTE DUTERTE	Parks and Recreational	0.06	100.00%	9,423,105.82	2	YES	YES	NO	YES	YES	2
LEON GARCIA SR.	Residential	12.04	100.00%	1,204,204,820.76	3	NO	NO	YES	YES	YES	3
LEON GARCIA SR.	Commercial	1.06	100.00%	158,606,156.97	3	YES	YES	NO	YES	YES	2
LEON GARCIA SR.	Industrial	0.29	100.00%	43,386,392.02	3	YES	YES	NO	YES	YES	2
LEON GARCIA SR.	Parks and Recreational	0.08	100.00%	11,720,015.13	2	YES	YES	NO	YES	YES	2
LAPU - LAPU	Residential	23.68	100.00%	2,367,807,745.32	3	NO	NO	YES	YES	YES	3
LAPU - LAPU	Commercial	1.61	100.00%	241,574,580.62	3	YES	YES	NO	YES	YES	2
LAPU - LAPU	Industrial	22.91	99.82%	3,435,992,158.31	3	YES	YES	NO	YES	YES	2
LAPU - LAPU	Parks and Recreational	0.04	100.00%	6,300,464.21	1	YES	YES	NO	YES	YES	2
TOMAS MONTEVERDE	Residential	2.09	100.00%	209,331,746.48	3	NO	NO	YES	YES	YES	3
TOMAS MONTEVERDE	Commercial	11.83	100.00%	1,774,600,141.53	3	YES	YES	NO	YES	YES	2
TOMAS MONTEVERDE	Industrial	0.83	100.00%	124,595,117.78	3	YES	YES	NO	YES	YES	2
SAN ANTONIO	Residential	25.28	100.00%	2,528,393,562.43	3	NO	NO	YES	YES	YES	3
SAN ANTONIO	Commercial	43.27	100.00%	6,490,728,043.48	3	YES	YES	NO	YES	YES	2
SAN ANTONIO	Industrial	10.51	100.00%	1,576,505,260.49	3	YES	YES	NO	YES	YES	2
SAN ANTONIO	Parks and Recreational	0.06	100.00%	8,476,887.60	1	YES	YES	NO	YES	YES	2

Table U-18. Urban Use Area, Adaptive Capacity Score, Liquefaction Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score Average	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
UBALDE	Residential	5.94	100.00%	593,870,521.72	3	NO	NO	YES	YES	YES	3
UBALDE	Commercial	1.53	100.00%	229,829,539.97	3	YES	YES	NO	YES	YES	2
UBALDE	Industrial	0.21	100.00%	31,293,522.98	2	YES	YES	NO	YES	YES	2
BUHANGIN	Residential	1.20	0.36%	120,062,974.52	3	NO	NO	YES	YES	YES	3
BUHANGIN	Industrial	0.13	2.90%	19,185,313.05	2	YES	YES	NO	YES	YES	2
BUHANGIN	Commercial	0.0024	0.00%	365,546.33	1	YES	YES	NO	YES	YES	2
MANDUG	Residential	14.09	8.37%	1,408,849,663.61	3	NO	NO	YES	YES	YES	3
MANDUG	Agri-Industrial	3.98	60.74%	596,994,165.02	3	YES	YES	NO	YES	YES	2
PAMPANGA	Commercial	11.31	100.00%	1,696,336,620.04	3	YES	YES	NO	YES	YES	2
PAMPANGA	Tourism	2.99	100.00%	447,772,687.45	3	YES	YES	NO	YES	YES	2
PAMPANGA	Industrial	23.90	89.57%	3,585,193,086.02	3	YES	YES	NO	YES	YES	2
PAMPANGA	Residential	0.05	0.11%	5,456,768.47	1	NO	NO	YES	YES	YES	3
SASA	Residential	25.93	11.59%	2,593,156,006.38	3	NO	NO	YES	YES	YES	3
SASA	Industrial	34.63	36.93%	5,193,798,341.78	3	YES	YES	NO	YES	YES	2
SASA	Commercial	20.86	35.96%	3,129,116,617.57	3	YES	YES	NO	YES	YES	2
SASA	Parks and Recreational	0.05	21.64%	6,879,260.67	1	YES	YES	NO	YES	YES	2
TIGATTO	Residential	156.38	61.02%	15,637,877,275.48	3	NO	NO	YES	YES	YES	3
TIGATTO	Commercial	2.91	89.48%	436,358,787.31	3	YES	YES	NO	YES	YES	2
TIGATTO	Industrial	5.15	39.52%	772,261,861.35	3	YES	YES	NO	YES	YES	2
WAAN	Residential	18.52	48.12%	1,851,715,453.66	3	NO	NO	YES	YES	YES	3
WAAN	Parks and Recreational	0.08	100.00%	11,568,767.90	2	YES	YES	NO	YES	YES	2
A. ANGLIONGTO	Residential	24.62	15.82%	2,462,151,601.11	3	NO	NO	YES	YES	YES	3
A. ANGLIONGTO	Commercial	31.98	82.53%	4,797,541,896.67	3	YES	YES	NO	YES	YES	2
A. ANGLIONGTO	Industrial	3.47	20.21%	520,142,547.01	3	YES	YES	NO	YES	YES	2
V. HIZON	Residential	52.73	44.42%	5,273,012,392.18	3	NO	NO	YES	YES	YES	3
V. HIZON	Industrial	6.31	100.00%	946,708,359.96	3	YES	YES	NO	YES	YES	2

Table U-18. Urban Use Area, Adaptive Capacity Score, Liquefaction Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score Average	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
V. HIZON	Commercial	25.13	99.53%	3,769,698,812.30	3	YES	YES	NO	YES	YES	2
V. HIZON	Tourism	0.69	45.20%	103,159,341.14	3	YES	YES	NO	YES	YES	2
BUNAWAN	Residential	89.65	72.44%	8,965,265,387.13	3	NO	NO	YES	YES	YES	3
BUNAWAN	Commercial	11.67	98.45%	1,751,033,615.40	3	YES	YES	NO	YES	YES	2
BUNAWAN	Industrial	79.29	68.58%	11,892,753,831.92	3	YES	YES	NO	YES	YES	2
BUNAWAN	Agri-Industrial	1.18	63.19%	176,310,977.33	3	YES	YES	NO	YES	YES	2
BUNAWAN	Parks and Recreational	0.18	75.90%	27,636,409.51	2	YES	YES	NO	YES	YES	2
ILANG	Residential	10.88	8.65%	1,087,914,568.68	3	NO	NO	YES	YES	YES	3
ILANG	Industrial	33.50	37.10%	5,025,088,268.27	3	YES	YES	NO	YES	YES	2
ILANG	Commercial	0.41	18.58%	61,233,382.40	3	YES	YES	NO	YES	YES	2
LASANG	Residential	50.58	99.70%	5,058,098,233.04	3	NO	NO	YES	YES	YES	3
LASANG	Industrial	38.00	100.00%	5,700,555,728.53	3	YES	YES	NO	YES	YES	2
LASANG	Commercial	2.13	100.00%	318,954,077.54	3	YES	YES	NO	YES	YES	2
LASANG	Agri-Industrial	9.35	99.61%	1,403,109,661.19	3	YES	YES	NO	YES	YES	2
LASANG	Parks and Recreational	0.07	100.00%	10,756,125.65	2	YES	YES	NO	YES	YES	2
MAHAYAG	Residential	7.63	13.21%	763,277,727.56	3	NO	NO	YES	YES	YES	3
MAHAYAG	Industrial	1.04	1.48%	155,557,683.32	3	YES	YES	NO	YES	YES	2
PANACAN	Residential	51.96	20.22%	5,196,453,706.62	3	NO	NO	YES	YES	YES	3
PANACAN	Parks and Recreational	6.97	100.00%	1,045,707,938.01	3	YES	YES	NO	YES	YES	2
PANACAN	Cemetery	1.30	100.00%	195,635,496.94	3	YES	YES	NO	YES	YES	2
PANACAN	Industrial	70.20	58.32%	10,530,080,704.21	3	YES	YES	NO	YES	YES	2
PANACAN	Commercial	3.81	51.05%	571,287,446.10	3	YES	YES	NO	YES	YES	2
PANACAN	Tourism	0.45	46.80%	67,258,881.59	3	YES	YES	NO	YES	YES	2
SAN ISIDRO	Residential	18.25	68.95%	1,824,709,911.66	3	NO	NO	YES	YES	YES	3

Table U-18. Urban Use Area, Adaptive Capacity Score, Liquefaction Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
SAN ISIDRO	Agri-Industrial	1.38	100.00%	207,366,014.96	3	YES	YES	NO	YES	YES	2
SAN ISIDRO	Industrial	2.74	65.07%	411,065,887.15	3	YES	YES	NO	YES	YES	2
SAN ISIDRO	Parks and Recreational	0.08	100.00%	11,270,954.85	2	YES	YES	NO	YES	YES	2
TIBUNGCO	Residential	1.24	0.94%	123,605,480.56	3	NO	NO	YES	YES	YES	3
TIBUNGCO	Industrial	3.77	9.03%	565,182,964.20	3	YES	YES	NO	YES	YES	2
BAGO APLAYA	Residential	94.69	99.20%	9,468,574,543.80	3	NO	NO	YES	YES	YES	3
BAGO GALLERA	Residential	1.56	1.20%	156,147,770.86	3	NO	NO	YES	YES	YES	3
BAGO APLAYA	Industrial	16.24	100.00%	2,436,509,741.16	3	YES	YES	NO	YES	YES	2
BAGO APLAYA	Commercial	12.82	99.29%	1,922,278,391.94	3	YES	YES	NO	YES	YES	2
BAGO APLAYA	Parks and Recreational	5.25	96.35%	788,103,884.73	3	YES	YES	NO	YES	YES	2
BAGO GALLERA	Parks and Recreational	9.3802	14.78%	1,407,032,731.74	3	YES	YES	NO	YES	YES	2
BAGO GALLERA	Commercial	0.0002	0.03%	26,869.93	1	YES	YES	NO	YES	YES	2
BUCANA	Residential	216.58	99.83%	21,657,754,187.75	3	NO	NO	YES	YES	YES	3
BUCANA	Parks and Recreational	1.92	100.00%	287,500,120.02	3	YES	YES	NO	YES	YES	2
BUCANA	Commercial	63.09	99.44%	9,464,086,291.80	3	YES	YES	NO	YES	YES	2
BUCANA	Tourism	0.66	99.35%	99,239,738.21	3	YES	YES	NO	YES	YES	2
BUCANA	Industrial	0.12	100.00%	17,514,521.14	2	YES	YES	NO	YES	YES	2
CATALUNAN GRANDE	Residential	0.01	0.00%	608,697.75	1	NO	NO	YES	YES	YES	3
DUMOY	Residential	82.31	50.56%	8,230,754,277.10	3	NO	NO	YES	YES	YES	3
DUMOY	Tourism	5.83	100.00%	874,001,152.47	3	YES	YES	NO	YES	YES	2
DUMOY	Parks and Recreational	8.04	96.50%	1,205,607,293.55	3	YES	YES	NO	YES	YES	2
DUMOY	Commercial	5.79	70.86%	869,242,941.13	3	YES	YES	NO	YES	YES	2
DUMOY	Industrial	16.42	50.44%	2,463,477,068.57	3	YES	YES	NO	YES	YES	2

Table U-18. Urban Use Area, Adaptive Capacity Score, Liquefaction Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
MATINA APLAYA	Residential	154.67	99.46%	15,466,659,751.19	3	NO	NO	YES	YES	YES	3
MATINA APLAYA	Tourism	2.34	99.55%	351,540,934.99	3	YES	YES	NO	YES	YES	2
MATINA APLAYA	Commercial	20.34	99.33%	3,050,355,113.13	3	YES	YES	NO	YES	YES	2
MATINA APLAYA	Industrial	2.87	98.82%	430,643,771.07	3	YES	YES	NO	YES	YES	2
MATINA APLAYA	Parks and Recreational	2.21	97.55%	332,186,534.95	3	YES	YES	NO	YES	YES	2
MATINA CROSSING	Residential	170.46	68.07%	17,045,624,248.24	3	NO	NO	YES	YES	YES	3
MATINA CROSSING	Commercial	40.51	79.66%	6,076,973,082.65	3	YES	YES	NO	YES	YES	2
MATINA CROSSING	Industrial	1.45	25.37%	217,986,259.43	3	YES	YES	NO	YES	YES	2
MATINA CROSSING	Parks and Recreational	3.91	21.29%	587,219,779.47	3	YES	YES	NO	YES	YES	2
MATINA CROSSING	Tourism	0.02	5.44%	2,885,957.22	1	YES	YES	NO	YES	YES	2
MATINA PANGI	Residential	42.34	27.77%	4,234,146,266.64	3	NO	NO	YES	YES	YES	3
MATINA PANGI	Industrial	0.03	79.94%	4,496,776.71	2	YES	YES	NO	YES	YES	2
MATINA PANGI	Parks and Recreational	0.10	18.24%	14,718,941.42	2	YES	YES	NO	YES	YES	2
TALOMO	Residential	226.37	76.08%	22,636,705,778.28	3	NO	NO	YES	YES	YES	3
MA-A	Residential	232.93	54.39%	23,293,021,468.97	3	NO	NO	YES	YES	YES	3
MA-A	Industrial	21.06	93.46%	3,159,224,523.44	3	YES	YES	NO	YES	YES	2
MA-A	Cemetery	14.51	57.08%	2,176,100,238.35	3	YES	YES	NO	YES	YES	2
MA-A	Commercial	51.11	56.68%	7,665,881,304.79	3	YES	YES	NO	YES	YES	2
TALOMO	Tourism	0.84	54.26%	126,092,259.32	3	YES	YES	NO	YES	YES	2
TALOMO	Commercial	9.98	48.33%	1,497,362,859.58	3	YES	YES	NO	YES	YES	2
MA-A	Parks and Recreational	5.92	45.58%	888,246,652.98	3	YES	YES	NO	YES	YES	2
MA-A	Tourism	5.54	33.43%	830,268,413.78	3	YES	YES	NO	YES	YES	2

Table U-18. Urban Use Area, Adaptive Capacity Score, Liquefaction Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score Average	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
TALOMO	Parks and Recreational	1.31	23.92%	195,905,297.94	3	YES	YES	NO	YES	YES	2
TALOMO	Industrial	2.23	14.07%	334,394,932.65	3	YES	YES	NO	YES	YES	2
CROSSING BAYABAS	Residential	0.01	0.01%	863,460.12	1	NO	NO	YES	YES	YES	3
CROSSING BAYABAS	Commercial	0.01	0.06%	806,367.26	1	YES	YES	NO	YES	YES	2
BINUGAO	Residential	15.57	29.49%	1,556,937,502.14	3	NO	NO	YES	YES	YES	3
BINUGAO	Parks and Recreational	1.31	98.08%	196,714,670.75	3	YES	YES	NO	YES	YES	2
BINUGAO	Commercial	3.05	88.77%	457,874,584.52	3	YES	YES	NO	YES	YES	2
BINUGAO	Industrial	53.20	83.96%	7,980,233,775.99	3	YES	YES	NO	YES	YES	2
BINUGAO	Agri-Industrial	0.22	1.63%	33,107,063.92	2	YES	YES	NO	YES	YES	2
DALIAO	Residential	106.80	99.09%	10,680,348,977.07	3	NO	NO	YES	YES	YES	3
DALIAO	Industrial	14.75	100.00%	2,213,132,533.61	3	YES	YES	NO	YES	YES	2
DALIAO	Tourism	1.79	100.00%	268,157,597.97	3	YES	YES	NO	YES	YES	2
DALIAO	Parks and Recreational	0.16	100.00%	23,834,181.92	2	YES	YES	NO	YES	YES	2
DALIAO	Commercial	0.07	100.00%	10,872,775.79	2	YES	YES	NO	YES	YES	2
LIZADA	Residential	98.22	97.28%	9,821,953,362.16	3	NO	NO	YES	YES	YES	3
LIZADA	Industrial	13.44	100.00%	2,015,844,149.64	3	YES	YES	NO	YES	YES	2
LIZADA	Commercial	2.79	100.00%	418,663,206.86	3	YES	YES	NO	YES	YES	2
LIZADA	Parks and Recreational	0.19	100.00%	28,055,563.27	2	YES	YES	NO	YES	YES	2
LIZADA	Tourism	0.08	100.00%	12,102,495.64	2	YES	YES	NO	YES	YES	2
LIZADA	Agri-Industrial	0.04	0.83%	6,423,153.77	1	YES	YES	NO	YES	YES	2

Table U-18. Urban Use Area, Adaptive Capacity Score, Liquefaction Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score Average	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
SIRAWAN	Residential	24.35	29.01%	2,435,005,448.17	3	NO	NO	YES	YES	YES	3
SIRAWAN	Agri-Industrial	1.74	2.04%	261,050,376.78	3	YES	YES	NO	YES	YES	2
SIRAWAN	Industrial	0.06	3.48%	9,673,389.54	2	YES	YES	NO	YES	YES	2
SIRAWAN	Parks and Recreational	0.04	100.00%	6,667,004.87	1	YES	YES	NO	YES	YES	2
SIRAWAN	Commercial	0.01	1.00%	1,243,126.00	1	YES	YES	NO	YES	YES	2
TORIL	Residential	48.61	69.97%	4,860,613,368.09	3	NO	NO	YES	YES	YES	3
TORIL	Industrial	2.86	100.00%	428,606,130.51	3	YES	YES	NO	YES	YES	2
TORIL	Commercial	14.72	60.01%	2,208,388,947.16	3	YES	YES	NO	YES	YES	2
NEW CARMEN	Residential	11.98	76.58%	1,197,922,126.49	3	NO	NO	YES	YES	YES	3

STORM SURGE

The same numbers of barangays in the residential area, commercial area, and industrial area, which have high degree of impact have low adaptive capacity. Residential area have the lowest adaptive capacity among the top three exposed urban use areas due to the lack of capacity and willingness of barangays to retrofit/relocate/conform with new regulations and no insurance coverage for the affected barangays.

Table U-19. Urban Use Area, Adaptive Capacity Score, Storm Surge Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score Average	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
1-A	Commercial	1.14	81.43%	171,000,000.00	3	YES	YES	NO	YES	YES	2
1-A	Parks and Recreational	0.08	100.00%	12,000,000.00	3	YES	YES	NO	YES	YES	2
1-A	Residential	6.95	100.00%	695,000,000.00	3	NO	NO	YES	YES	YES	3
2-A	Commercial	9.14	80.79%	1,371,732,731.02	3	YES	YES	NO	YES	YES	2
2-A	Parks and Recreational	0.44	100.00%	66,567,818.65	3	YES	YES	NO	YES	YES	2
2-A	Residential	1.62	99.89%	161,836,733.90	3	NO	NO	YES	YES	YES	3
3-A	Commercial	14.90	100.00%	2,234,604,689.15	3	YES	YES	NO	YES	YES	2
3-A	Parks and Recreational	0.10	100.00%	15,358,451.09	3	YES	YES	NO	YES	YES	2
3-A	Residential	0.55	100.00%	55,110,065.12	3	NO	NO	YES	YES	YES	3
4-A	Commercial	9.55	100.00%	1,432,224,844.85	3	YES	YES	NO	YES	YES	2
4-A	Industrial	0.08	100.00%	12,539,491.89	3	YES	YES	NO	YES	YES	2
4-A	Parks and Recreational	4.00	100.00%	600,131,108.50	3	YES	YES	NO	YES	YES	2
4-A	Residential	2.93	100.00%	293,381,599.56	3	NO	NO	YES	YES	YES	3
5-A	Commercial	1.51	34.67%	225,891,312.78	3	YES	YES	NO	YES	YES	2
5-A	Residential	10.31	50.50%	1,030,738,916.39	3	NO	NO	YES	YES	YES	3
6-A	Commercial	0.78	13.78%	116,980,567.71	3	YES	YES	NO	YES	YES	2
6-A	Residential	0.51	11.53%	50,627,731.15	3	NO	NO	YES	YES	YES	3

Table U-19. Urban Use Area, Adaptive Capacity Score, Storm Surge Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
7-A	Commercial	3.25	47.78%	486,873,588.36	3	YES	YES	NO	YES	YES	2
7-A	Residential	0.59	5.83%	59,402,194.99	3	NO	NO	YES	YES	YES	3
8-A	Residential	9.24	11.15%	923,606,706.71	3	NO	NO	YES	YES	YES	3
9-A	Commercial	0.66	0.27%	99,000,000.00	2	YES	YES	NO	YES	YES	2
9-A	Industrial	0.66	8.86%	99,572,259.48	3	YES	YES	NO	YES	YES	2
9-A	Residential	0.21	91.54%	20,567,176.36	3	NO	NO	YES	YES	YES	3
10-A	Commercial	5.52	72.63%	828,000,000.00	3	YES	YES	NO	YES	YES	2
10-A	Industrial	0.25	100.00%	37,500,000.00	3	YES	YES	NO	YES	YES	2
10-A	Residential	3.30	56.99%	330,000,000.00	3	NO	NO	YES	YES	YES	3
11-B	Commercial	4.52	100.00%	678,000,000.00	3	YES	YES	NO	YES	YES	2
11-B	Industrial	0.61	100.00%	91,500,000.00	3	YES	YES	NO	YES	YES	2
11-B	Residential	2.56	100.00%	256,000,000.00	3	NO	NO	YES	YES	YES	3
12-B	Commercial	12.31	99.03%	1,846,500,000.00	3	YES	YES	NO	YES	YES	2
12-B	Industrial	0.01	100.00%	1,500,000.00	1	YES	YES	NO	YES	YES	2
12-B	Parks and Recreational	0.06	100.0000 %	9,000,000.00	2	YES	YES	NO	YES	YES	2
12-B	Residential	1.20	100.00%	120,000,000.00	3	NO	NO	YES	YES	YES	3
13-B	Commercial	8.52	100.00%	1,278,000,000.00	3	YES	YES	NO	YES	YES	2
13-B	Residential	0.57	100.00%	57,000,000.00	3	NO	NO	YES	YES	YES	3
14-B	Commercial	7.52	100.00%	1,128,000,000.00	3	YES	YES	NO	YES	YES	2
14-B	Industrial	0.30	100.00%	45,000,000.00	3	YES	YES	NO	YES	YES	2
14-B	Residential	3.09	100.00%	309,000,000.00	3	NO	NO	YES	YES	YES	3
15-B	Commercial	24.46	100.00%	3,669,000,000.00	3	YES	YES	NO	YES	YES	2
15-B	Parks and Recreational	0.19	100.00%	28,500,000.00	3	YES	YES	NO	YES	YES	2
15-B	Residential	1.46	100.00%	146,000,000.00	3	NO	NO	YES	YES	YES	3
16-B	Commercial	3.38	100.00%	507,000,000.00	3	YES	YES	NO	YES	YES	2
16-B	Residential	0.42	100.00%	42,000,000.00	3	NO	NO	YES	YES	YES	3
17-B	Commercial	3.89	100.00%	583,500,000.00	3	YES	YES	NO	YES	YES	2

Table U-19. Urban Use Area, Adaptive Capacity Score, Storm Surge Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
17-B	Residential	0.52	100.00%	52,000,000.00	3	NO	NO	YES	YES	YES	3
18-B	Commercial	8.95	100.00%	1,342,500,000.00	3	YES	YES	NO	YES	YES	2
18-B	Parks and Recreational	0.42	100.00%	63,000,000.00	3	YES	YES	NO	YES	YES	2
18-B	Residential	0.40	100.00%	40,000,000.00	3	NO	NO	YES	YES	YES	3
19-B	Commercial	2.58	9.14%	387,000,000.00	3	YES	YES	NO	YES	YES	2
20-B	Commercial	11.85	41.43%	1,777,500,000.00	3	YES	YES	NO	YES	YES	2
20-B	Residential	8.94	64.22%	894,000,000.00	3	NO	NO	YES	YES	YES	3
21-C	Commercial	0.30	100.00%	45,000,000.00	3	YES	YES	NO	YES	YES	2
21-C	Parks and Recreational	0.07	100.00%	10,500,000.00	3	YES	YES	NO	YES	YES	2
21-C	Residential	5.18	100.00%	518,000,000.00	3	NO	NO	YES	YES	YES	3
22-C	Commercial	0.50	100.00%	75,000,000.00	3	YES	YES	NO	YES	YES	2
22-C	Parks and Recreational	0.05	100.00%	7,500,000.00	2	YES	YES	NO	YES	YES	2
22-C	Residential	4.78	100.00%	478,000,000.00	3	NO	NO	YES	YES	YES	3
23-C	Commercial	0.87	100.00%	130,500,000.00	3	YES	YES	NO	YES	YES	2
23-C	Parks and Recreational	0.72	100.00%	108,000,000.00	3	YES	YES	NO	YES	YES	2
23-C	Residential	12.79	100.00%	1,279,000,000.00	3	NO	NO	YES	YES	YES	3
24-C	Commercial	3.60	100.00%	540,000,000.00	3	YES	YES	NO	YES	YES	2
24-C	Parks and Recreational	0.05	100.00%	7,500,000.00	2	YES	YES	NO	YES	YES	2
24-C	Residential	2.51	69.72%	251,000,000.00	3	NO	NO	YES	YES	YES	3
25-C	Commercial	2.24	100.00%	336,000,000.00	3	YES	YES	NO	YES	YES	2
25-C	Residential	1.73	100.00%	173,000,000.00	3	NO	NO	YES	YES	YES	3
26-C	Commercial	4.32	100.00%	648,000,000.00	3	YES	YES	NO	YES	YES	2
26-C	Residential	2.23	100.00%	223,000,000.00	3	NO	NO	YES	YES	YES	3
27-C	Commercial	18.61	100.00%	2,791,500,000.00	3	YES	YES	NO	YES	YES	2

Table U-19. Urban Use Area, Adaptive Capacity Score, Storm Surge Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
27-C	Industrial	0.69	100.00%	103,500,000.00	3	YES	YES	NO	YES	YES	2
27-C	Parks and Recreational	4.10	100.00%	615,000,000.00	3	YES	YES	NO	YES	YES	2
27-C	Residential	0.64	100.00%	64,430,783.06	3	NO	NO	YES	YES	YES	3
27-C	Tourism	0.04	100.00%	6,481,597.18	3	YES	YES	NO	YES	YES	2
28-C	Commercial	3.95	100.00%	592,148,326.85	3	YES	YES	NO	YES	YES	2
28-C	Residential	1.65	100.00%	164,904,358.72	3	NO	NO	YES	YES	YES	3
29-C	Commercial	6.88	100.00%	1,032,303,475.68	3	YES	YES	NO	YES	YES	2
29-C	Residential	1.07	100.00%	106,578,556.98	3	NO	NO	YES	YES	YES	3
30-C	Commercial	14.96	100.00%	2,243,730,999.11	3	YES	YES	NO	YES	YES	2
30-C	Industrial	0.29	100.00%	43,726,594.40	3	YES	YES	NO	YES	YES	2
30-C	Residential	1.37	100.00%	136,706,617.66	3	NO	NO	YES	YES	YES	3
31-D	Commercial	0.61	100.00%	91,246,593.76	3	YES	YES	NO	YES	YES	2
31-D	Parks and Recreational	0.13	100.00%	19,561,694.62	3	YES	YES	NO	YES	YES	2
31-D	Residential	13.56	100.00%	1,356,101,073.23	3	NO	NO	YES	YES	YES	3
32-D	Commercial	5.17	100.00%	775,208,195.52	3	YES	YES	NO	YES	YES	2
32-D	Parks and Recreational	0.20	100.00%	29,385,040.36	3	YES	YES	NO	YES	YES	2
32-D	Residential	2.75	100.00%	274,985,473.05	3	NO	NO	YES	YES	YES	3
33-D	Commercial	2.89	100.00%	433,152,447.07	3	YES	YES	NO	YES	YES	2
33-D	Residential	3.86	100.00%	386,250,546.69	3	NO	NO	YES	YES	YES	3
34-D	Commercial	12.70	100.00%	1,905,014,792.46	3	YES	YES	NO	YES	YES	2
34-D	Industrial	0.00	100.00%	35,858.57	1	YES	YES	NO	YES	YES	2
34-D	Parks and Recreational	0.3688	100.00%	55,314,292.62	3	YES	YES	NO	YES	YES	2
34-D	Residential	2.48	100.00%	248,103,494.79	3	NO	NO	YES	YES	YES	3
35-D	Commercial	4.13	100.00%	620,121,662.03	3	YES	YES	NO	YES	YES	2
35-D	Parks and Recreational	0.04	100.00%	6,444,448.78	2	YES	YES	NO	YES	YES	2

Table U-19. Urban Use Area, Adaptive Capacity Score, Storm Surge Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
35-D	Residential	0.35	100.00%	34,684,421.49	3	NO	NO	YES	YES	YES	3
36-D	Commercial	3.33	100.00%	499,363,988.12	3	YES	YES	NO	YES	YES	2
36-D	Parks and Recreational	0.07	100.00%	10,425,406.61	3	YES	YES	NO	YES	YES	2
36-D	Residential	2.39	100.00%	238,999,142.25	3	NO	NO	YES	YES	YES	3
37-D	Commercial	0.82	100.00%	123,129,455.68	3	YES	YES	NO	YES	YES	2
37-D	Residential	3.54	100.00%	354,418,912.16	3	NO	NO	YES	YES	YES	3
38-D	Commercial	3.10	100.00%	465,690,522.39	3	YES	YES	NO	YES	YES	2
38-D	Parks and Recreational	0.01	100.00%	1,032,136.18	1	YES	YES	NO	YES	YES	2
38-D	Residential	1.73	100.00%	172,640,143.97	3	NO	NO	YES	YES	YES	3
39-D	Commercial	5.34	100.00%	801,638,866.43	3	YES	YES	NO	YES	YES	2
39-D	Parks and Recreational	0.89	100.00%	133,631,730.63	3	YES	YES	NO	YES	YES	2
39-D	Residential	2.92	100.00%	292,022,426.40	3	NO	NO	YES	YES	YES	3
40-D	Commercial	6.05	100.00%	907,271,894.76	3	YES	YES	NO	YES	YES	2
40-D	Residential	1.34	100.00%	133,947,526.34	3	NO	NO	YES	YES	YES	3
AGDAO PROPER	Commercial	22.65	100.00%	3,397,578,352.27	3	YES	YES	NO	YES	YES	2
AGDAO PROPER	Industrial	1.29	100.00%	193,897,927.91	3	YES	YES	NO	YES	YES	2
AGDAO PROPER	Parks and Recreational	0.01	100.00%	1,612,487.80	1	YES	YES	NO	YES	YES	2
AGDAO PROPER	Residential	7.62	100.00%	761,819,333.62	3	NO	NO	YES	YES	YES	3
WILFREDO AQUINO	Commercial	11.73	49.33%	1,759,265,765.79	3	YES	YES	NO	YES	YES	2
WILFREDO AQUINO	Industrial	0.11	98.60%	17,026,982.97	3	YES	YES	NO	YES	YES	2
WILFREDO AQUINO	Parks and Recreational	0.21	19.74%	31,522,470.25	3	YES	YES	NO	YES	YES	2
WILFREDO AQUINO	Residential	8.59	32.93%	859,283,570.24	3	NO	NO	YES	YES	YES	3
PACIANO BANGOY	Commercial	26.00	70.14%	3,899,437,527.29	3	YES	YES	NO	YES	YES	2
PACIANO BANGOY	Industrial	0.67	100.00%	100,104,760.91	3	YES	YES	NO	YES	YES	2

Table U-19. Urban Use Area, Adaptive Capacity Score, Storm Surge Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
PACIANO BANGOY	Residential	14.39	67.35%	1,438,505,620.27	3	NO	NO	YES	YES	YES	3
RAFAEL CASTILLO	Commercial	16.34	99.58%	2,450,664,622.06	3	YES	YES	NO	YES	YES	2
RAFAEL CASTILLO	Industrial	9.33	100.00%	1,398,997,714.83	3	YES	YES	NO	YES	YES	2
RAFAEL CASTILLO	Parks and Recreational	0.02	100.00%	2,764,122.06	2	YES	YES	NO	YES	YES	2
RAFAEL CASTILLO	Residential	11.86	100.00%	1,186,306,694.99	3	NO	NO	YES	YES	YES	3
CENTRO	Commercial	1.14	100.00%	170,319,219.74	3	YES	YES	NO	YES	YES	2
CENTRO	Industrial	10.73	100.00%	1,609,490,361.01	3	YES	YES	NO	YES	YES	2
CENTRO	Parks and Recreational	0.04	100.00%	6,174,813.88	2	YES	YES	NO	YES	YES	2
CENTRO	Residential	22.72	100.00%	2,271,589,342.20	3	NO	NO	YES	YES	YES	3
GOV. VICENTE DUTERTE	Commercial	4.95	100.00%	741,990,041.23	3	YES	YES	NO	YES	YES	2
GOV. VICENTE DUTERTE	Industrial	12.56	100.00%	1,884,562,137.22	3	YES	YES	NO	YES	YES	2
GOV. VICENTE DUTERTE	Parks and Recreational	0.06	100.00%	9,423,105.42	2	YES	YES	NO	YES	YES	2
GOV. VICENTE DUTERTE	Residential	20.34	100.00%	2,033,555,834.25	3	NO	NO	YES	YES	YES	3
LEON GARCIA SR.	Commercial	1.06	100.00%	158,606,120.04	3	YES	YES	NO	YES	YES	2
LEON GARCIA SR.	Industrial	0.29	100.00%	43,386,408.60	3	YES	YES	NO	YES	YES	2
LEON GARCIA SR.	Parks and Recreational	0.08	100.00%	11,720,018.15	3	YES	YES	NO	YES	YES	2
LEON GARCIA SR.	Residential	12.04	100.00%	1,204,204,893.53	3	NO	NO	YES	YES	YES	3
LAPU - LAPU	Commercial	1.61	100.00%	241,574,388.17	3	YES	YES	NO	YES	YES	2
LAPU - LAPU	Industrial	22.95	100.00%	3,442,184,815.31	3	YES	YES	NO	YES	YES	2
LAPU - LAPU	Parks and Recreational	0.04	100.00%	6,300,480.75	2	YES	YES	NO	YES	YES	2
LAPU - LAPU	Residential	23.68	100.00%	2,367,807,879.40	3	NO	NO	YES	YES	YES	3
TOMAS MONTEVERDE	Commercial	11.83	100.00%	1,774,599,927.95	3	YES	YES	NO	YES	YES	2
TOMAS MONTEVERDE	Industrial	0.83	100.00%	124,595,134.07	3	YES	YES	NO	YES	YES	2
TOMAS MONTEVERDE	Residential	2.09	100.00%	209,331,813.25	3	NO	NO	YES	YES	YES	3

Table U-19. Urban Use Area, Adaptive Capacity Score, Storm Surge Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
SAN ANTONIO	Commercial	40.77	94.23%	6,116,149,628.24	3	YES	YES	NO	YES	YES	2
SAN ANTONIO	Industrial	10.51	100.00%	1,576,505,130.86	3	YES	YES	NO	YES	YES	2
SAN ANTONIO	Parks and Recreational	0.06	100.00%	8,476,891.29	2	YES	YES	NO	YES	YES	2
SAN ANTONIO	Residential	25.28	100.00%	2,528,310,391.01	3	NO	NO	YES	YES	YES	3
UBALDE	Commercial	1.53	100.00%	229,829,626.68	3	YES	YES	NO	YES	YES	2
UBALDE	Industrial	0.21	100.00%	31,293,618.69	3	YES	YES	NO	YES	YES	2
UBALDE	Residential	5.94	100.00%	593,870,630.71	3	NO	NO	YES	YES	YES	3
PAMPANGA	Commercial	9.68	85.59%	1,451,849,595.57	3	YES	YES	NO	YES	YES	2
PAMPANGA	Industrial	22.14	82.98%	3,321,504,237.62	3	YES	YES	NO	YES	YES	2
PAMPANGA	Residential	0.07	0.13%	6,650,659.71	2	NO	NO	YES	YES	YES	3
PAMPANGA	Tourism	2.99	100.00%	447,772,676.38	3	YES	YES	NO	YES	YES	2
SASA	Commercial	9.87	17.02%	1,481,011,406.31	3	YES	YES	NO	YES	YES	2
SASA	Industrial	7.96	8.49%	1,193,938,159.28	2	YES	YES	NO	YES	YES	2
SASA	Residential	15.53	6.94%	1,553,348,198.72	3	NO	NO	YES	YES	YES	3
A. ANGLIONGTO	Commercial	16.74	43.20%	2,511,503,441.71	3	YES	YES	NO	YES	YES	2
A. ANGLIONGTO	Industrial	2.95	17.19%	442,465,662.96	3	YES	YES	NO	YES	YES	2
A. ANGLIONGTO	Residential	3.71	2.39%	371,340,252.39	3	NO	NO	YES	YES	YES	3
V. HIZON	Commercial	22.61	89.55%	3,391,652,239.64	3	YES	YES	NO	YES	YES	2
V. HIZON	Industrial	6.29	99.73%	944,162,773.44	3	YES	YES	NO	YES	YES	2
V. HIZON	Residential	34.45	29.02%	3,445,009,803.24	3	NO	NO	YES	YES	YES	3
V. HIZON	Tourism	0.69	45.20%	103,159,309.35	3	YES	YES	NO	YES	YES	2
BUNAWAN	Agri-Industrial	1.18	63.19%	176,310,936.40	3	YES	YES	NO	YES	YES	2
BUNAWAN	Commercial	10.44	88.01%	1,565,375,961.43	3	YES	YES	NO	YES	YES	2
BUNAWAN	Industrial	71.18	61.57%	10,677,533,101.42	3	YES	YES	NO	YES	YES	2
BUNAWAN	Parks and Recreational	0.18	75.90%	27,636,318.14	3	YES	YES	NO	YES	YES	2
BUNAWAN	Residential	73.00	58.98%	7,299,529,543.00	3	NO	NO	YES	YES	YES	3

Table U-19. Urban Use Area, Adaptive Capacity Score, Storm Surge Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
ILANG	Industrial	20.88	23.17%	3,132,663,525.14	3	YES	YES	NO	YES	YES	2
ILANG	Residential	11.24	8.95%	1,124,445,330.35	3	NO	NO	YES	YES	YES	3
LASANG	Commercial	0.59	27.59%	87,993,359.55	3	YES	YES	NO	YES	YES	2
LASANG	Industrial	10.51	27.64%	1,575,904,231.58	3	YES	YES	NO	YES	YES	2
LASANG	Parks and Recreational	0.07	100.00%	10,756,125.65	3	YES	YES	NO	YES	YES	2
LASANG	Residential	37.91	74.73%	3,791,015,974.16	3	NO	NO	YES	YES	YES	3
MAHAYAG	Industrial	2.18	3.12%	327,490,389.66	3	YES	YES	NO	YES	YES	2
MAHAYAG	Residential	8.08	13.99%	808,039,809.18	3	NO	NO	YES	YES	YES	3
PANACAN	Commercial	3.53	47.37%	530,072,420.12	3	YES	YES	NO	YES	YES	2
PANACAN	Industrial	39.42	32.75%	5,913,217,853.51	3	YES	YES	NO	YES	YES	2
PANACAN	Parks and Recreational	6.91	99.07%	1,035,970,786.26	3	YES	YES	NO	YES	YES	2
PANACAN	Residential	32.21	12.53%	3,221,054,544.67	3	NO	NO	YES	YES	YES	3
PANACAN	Tourism	0.76	79.24%	113,878,781.56	3	YES	YES	NO	YES	YES	2
TIBUNGCO	Industrial	5.60	13.42%	840,477,503.05	3	YES	YES	NO	YES	YES	2
TIBUNGCO	Residential	11.83	100.00%	1,183,066,618.64	3	NO	NO	YES	YES	YES	3
BAGO APLAYA	Commercial	9.29	71.96%	1,392,984,605.26	3	YES	YES	NO	YES	YES	2
BAGO APLAYA	Industrial	15.91	97.95%	2,386,594,737.70	3	YES	YES	NO	YES	YES	2
BAGO APLAYA	Parks and Recreational	5.45	99.89%	817,011,372.54	3	YES	YES	NO	YES	YES	2
BAGO APLAYA	Residential	83.51	87.48%	8,350,523,697.88	3	NO	NO	YES	YES	YES	3
BAGO GALLERA	Parks and Recreational	20.79	32.76%	3,119,077,919.81	3	YES	YES	NO	YES	YES	2
BAGO GALLERA	Residential	1.52	1.17%	151,684,311.52	3	NO	NO	YES	YES	YES	3
BUCANA	Commercial	53.33	84.04%	7,999,105,327.65	3	YES	YES	NO	YES	YES	2
BUCANA	Industrial	0.12	100.00%	17,514,521.14	3	YES	YES	NO	YES	YES	2
BUCANA	Parks and Recreational	1.84	96.21%	276,608,516.54	3	YES	YES	NO	YES	YES	2

Table U-19. Urban Use Area, Adaptive Capacity Score, Storm Surge Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
BUCANA	Residential	189.27	87.24%	18,927,308,315.83	3	NO	NO	YES	YES	YES	3
BUCANA	Tourism	0.67	100.00%	99,886,927.88	3	YES	YES	NO	YES	YES	2
DUMOY	Commercial	2.03	24.80%	304,280,609.76	3	YES	YES	NO	YES	YES	2
DUMOY	Industrial	3.85	11.83%	577,795,389.33	3	YES	YES	NO	YES	YES	2
DUMOY	Parks and Recreational	8.04	96.50%	1,205,608,019.16	3	YES	YES	NO	YES	YES	2
DUMOY	Residential	40.74	25.03%	6,111,718,427.68	3	NO	NO	YES	YES	YES	3
DUMOY	Tourism	5.83	100.00%	582,667,328.21	3	YES	YES	NO	YES	YES	2
MA-A	Commercial	2.88	3.19%	431,464,196.51	3	YES	YES	NO	YES	YES	2
MA-A	Industrial	2.08	9.22%	311,738,761.33	3	YES	YES	NO	YES	YES	2
MA-A	Parks and Recreational	0.05	0.41%	8,003,319.22	2	YES	YES	NO	YES	YES	2
MA-A	Residential	7.45	1.74%	744,643,837.80	3	NO	NO	YES	YES	YES	3
MATINA APLAYA	Commercial	15.77	77.01%	2,364,923,678.33	3	YES	YES	NO	YES	YES	2
MATINA APLAYA	Industrial	2.65	91.29%	397,836,146.49	3	YES	YES	NO	YES	YES	2
MATINA APLAYA	Parks and Recreational	1.51	66.30%	225,771,374.70	3	YES	YES	NO	YES	YES	2
MATINA APLAYA	Residential	131.23	84.39%	13,122,695,931.23	3	NO	NO	YES	YES	YES	3
MATINA APLAYA	Tourism	1.79	75.83%	267,773,888.10	3	YES	YES	NO	YES	YES	2
MATINA CROSSING	Commercial	1.06	2.08%	158,999,255.72	3	YES	YES	NO	YES	YES	2
MATINA CROSSING	Residential	20.70	8.26%	2,069,535,118.57	3	NO	NO	YES	YES	YES	3
TALOMO	Commercial	4.99	24.18%	749,217,882.81	3	YES	YES	NO	YES	YES	2
TALOMO	Industrial	2.63	16.61%	394,878,666.01	3	YES	YES	NO	YES	YES	2
TALOMO	Parks and Recreational	1.19	21.79%	178,456,030.72	3	YES	YES	NO	YES	YES	2
TALOMO	Residential	202.72	68.13%	20,271,618,543.12	3	NO	NO	YES	YES	YES	3
TALOMO	Tourism	0.84	54.26%	126,092,259.60	3	YES	YES	NO	YES	YES	2
BINUGAO	Industrial	28.66	45.24%	4,299,580,048.70	3	YES	YES	NO	YES	YES	2
BINUGAO	Parks and Recreational	1.27	94.94%	190,405,495.62	3	YES	YES	NO	YES	YES	2

Table U-19. Urban Use Area, Adaptive Capacity Score, Storm Surge Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
BINUGAO	Residential	5.83	11.04%	582,772,276.73	3	NO	NO	YES	YES	YES	3
DALIAO	Commercial	0.07	100.00%	10,872,775.79	3	YES	YES	NO	YES	YES	2
DALIAO	Industrial	13.79	93.47%	2,068,701,954.04	3	YES	YES	NO	YES	YES	2
DALIAO	Parks and Recreational	0.16	100.00%	23,834,181.92	3	YES	YES	NO	YES	YES	2
DALIAO	Residential	48.79	45.27%	4,879,317,807.20	3	NO	NO	YES	YES	YES	3
DALIAO	Tourism	1.79	100.00%	268,157,669.73	3	YES	YES	NO	YES	YES	2
LIZADA	Industrial	3.90	29.03%	585,111,028.13	3	YES	YES	NO	YES	YES	2
LIZADA	Parks and Recreational	0.11	61.34%	17,208,696.54	3	YES	YES	NO	YES	YES	2
LIZADA	Residential	71.85	71.16%	7,184,785,765.72	3	NO	NO	YES	YES	YES	3
LIZADA	Tourism	0.08	100.00%	12,102,495.64	3	YES	YES	NO	YES	YES	2
SIRAWAN	Parks and Recreational	0.04	100.00%	6,667,004.87	2	YES	YES	NO	YES	YES	2
SIRAWAN	Residential	17.36	20.68%	1,735,603,133.59	3	NO	NO	YES	YES	YES	3

FAULTLINE

Overall, there are 25 barangays located in fault line areas which registered a low adaptive capacity and an adaptive capacity average equivalent to three (3) in dealing with the impact of an earthquake. Though government resources and alternative sites are readily available as few of the efforts to mitigate the damages of earthquake, the barangays have no capacity and willingness to retrofit/relocate/conform with new regulations and no insurance coverage for the barangays in the residential area.

Table U-20. Urban Use Area, Adaptive Capacity Score, Faultline Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score Average	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
MALAGOS	Residential	0.08	0.43%	7,680,265	2	NO	NO	YES	YES	YES	3
BIAO JOAQUIN	Agri-Industrial	0.32	1.61%	48,712,383	1	YES	YES	NO	YES	YES	2
CALINAN	Residential	0.16	0.15%	16,452,449	1	NO	NO	YES	YES	YES	3
CALINAN	Commercial	0.05	0.26%	5,000,000	1						2
CAWAYAN	Agri-Industrial	0.27	4.51%	40,475,177	2	YES	YES	NO	YES	YES	2
PANGYAN	Residential	0.11	2.13%	10,829,847	2	NO	NO	YES	YES	YES	3
RIVERSIDE	Residential	0.74	3.48%	73,649,697	2	NO	NO	YES	YES	YES	3
RIVERSIDE	Parks and Recreational	0.01	12.96%	1,360,320	1	YES	YES	NO	YES	YES	2
RIVERSIDE	Commercial	0.04	3.84%	6,391,537	1	YES	YES	NO	YES	YES	2
SUBASTA	Residential	0.15	1.58%	15,140,439	3	NO	NO	YES	YES	YES	3
TALOMO RIVER	Residential	0.15	0.69%	14,974,448	2	NO	NO	YES	YES	YES	3
TALOMO RIVER	Agri-Industrial	0.16	0.89%	24,507,299	1	YES	YES	NO	YES	YES	2
WANGAN	Residential	0.05	1.35%	4,504,294	2	NO	NO	YES	YES	YES	3
TAMUGAN	Residential	0.16	1.60%	16,308,833	1	NO	NO	YES	YES	NO	3
TAMUGAN	Agri-Industrial	0.22	1.02%	33,081,754	1	YES	YES	NO	YES	NO	2

Table U-20. Urban Use Area, Adaptive Capacity Score, Faultline Impact Areas, Davao City

EXPOSURE					IMPACT	ADAPTIVE CAPACITY					
Barangay	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
LOS AMIGOS	Residential	0.16	0.39%	15,603,212	2	NO	NO	YES	YES	YES	3
LOS AMIGOS	Tourism	0.03	5.10%	4,824,029	1	YES	YES	NO	YES	YES	2
LOS AMIGOS	Commercial	0.01	0.74%	1,140,000	1	YES	YES	NO	YES	YES	2
MALABOG	Residential	0.00	0.02%	439,318	1	NO	NO	YES	YES	NO	3
PANALUM	Residential	0.00	0.01%	11,734	1	NO	NO	YES	YES	NO	3
SUMIMAO	Residential	0.01	0.41%	734,094	2	NO	NO	YES	YES	NO	3
BALIOK	Industrial	0.02	0.29%	2,805,000	1	YES	YES	NO	YES	YES	2
CATALUNAN GRANDE	Residential	0.49	0.16%	48,595,846	2	NO	NO	YES	YES	YES	3
CATALUNAN PEQUENO	Residential	1.26	0.64%	126,446,559	3	NO	NO	YES	YES	YES	3
CATALUNAN PEQUENO	Tourism	0.02	1.37%	2,714,630	1	YES	YES	NO	YES	YES	2
CATALUNAN PEQUENO	Agri-Industrial	0.13	0.93%	19,105,760	1	YES	YES	NO	YES	YES	2
TALOMO	Residential	0.38	0.13%	38,445,207	2	NO	NO	YES	YES	YES	3
BANKAS HEIGHTS	Residential	0.07	0.24%	7,181,899	1	NO	NO	YES	YES	YES	3
BINUGAO	Residential	0.59	1.12%	58,901,751	2	NO	NO	YES	YES	YES	3
BINUGAO	Industrial	0.58	0.92%	87,022,225	2	YES	YES	NO	YES	YES	2
BINUGAO	Commercial	0.04	1.16%	6,000,000	1	YES	YES	NO	YES	YES	2
LIZADA	Residential	0.0004	0.0004%	42,717	2	NO	NO	YES	YES	YES	3
SIRAWAN	Residential	0.54	0.64%	53,525,360	2	NO	NO	YES	YES	YES	3
SIRAWAN	Agri-Industrial	0.01	0.01%	1,245,258	1	YES	YES	NO	YES	YES	2
ANGALAN	Residential	0.01	0.11%	1,300,000	2	NO	NO	YES	YES	YES	3
BAGO OSHIRO	Residential	0.10	0.07%	10,218,057	2	NO	NO	YES	YES	YES	3
BIAO ESCUELA	Agri-Industrial	0.08	0.23%	12,548,263	1	YES	YES	NO	YES	YES	2
MINTAL	Residential	1.06	0.71%	106,353,159	3	NO	NO	YES	YES	YES	3
MINTAL	Parks and Recreational	0.04	9.78%	6,011,713	1	YES	YES	NO	YES	YES	2

Table U-20. Urban Use Area, Adaptive Capacity Score, Faultline Impact Areas, Davao City

Barangay	EXPOSURE				IMPACT	ADAPTIVE CAPACITY					
	Land Use Category	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of impact score	Capacity and willingness to retrofit or relocate or conform with new regulations	Insurance Coverage	Available Alternative Sites	Government Resources	Local Government capacity to impose/ implement zoning regulations	Adaptive Capacity Average
					Average						
STO. NINO	Residential	0.47	0.58%	47,011,269	3	NO	NO	YES	YES	YES	3
TAGAKPAN	Residential	0.04	0.38%	3,697,376	2	NO	NO	YES	YES	YES	3
TAGAKPAN	Parks and Recreational	0.01	0.47%	1,690,592	1	YES	YES	NO	YES	YES	2
TALANDANG	Agri-Industrial	0.29	1.16%	43,063,860	2	YES	YES	NO	YES	YES	2
TUGBOK	Residential	0.75	0.66%	75,294,413	2	NO	NO	YES	YES	YES	3
TUGBOK	Cemetery	0.22	5.53%	32,949,319	1	YES	NO	NO	YES	YES	2
TUGBOK	Agri-Industrial	0.04	0.78%	5,487,579	1	YES	YES	NO	YES	YES	2

VULNERABILITY

FLOOD

Out of 76 barangays which are highly susceptible to flooding, a total of 59 barangays have residential areas vulnerable to flood. These 59 barangays have high degree of impact and low adaptive capacity. These high degree of impact areas takes a 77.68% of the total residential areas susceptible to flood, and damage to such is pegged at 12,234,500,000. Out of 59 barangays 37 have high to very high proportion of buildings with walls with light material and also high to very high proportion of buildings in dilapidated and condemned condition and 44 have moderate rating in structure employing hazard resistant design, while 15 have high rating. All of the 59 barangays have “very high rating” for no access/area coverage to infrastructure related hazard mitigation.

It is notable also that all of these barangays with high degree of impact have also low adaptive capacity because of no insurance coverage and no capacity and willingness to retrofit or relocate or conform with the new regulations with makes these barangays vulnerable given the fact that these areas are pre-identified to have moderate to very high susceptibility to flood. While there is high degree of impact and low adaptive capacity, these barangays still have chance to improve because the barangay have available alternate sites, available government resources at their disposal and are empowered to implement zoning regulations.

Table U-21. Urban Use Areas Vulnerability, Flood Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
1-A	Residential	6.95	6.94	99.86%	69,400,000.00	3	3	9	HIGH
1-A	Parks and Recreational	0.08	0.08	100.00%	1,200,000.00	2	2	4	MODERATE
1-A	Commercial	1.41	1.02	72.34%	15,300,000.00	3	3	9	HIGH
2-A	Residential	1.62	1.23	75.93%	12,300,000.00	3	3	9	HIGH
2-A	Commercial	11.32	1.53	13.52%	22,950,000.00	3	3	9	HIGH
5-A	Residential	20.41	14.12	69.18%	141,200,000.00	3	3	9	HIGH

Table U-21. Urban Use Areas Vulnerability, Flood Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
5-A	Parks and Recreational	0.01	0.01	100.00%	150,000.00	1	1	1	LOW
5-A	Commercial	4.34	0.14	3.23%	2,100,000.00	2	2	4	MODERATE
8-A	Residential	82.83	47.94	57.88%	479,400,000.00	3	3	9	HIGH
8-A	Industrial	3.84	3.84	100.00%	57,600,000.00	3	3	9	HIGH
8-A	Commercial	5.65	4.29	75.93%	64,350,000.00	3	3	9	HIGH
8-A	Cemetery	18.9	3.17	16.77%	47,550,000.00	3	3	9	HIGH
8-A	Parks and Recreational	1.17	0.04	3.42%	600,000.00	2	2	4	MODERATE
15-B	Residential	1.46	0.22	15.07%	2,200,000.00	2	2	4	MODERATE
15-B	Commercial	24.46	1.2	4.91%	18,000,000.00	3	3	9	HIGH
19-B	Residential	179.82	40.47	22.51%	404,700,000.00	3	3	9	HIGH
19-B	Parks and Recreational	0.36	0.1	27.78%	1,500,000.00	2	2	4	MODERATE
19-B	Commercial	28.23	4.9	17.36%	73,500,000.00	3	3	9	HIGH
19-B	Industrial	2.48	0.16	6.45%	2,400,000.00	2	2	4	MODERATE
21-C	Residential	5.18	1.32	25.48%	13,200,000.00	3	3	9	HIGH
22-C	Residential	4.78	3.53	73.85%	35,300,000.00	3	3	9	HIGH
22-C	Parks and Recreational	0.05	0.001	2.00%	15,000.00	1	1	1	LOW
23-C	Residential	12.79	11.18	87.41%	111,800,000.00	3	3	9	HIGH
23-C	Parks and Recreational	0.72	0.43	59.72%	6,450,000.00	3	3	9	HIGH
27-C	Tourism	0.04	0.04	100.00%	600,000.00	2	2	4	MODERATE

Table U-21. Urban Use Areas Vulnerability, Flood Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
27-C	Parks and Recreational	4.1	3.01	73.41%	45,150,000.00	3	3	9	HIGH
31-D	Residential	13.56	7.74	57.08%	77,400,000.00	3	3	9	HIGH
31-D	Parks and Recreational	0.13	0.11	84.62%	1,650,000.00	2	2	4	MODERATE
37-D	Residential	3.55	0.76	21.41%	7,600,000.00	3	3	9	HIGH
39-D	Residential	2.93	2.53	86.35%	25,300,000.00	3	3	9	HIGH
39-D	Commercial	5.35	3.03	56.64%	45,450,000.00	3	3	9	HIGH
39-D	Parks and Recreational	0.89	0.16	17.98%	2,400,000.00	2	2	4	MODERATE
40-D	Residential	1.34	1.3	97.01%	13,000,000.00	3	3	9	HIGH
40-D	Commercial	6.05	6.04	99.83%	90,600,000.00	3	3	9	HIGH
AGDAO PROPER	Residential	7.62	7.62	100.00%	76,200,000.00	3	3	9	HIGH
AGDAO PROPER	Parks and Recreational	0.01	0.01	100.00%	150,000.00	1	1	1	LOW
AGDAO PROPER	Industrial	1.29	1.29	100.00%	19,350,000.00	3	3	9	HIGH
AGDAO PROPER	Commercial	22.65	19.23	84.90%	288,450,000.00	3	3	9	HIGH
CENTRO	Residential	22.72	18.39	80.94%	183,900,000.00	3	3	9	HIGH
CENTRO	Parks and Recreational	0.04	0.04	100.00%	600,000.00	2	2	4	MODERATE
CENTRO	Industrial	10.73	8.83	82.29%	132,450,000.00	3	3	9	HIGH
CENTRO	Commercial	1.14	0.26	22.81%	3,900,000.00	2	2	4	MODERATE
GOV. VICENTE DUTERTE	Residential	20.34	14.16	69.62%	141,600,000.00	3	3	9	HIGH
GOV. VICENTE DUTERTE	Commercial	4.95	2.49	50.30%	37,350,000.00	3	3	9	HIGH
GOV. VICENTE DUTERTE	Industrial	12.57	3.99	31.74%	59,850,000.00	3	3	9	HIGH
LEON GARCIA SR.	Residential	12.04	10.85	90.12%	108,500,000.00	3	3	9	HIGH
LEON GARCIA SR.	Parks and Recreational	0.08	0.08	100.00%	1,200,000.00	2	2	4	MODERATE
LEON GARCIA SR.	Industrial	0.29	0.29	100.00%	4,350,000.00	3	3	9	HIGH
LEON GARCIA SR.	Commercial	1.06	0.82	77.36%	12,300,000.00	3	3	9	HIGH
LAPU - LAPU	Residential	23.68	17.27	72.93%	172,700,000.00	3	3	9	HIGH

Table U-21. Urban Use Areas Vulnerability, Flood Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
LAPU - LAPU	Parks and Recreational	0.04	0.04	100.00%	600,000.00	2	2	4	MODERATE
LAPU - LAPU	Commercial	1.61	0.89	55.28%	13,350,000.00	3	3	9	HIGH
LAPU - LAPU	Industrial	22.95	5.97	26.01%	89,550,000.00	3	3	9	HIGH
BAGUIO	Residential	12.03	8.1	67.33%	81,000,000.00	3	3	9	HIGH
BAGUIO	Agri-Industrial	6.17	3.03	49.11%	45,450,000.00	3	3	9	HIGH
GUMALANG	Parks and Recreational	0.05	0.05	100.00%	750,000.00	2	2	4	MODERATE
GUMALANG	Agri-Industrial	21.28	0.3	1.41%	4,500,000.00	2	2	4	MODERATE
MALAGOS	Residential	18.01	4.89	27.15%	48,900,000.00	3	3	9	HIGH
MALAGOS	Industrial	3.05	0.79	25.90%	11,850,000.00	3	3	9	HIGH
MALAGOS	Tourism	13.49	0.95	7.04%	14,250,000.00	3	3	9	HIGH
MALAGOS	Agri-Industrial	7.82	0.17	2.17%	2,550,000.00	2	2	4	MODERATE
BUHANGIN	Industrial	4.4	0.46	10.45%	6,900,000.00	3	3	9	HIGH
BUHANGIN	Residential	335.4	9.41	2.81%	94,100,000.00	3	3	9	HIGH
BUHANGIN	Commercial	52.91	0.16	0.30%	2,400,000.00	2	2	4	MODERATE
BUHANGIN	Cemetery	8.84	0.25	2.83%	3,750,000.00	2	2	4	MODERATE
CABANTIAN	Residential	305.58	5.47	1.79%	54,700,000.00	3	3	9	HIGH
CABANTIAN	Industrial	26.47	0.04	0.15%	600,000.00	2	2	4	MODERATE
CABANTIAN	Commercial	23.17	0.07	0.30%	1,050,000.00	2	2	4	MODERATE
CALLAWA	Residential	7.91	0.11	1.39%	1,100,000.00	2	2	4	MODERATE
COMMUNAL	Tourism	20.16	0.7	3.47%	10,500,000.00	3	3	9	HIGH
COMMUNAL	Residential	162.84	7.08	4.35%	70,800,000.00	3	3	9	HIGH
COMMUNAL	Commercial	11.99	0.02	0.17%	300,000.00	1	1	1	LOW
INDANGAN	Commercial	1.71	0.45	26.32%	6,750,000.00	3	3	9	HIGH
INDANGAN	Residential	247.61	0.4	0.16%	4,000,000.00	2	2	4	MODERATE
MANDUG	Agri-Industrial	6.55	6.54	99.85%	98,100,000.00	3	3	9	HIGH
MANDUG	Residential	168.4	20.99	12.46%	209,900,000.00	3	3	9	HIGH

Table U-21. Urban Use Areas Vulnerability, Flood Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
A. ANGLIONGTO	Residential	155.73	6.3	4.05%	63,000,000.00	3	3	9	HIGH
A. ANGLIONGTO	Commercial	38.75	0.51	1.32%	7,650,000.00	3	3	9	HIGH
BUNAWAN	Residential	124.56	35.1	28.18%	351,000,000.00	3	3	9	HIGH
BUNAWAN	Parks and Recreational	0.24	0.11	45.83%	1,650,000.00	2	2	4	MODERATE
BUNAWAN	Commercial	11.86	5.74	48.40%	86,100,000.00	3	3	9	HIGH
BUNAWAN	Industrial	115.63	25.79	22.30%	386,850,000.00	3	3	9	HIGH
BUNAWAN	Agri-Industrial	1.86	0.1	5.38%	1,500,000.00	2	2	4	MODERATE
GATUNGAN	Parks and Recreational	0.01	0.01	100.00%	150,000.00	1	1	1	LOW
GATUNGAN	Residential	1.99	0.04	2.01%	400,000.00	1	1	1	LOW
ILANG	Residential	125.68	7.03	5.59%	70,300,000.00	3	3	9	HIGH
ILANG	Industrial	90.12	7.34	8.14%	110,100,000.00	3	3	9	HIGH
LASANG	Residential	50.73	20.65	40.71%	206,500,000.00	3	3	9	HIGH
LASANG	Parks and Recreational	0.07	0.07	100.00%	1,050,000.00	2	2	4	MODERATE
LASANG	Agri-Industrial	9.39	4.1	43.66%	61,500,000.00	3	3	9	HIGH
LASANG	Industrial	38.2	6.57	17.20%	98,550,000.00	3	3	9	HIGH
LASANG	Commercial	2.13	0.13	6.10%	1,950,000.00	2	2	4	MODERATE
MAHAYAG	Residential	57.77	0.74	1.28%	7,400,000.00	3	3	9	HIGH
MAHAYAG	Industrial	26.18	1.17	4.47%	17,550,000.00	3	3	9	HIGH
BIAO JOAQUIN	Residential	3.2	2.38	74.38%	23,800,000.00	3	3	9	HIGH
BIAO JOAQUIN	Agri-Industrial	20.15	16.06	79.70%	240,900,000.00	3	3	9	HIGH
CALINAN	Residential	107.32	107.19	99.88%	1,071,900,000.00	3	3	9	HIGH
CALINAN	Parks and Recreational	0.75	0.75	100.00%	11,250,000.00	3	3	9	HIGH
CALINAN	Industrial	2.17	2.17	100.00%	32,550,000.00	3	3	9	HIGH
CALINAN	Commercial	19.53	19.53	100.00%	292,950,000.00	3	3	9	HIGH
CALINAN	Cemetery	5.97	5.97	100.00%	89,550,000.00	3	3	9	HIGH

Table U-21. Urban Use Areas Vulnerability, Flood Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
CALINAN	Agri-Industrial	3.12	3.12	100.00%	46,800,000.00	3	3	9	HIGH
CAWAYAN	Residential	1.84	0.3	16.30%	3,000,000.00	2	2	4	MODERATE
DACUDAO	Agri-Industrial	37.73	6.6	17.49%	99,000,000.00	3	3	9	HIGH
DACUDAO	Residential	7.13	0.29	4.07%	2,900,000.00	2	2	4	MODERATE
DALAGDAG	Residential	2.54	1.18	46.46%	11,800,000.00	3	3	9	HIGH
DOMINGA	Residential	1.77	1.73	97.74%	17,300,000.00	3	3	9	HIGH
INAYANGAN	Residential	30.2	0.01	0.03%	100,000.00	1	1	1	LOW
LACSON	Residential	5.16	1.3	25.19%	13,000,000.00	3	3	9	HIGH
LACSON	Agri-Industrial	11.02	1.06	9.62%	15,900,000.00	3	3	9	HIGH
LAMANAN	Residential	4.54	0.06	1.32%	600,000.00	2	2	4	MODERATE
LAMPIANAO	Residential	2.14	0.29	13.55%	2,900,000.00	2	2	4	MODERATE
GUMITAN	Residential	8.23	0.03	0.36%	300,000.00	1	1	1	LOW
MALAMBA	Residential	13.12	1.4	10.67%	14,000,000.00	3	3	9	HIGH
MARILOG	Residential	92.61	0.1	0.11%	1,000,000.00	2	2	4	MODERATE
MALABOG	Residential	18.22	0.03	0.16%	300,000.00	1	1	1	LOW
BAGO APLAYA	Residential	95.45	28.28	29.63%	282,800,000.00	3	3	9	HIGH
BAGO APLAYA	Industrial	16.24	5.86	36.08%	87,900,000.00	3	3	9	HIGH
BAGO APLAYA	Commercial	12.91	4.13	31.99%	61,950,000.00	3	3	9	HIGH
BAGO APLAYA	Parks and Recreational	5.45	0.4	7.34%	6,000,000.00	3	3	9	HIGH
BAGO GALLERA	Residential	129.96	49.25	37.90%	492,500,000.00	3	3	9	HIGH
BAGO GALLERA	Industrial	0.12	0.11	91.67%	1,650,000.00	2	2	4	MODERATE
BAGO GALLERA	Commercial	0.65	0.28	43.08%	4,200,000.00	2	2	4	MODERATE
BALIOK	Residential	77.41	14.12	18.24%	141,200,000.00	3	3	9	HIGH
BALIOK	Parks and Recreational	0.35	0.09	25.71%	1,350,000.00	2	2	4	MODERATE
BUCANA	Tourism	0.67	0.3	44.78%	4,500,000.00	2	2	4	MODERATE
BUCANA	Residential	216.99	86.42	39.83%	864,200,000.00	3	3	9	HIGH

Table U-21. Urban Use Areas Vulnerability, Flood Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
BUCANA	Parks and Recreational	1.92	0.22	11.46%	3,300,000.00	2	2	4	MODERATE
BUCANA	Commercial	63.45	6.95	10.95%	104,250,000.00	3	3	9	HIGH
CATALUNAN GRANDE	Residential	301.77	69.62	23.07%	696,200,000.00	3	3	9	HIGH
CATALUNAN GRANDE	Agri-Industrial	21.25	9.74	45.84%	146,100,000.00	3	3	9	HIGH
CATALUNAN GRANDE	Parks and Recreational	5.8	1.82	31.38%	27,300,000.00	3	3	9	HIGH
CATALUNAN GRANDE	Commercial	6.03	0.88	14.59%	13,200,000.00	3	3	9	HIGH
CATALUNAN PEQUEÑO	Tourism	1.32	0.22	16.67%	3,300,000.00	2	2	4	MODERATE
CATALUNAN PEQUEÑO	Residential	197.4	26.64	13.50%	266,400,000.00	3	3	9	HIGH
CATALUNAN PEQUEÑO	Commercial	3.55	0.3	8.45%	4,500,000.00	2	2	4	MODERATE
CATALUNAN PEQUEÑO	Agri-Industrial	13.65	0.74	5.42%	11,100,000.00	3	3	9	HIGH
DUMOY	Tourism	5.83	4	68.61%	60,000,000.00	3	3	9	HIGH
DUMOY	Parks and Recreational	8.33	5.15	61.82%	77,250,000.00	3	3	9	HIGH
DUMOY	Residential	162.79	28.49	17.50%	284,900,000.00	3	3	9	HIGH
DUMOY	Industrial	32.56	0.25	0.77%	3,750,000.00	2	2	4	MODERATE
LANGUB	Residential	13.62	0.01	0.07%	100,000.00	1	1	1	LOW
MA-A	Residential	428.3	136.31	31.83%	1,363,100,000.00	3	3	9	HIGH
MA-A	Parks and Recreational	12.99	5.36	41.26%	80,400,000.00	3	3	9	HIGH
MA-A	Industrial	22.55	18.04	80.00%	270,600,000.00	3	3	9	HIGH
MA-A	Tourism	16.56	5.6	33.82%	84,000,000.00	3	3	9	HIGH
MA-A	Commercial	90.17	27.8	30.83%	417,000,000.00	3	3	9	HIGH
MAGTUOD	Residential	53.99	10.06	18.63%	100,600,000.00	3	3	9	HIGH
MAGTUOD	Parks and Recreational	10.49	0.41	3.91%	6,150,000.00	3	3	9	HIGH
MATINA APLAYA	Residential	155.55	72.79	46.80%	727,900,000.00	3	3	9	HIGH
MATINA APLAYA	Commercial	20.48	13.87	67.72%	208,050,000.00	3	3	9	HIGH
MATINA APLAYA	Tourism	2.35	0.47	20.00%	7,050,000.00	3	3	9	HIGH

Table U-21. Urban Use Areas Vulnerability, Flood Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
ALAMBRE	Residential	7.87	0.09	1.14%	900,000.00	2	2	4	MODERATE
BANKAS HEIGHTS	Residential	29.39	18.61	63.32%	186,100,000.00	3	3	9	HIGH
BANKAS HEIGHTS	Agri-Industrial	1.67	0.18	10.78%	2,700,000.00	2	2	4	MODERATE
BATO	Commercial	0.47	0.33	70.21%	4,950,000.00	2	2	4	MODERATE
BATO	Residential	44.81	2.08	4.64%	20,800,000.00	3	3	9	HIGH
CROSSING BAYABAS	Residential	92.31	21.61	23.41%	216,100,000.00	3	3	9	HIGH
BINUGAO	Residential	52.8	26.77	50.70%	267,700,000.00	3	3	9	HIGH
BINUGAO	Parks and Recreational	1.34	1.34	100.00%	20,100,000.00	3	3	9	HIGH
BINUGAO	Industrial	63.36	48.27	76.18%	724,050,000.00	3	3	9	HIGH
BINUGAO	Commercial	3.44	1.44	41.86%	21,600,000.00	3	3	9	HIGH
BINUGAO	Agri-Industrial	13.5	0.15	1.11%	2,250,000.00	2	2	4	MODERATE
CATIGAN	Residential	6.31	0.24	3.80%	2,400,000.00	2	2	4	MODERATE
DALIAO	Tourism	1.79	1.46	81.56%	21,900,000.00	3	3	9	HIGH
DALIAO	Residential	107.79	23.42	21.73%	351,300,000.00	3	3	9	HIGH
DALIAO	Parks and Recreational	0.16	0.07	43.75%	1,050,000.00	2	2	4	MODERATE
DALIAO	Industrial	14.75	7.84	53.15%	117,600,000.00	3	3	9	HIGH
EDEN	Tourism	98.41	9.12	9.27%	136,800,000.00	3	3	9	HIGH
EDEN	Residential	51.49	2.35	4.56%	23,500,000.00	3	3	9	HIGH
KILATE	Residential	2.61	0.11	4.21%	1,100,000.00	2	2	4	MODERATE
LIZADA	Agri-Industrial	5.18	2.1	40.54%	31,500,000.00	3	3	9	HIGH
LIZADA	Residential	100.96	19.82	19.63%	198,200,000.00	3	3	9	HIGH
LIZADA	Industrial	13.44	1.42	10.57%	21,300,000.00	3	3	9	HIGH
LUBOGAN	Residential	90.18	32.08	35.57%	481,200,000.00	3	3	9	HIGH
LUBOGAN	Parks and Recreational	1.1	0.07	6.36%	1,050,000.00	2	2	4	MODERATE
LUBOGAN	Cemetery	5.67	0.09	1.59%	1,350,000.00	2	2	4	MODERATE
MARAPANGI	Tourism	0.02	0.02	100.00%	300,000.00	1	1	1	LOW

Table U-21. Urban Use Areas Vulnerability, Flood Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
MARAPANGI	Agri-Industrial	9.85	8.44	85.69%	126,600,000.00	3	3	9	HIGH
MARAPANGI	Residential	76.92	12.97	16.86%	129,700,000.00	3	3	9	HIGH
ANGALAN	Agri-Industrial	12.3	12.3	100.00%	184,500,000.00	3	3	9	HIGH
ANGALAN	Residential	11.73	11.73	100.00%	117,300,000.00	3	3	9	HIGH
ANGALAN	Parks and Recreational	0.06	0.06	100.00%	900,000.00	2	2	4	MODERATE
BAGO OSHIRO	Residential	138.55	2.96	2.14%	29,600,000.00	3	3	9	HIGH
BALENGAENG	Agri-Industrial	35.49	35.49	100.00%	532,350,000.00	3	3	9	HIGH
BALENGAENG	Parks and Recreational	0.05	0.05	100.00%	750,000.00	2	2	4	MODERATE
BIAO ESCUELA	Parks and Recreational	0.04	0.04	100.00%	600,000.00	2	2	4	MODERATE
BIAO ESCUELA	Agri-Industrial	36.45	16.81	46.12%	252,150,000.00	3	3	9	HIGH
BIAO ESCUELA	Residential	8.59	1.62	18.86%	16,200,000.00	3	3	9	HIGH
BIAO GUIANGA	Agri-Industrial	6.2	6.2	100.00%	93,000,000.00	3	3	9	HIGH
BIAO GUIANGA	Residential	3.83	1.69	44.13%	16,900,000.00	3	3	9	HIGH
LOS AMIGOS	Tourism	0.63	0.63	100.00%	9,450,000.00	3	3	9	HIGH
LOS AMIGOS	Residential	39.99	38.62	96.57%	386,200,000.00	3	3	9	HIGH
LOS AMIGOS	Industrial	3.31	3.31	100.00%	49,650,000.00	3	3	9	HIGH
LOS AMIGOS	Commercial	1.03	1.03	100.00%	15,450,000.00	3	3	9	HIGH
MANAMBULAN	Residential	9.65	9.1	94.30%	91,000,000.00	3	3	9	HIGH
MANUEL GUIANGA	Agri-Industrial	4.52	1.69	37.39%	25,350,000.00	3	3	9	HIGH
MANUEL GUIANGA	Residential	7.31	0.17	2.33%	1,700,000.00	2	2	4	MODERATE

The table below shows the Climate Change Vulnerability Assessment for Flood which enumerates the technical findings per land use category per barangay. Implications per type of land use describe the consequences of damage due to flood. Policy interventions are also in place in order to mitigate impacts and raise the adaptive capacity of urban use areas during the onslaught of the hazard.

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
1-A	Residential	<ol style="list-style-type: none"> 1. Area per land Use Category: 6.95; 2. Exposed Area in Hectares: 6.94: 3. % Exposure: 0.998561151079137 4. Exposed Value (PHP): 69400000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
1-A	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 1.41 2. Exposed Area in Hectares: 1.02 3. % Exposure: 0.723404255319149 4. Exposed Value (PHP): 15300000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
2-A	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 1.62 2. Exposed Area in Hectares: 1.23 3. % Exposure: 0.759259259259259 4. Exposed Value (PHP): 12300000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 7. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
2-A	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 11.32 2. Exposed Area in Hectares: 1.53 3. % Exposure: 0.135159010600707 4. Exposed Value (PHP): 22950000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
5-A	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 20.41 2. Exposed Area in Hectares: 14.12 3. % Exposure: 0.691817736403724 4. Exposed Value (PHP): 141200000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
8-A	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 82.83 2. Exposed Area in Hectares: 47.94 3. % Exposure: 0.578775805867439 4. Exposed Value (PHP): 479400000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
8-A	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 3.84 2. Exposed Area in Hectares: 3.84 3. % Exposure: 1 4. Exposed Value (PHP): 57600000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting industrial establishments	Imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
8-A	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 5.65 2. Exposed Area in Hectares: 4.29 3. % Exposure: 0.75929203539823 4. Exposed Value (PHP): 64350000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
8-A	Cemetery	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 18.9 2. Exposed Area in Hectares: 3.17 3. % Exposure: 0.167724867724868 4. Exposed Value (PHP): 47550000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Lack of flood resistant design regulations may lead to increased vulnerability	No additional development to cemetery area susceptible to flood

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
15-B	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 24.46 2. Exposed Area in Hectares: 1.2 3. % Exposure: 0.0490596892886345 5. Exposed Value (PHP): 18000000 6. Degree of Impact: 3 7. Adaptive Capacity: 3 8. Vulnerability Index: 9 9. Vulnerability Category : HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
19-B	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 179.82 2. Exposed Area in Hectares: 40.47 3. % Exposure: 0.225058391725058 4. Exposed Value (PHP): 404700000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
19-B	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 28.23 2. Exposed Area in Hectares: 4.9 3. % Exposure: 0.173574211831385 4. Exposed Value (PHP): 73500000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
21-C	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 5.18 2. Exposed Area in Hectares: 1.32 3. % Exposure: 0.254826254826255 4. Exposed Value (PHP): 13200000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
22-C	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 4.78 2. Exposed Area in Hectares: 3.53 3. % Exposure: 0.738493723849372 4. Exposed Value (PHP): 35300000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
23-C	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 12.79 2. Exposed Area in Hectares: 11.18 3. % Exposure: 0.874120406567631 4. Exposed Value (PHP): 111800000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
23-C	Parks and Recreational	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 0.72 2. Exposed Area in Hectares: 0.43 3. % Exposure: 0.597222222222222 4. Exposed Value (PHP): 6450000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Structures in the area might slowly corrode and/or rust	Plant more trees; maintain and monitor structure
27-C	Parks and Recreational	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 4.1 2. Exposed Area in Hectares: 3.01 3. % Exposure: 0.734146341463415 4. Exposed Value (PHP): 45150000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Structures in the area might slowly corrode and/or rust	Plant more trees; maintain and monitor structure

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
31-D	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 13.56 2. Exposed Area in Hectares: 7.74 3. % Exposure: 0.570796460176991 4. Exposed Value (PHP): 77400000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
37-D	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 3.55 2. Exposed Area in Hectares: 0.76 3. % Exposure: 0.214084507042254 4. Exposed Value (PHP): 7600000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
39-D	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 2.93 2. Exposed Area in Hectares: 2.53 3. % Exposure: 0.863481228668942 4. Exposed Value (PHP): 25300000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
39-D	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 5.35 2. Exposed Area in Hectares: 3.03 3. % Exposure: 0.566355140186916 4. Exposed Value (PHP): 45450000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
40-D	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 1.34 2. Exposed Area in Hectares: 1.3 3. % Exposure: 0.970149253731343 4. Exposed Value (PHP): 13000000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
40-D	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 6.05 2. Exposed Area in Hectares: 6.04 3. % Exposure: 0.998347107438017 4. Exposed Value (PHP): 90600000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
AGDAO PROPER	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 7.62 2. Exposed Area in Hectares: 7.62 3. % Exposure: 1 Exposed Value (PHP): 76200000 4. Degree of Impact: 3 5. Adaptive Capacity: 3 6. Vulnerability Index: 9 7. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
AGDAO PROPER	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 1.29 2. Exposed Area in Hectares: 1.29 3. % Exposure: 1 Exposed Value (PHP): 19350000 4. Degree of Impact: 3 5. Adaptive Capacity: 3 6. Vulnerability Index: 9 7. Vulnerability Category : HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting industrial establishments	Imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
AGDAO PROPER	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 22.65 2. Exposed Area in Hectares: 19.23 3. % Exposure: 0.849006622516556 4. Exposed Value (PHP): 288450000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index : 9 Vulnerability Category : HIGH	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
CENTRO	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 22.72 2. Exposed Area in Hectares: 18.39 3. % Exposure: 0.809419014084507 4. Exposed Value (PHP): 183900000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
CENTRO	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 10.73 2. Exposed Area in Hectares: 8.83 3. % Exposure: 0.822926374650513 4. Exposed Value (PHP): 132450000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting industrial establishments	Imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
GOV. VICENTE DUTERTE	Residential	1. Area per Land Use Category in Hectares: 20.34 2. Exposed Area in Hectares: 14.16 3. % Exposure: 0.696165191740413 4. Exposed Value (PHP): 141600000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
GOV. VICENTE DUTERTE	Commercial	1. Area per Land Use Category in Hectares: 4.95 2. Exposed Area in Hectares: 2.49 3. % Exposure: 0.503030303030303 4. Exposed Value (PHP): 37350000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
GOV. VICENTE DUTERTE	Industrial	1. Area per Land Use Category in Hectares: 12.57 2. Exposed Area in Hectares: 3.99 3. % Exposure: 0.317422434367542 4. Exposed Value (PHP): 59850000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH	Potential impacts to local economy will be severe due to economic disruption affecting industrial establishments	Imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
LEON GARCIA SR.	Residential	1. Area per Land Use Category in Hectares: 12.04 2. Exposed Area in Hectares: 10.85 3. % Exposure: 0.901162790697674 4. Exposed Value (PHP): 108500000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
LEON GARCIA SR.	Industrial	1. Area per Land Use Category in Hectares: 0.29 2. Exposed Area in Hectares: 0.29 3. % Exposure: 1 4. Exposed Value (PHP): 4350000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH	Potential impacts to local economy will be sever due to economic disruption affecting industrial establishments	Imposition of hazard resistant design standards/regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
LEON GARCIA SR.	Commercial	1. Area per Land Use Category in Hectares: 1.06 2. Exposed Area in Hectares: 0.82 3. % Exposure: 0.773584905660377 4. Exposed Value (PHP): 12300000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
LAPU - LAPU	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 23.68 2. Exposed Area in Hectares: 17.27 3. % Exposure: 0.729307432432432 4. Exposed Value (PHP): 172700000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
LAPU - LAPU	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 1.61 2. Exposed Area in Hectares: 0.89 3. % Exposure: 0.552795031055901 4. Exposed Value (PHP): 13350000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
LAPU - LAPU	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 22.95 2. Exposed Area in Hectares: 5.97 3. % Exposure: 0.260130718954248 4. Exposed Value (PHP): 89550000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Potential impacts to local economy will be sever due to economic disruption affecting industrial establishments	Imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
BAGUIO	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 12.03 2. Exposed Area in Hectares: 8.1 3. % Exposure: 0.673316708229426 4. Exposed Value (PHP): 81000000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
BAGUIO	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 6.17 2. Exposed Area in Hectares: 3.03 3. % Exposure: 0.491085899513776 4. Exposed Value (PHP): 45450000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Detrimental impacts to local economy and property owners	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
MALAGOS	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 18.01 2. Exposed Area in Hectares: 4.89 3. % Exposure: 0.271515824541921 4. Exposed Value (PHP): 48900000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
MALAGOS	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 3.05 2. Exposed Area in Hectares: 0.79 3. % Exposure: 0.259016393442623 4. Exposed Value (PHP): 11850000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting industrial establishments	Imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
MALAGOS	Tourism	1. Area per Land Use Category in Hectares: 13.49 2. Exposed Area in Hectares: 0.95 3. % Exposure: 0.0704225352112676 4. Exposed Value (PHP): 14250000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH	Disruption of tourism related facilities	Imposition of hazard resistant design standards/ regulations within flood susceptible areas
BUHANGIN	Industrial	1. Area per Land Use Category in Hectares: 4.4 2. Exposed Area in Hectares: 0.46 3. % Exposure: 0.104545454545455 4. Exposed Value (PHP): 6900000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH	Potential impacts to local economy will be sever due to economic disruption affecting industrial establishments	Imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
BUHANGIN	Residential	1. Area per Land Use Category in Hectares: 335.4 2. Exposed Area in Hectares: 9.41 3. % Exposure: 0.0280560524746571 4. Exposed Value (PHP): 94100000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
CABANTIAN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 305.58 2. Exposed Area in Hectares: 5.47 3. % Exposure: 0.0179003861509261 4. Exposed Value (PHP): 54700000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
COMMUNAL	Tourism	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 20.16 2. Exposed Area in Hectares: 0.7 3. % Exposure: 0.0347222222222222 4. Exposed Value (PHP): 10500000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Disruption of tourism related facilities	Imposition of hazard resistant design standards/regulations within flood susceptible areas
COMMUNAL	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 162.84 2. Exposed Area in Hectares: 7.08 3. % Exposure: 0.0434782608695652 4. Exposed Value (PHP): 70800000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index : 9 8. Vulnerability Category: HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
INDANGAN	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 1.71 2. Exposed Area in Hectares: 0.45 3. % Exposure: 0.263157894736842 4. Exposed Value (PHP): 6750000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
MANDUG	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 6.55 2. Exposed Area in Hectares: 6.54 3. % Exposure: 0.998473282442748 4. Exposed Value (PHP): 98100000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Detrimental impacts to local economy and property owners	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
MANDUG	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 168.4 2. Exposed Area in Hectares: 20.99 3. % Exposure: 0.124643705463183 4. Exposed Value (PHP): 209900000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
A. ANGLIONGTO	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 155.73 2. Exposed Area in Hectares: 6.3 3. % Exposure: 0.0404546330186862 4. Exposed Value (PHP): 63000000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
A. ANGLIONGTO	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 38.75 2. Exposed Area in Hectares: 0.51 3. % Exposure: 0.0131612903225806 4. Exposed Value (PHP): 7650000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
BUNAWAN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 124.56 2. Exposed Area in Hectares: 35.1 3. % Exposure: 0.281791907514451 4. Exposed Value (PHP): 351000000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
BUNAWAN	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 11.86 2. Exposed Area in Hectares: 5.74 3. % Exposure: 0.48397976391231 4. Exposed Value (PHP): 86100000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
BUNAWAN	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 115.63 2. Exposed Area in Hectares: 25.79 3. % Exposure: 0.223039003718758 4. Exposed Value (PHP): 386850000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting industrial establishments	Imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
ILANG	Residential	1. Area per Land Use Category in Hectares: 125.68 2. Exposed Area in Hectares: 7.03 3. % Exposure: 0.0559357097390197 4. Exposed Value (PHP): 70300000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
ILANG	Industrial	1. Area per Land Use Category in Hectares: 90.12 2. Exposed Area in Hectares: 7.34 3. % Exposure: 0.0814469596094097 4. Exposed Value (PHP): 110100000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH	Potential impacts to local economy will be sever due to economic disruption affecting industrial establishments	Imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
LASANG	Residential	1. Area per Land Use Category in Hectares: 50.73 2. Exposed Area in Hectares: 20.65 3. % Exposure: 0.407056968263355 4. Exposed Value (PHP): 206500000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
LASANG	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 9.39 2. Exposed Area in Hectares: 4.1 3. % Exposure: 0.436634717784877 4. Exposed Value (PHP): 61500000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Detrimental impacts to local economy and property owners	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
LASANG	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 38.2 2. Exposed Area in Hectares: 6.57 3. % Exposure: 0.171989528795812 4. Exposed Value (PHP): 98550000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Potential impacts to local economy will be sever due to economic disruption affecting industrial establishments	Imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
MAHAYAG	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 57.77 2. Exposed Area in Hectares: 0.74 3. % Exposure: 0.0128094166522416 4. Exposed Value (PHP): 7400000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
MAHAYAG	Industrial	1. Area per Land Use Category in Hectares: 26.18 2. Exposed Area in Hectares: 1.17 3. % Exposure: 0.0446906035141329 4. Exposed Value (PHP): 17550000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH	Potential impacts to local economy will be sever due to economic disruption affecting industrial establishments	Imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
BIAO JOAQUIN	Residential	1. Area per Land Use Category in Hectares: 3.2 2. Exposed Area in Hectares: 2.38 3. % Exposure: 0.74375 4. Exposed Value (PHP): 23800000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
BIAO JOAQUIN	Agri-Industrial	1. Area per Land Use Category in Hectares: 20.15 2. Exposed Area in Hectares: 16.06 3. % Exposure: 0.797022332506203 4. Exposed Value (PHP): 240900000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH	Detrimental impacts to local economy and property owners	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
CALINAN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 107.32 2. Exposed Area in Hectares: 107.19 3. % Exposure: 0.998788669399925 4. Exposed Value (PHP): 1071900000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
CALINAN	Parks and Recreational	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 0.75 2. Exposed Area in Hectares: 0.75 3. % Exposure: 1 4. Exposed Value (PHP): 11250000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Structures in the area might slowly corrode and/or rust	Plant more trees; maintain and monitor structure
		<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 2.17 2. Exposed Area in Hectares: 2.17 3. % Exposure: 1 4. Exposed Value (PHP): 32550000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 		

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
CALINAN	Commercial	1. Area per Land Use Category in Hectares: 19.53 2. Exposed Area in Hectares: 19.53 3. % Exposure: 1 4. Exposed Value (PHP): 292950000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
CALINAN	Cemetery	1. Area per Land Use Category in Hectares: 5.97 2. Exposed Area in Hectares: 5.97 3. % Exposure: 1 4. Exposed Value (PHP): 89550000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH	Lack of flood resistant design regulations may lead to increased vulnerability	No additional development to cemetery area susceptible to flood
CALINAN	Agri-Industrial	1. Area per Land Use Category in Hectares: 3.12 2. Exposed Area in Hectares: 3.12 3. % Exposure: 1 4. Exposed Value (PHP): 46800000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category : HIGH	Detrimental impacts to local economy and property owners	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
DACUDAO	Agri-Industrial	1. Area per Land Use Category in Hectares: 37.73 2. Exposed Area in Hectares: 6.6 3. % Exposure: 0.174927113702624 4. Exposed Value (PHP): 99000000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH	Detrimental impacts to local economy and property owners	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
DALAGDAG	Residential	1. Area per Land Use Category in Hectares: 2.54 2. Exposed Area in Hectares: 1.18 3. % Exposure: 0.464566929133858 4. Exposed Value (PHP): 11800000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
DOMINGA	Residential	1. Area per Land Use Category in Hectares: 1.77 2. Exposed Area in Hectares: 1.73 3. % Exposure: 0.977401129943503 4. Exposed Value (PHP): 17300000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
LACSON	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 5.16 2. Exposed Area in Hectares: 1.3 3. % Exposure: 0.251937984496124 4. Exposed Value (PHP): 13000000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
LACSON	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 11.02 2. Exposed Area in Hectares: 1.06 3. % Exposure: 0.0961887477313975 4. Exposed Value (PHP): 15900000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Detrimental impacts to local economy and property owners	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
MALAMBA	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 13.12 2. Exposed Area in Hectares: 1.4 3. % Exposure: 0.106707317073171 4. Exposed Value (PHP): 14000000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
BAGO APLAYA	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 95.45 2. Exposed Area in Hectares: 28.28 3. % Exposure: 0.296280775275013 4. Exposed Value (PHP): 282800000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
BAGO APLAYA	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 16.24 2. Exposed Area in Hectares: 5.86 3. % Exposure: 0.360837438423645 4. Exposed Value (PHP): 87900000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting industrial establishments	Imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
BAGO APLAYA	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 12.91 2. Exposed Area in Hectares: 4.13 3. % Exposure: 0.31990704879938 4. Exposed Value (PHP): 61950000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
BAGO APLAYA	Parks and Recreational	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 5.45 2. Exposed Area in Hectares: 0.4 3. % Exposure: 0.073394495412844 4. Exposed Value (PHP): 6000000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Structures in the area might slowly corrode and/or rust	Plant more trees; maintain and monitor structure
BAGO GALLERA	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 129.96 2. Exposed Area in Hectares: 49.25 3. % Exposure: 0.378962757771622 4. Exposed Value (PHP): 492500000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
BALIOK	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 77.41 2. Exposed Area in Hectares: 14.12 3. % Exposure: 0.18240537398269 4. Exposed Value (PHP): 141200000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
BUCANA	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 216.99 2. Exposed Area in Hectares: 86.42 3. % Exposure: 0.398267201253514 4. Exposed Value (PHP): 864200000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
BUCANA	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 63.45 2. Exposed Area in Hectares: 6.95 3. % Exposure: 0.109535066981875 4. Exposed Value (PHP): 104250000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
CATALUNAN GRANDE	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares: 301.77 2. Exposed Area in Hectares: 69.62 3. % Exposure: 0.230705504191934 4. Exposed Value (PHP): 696200000 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category: HIGH 	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
CATALUNAN GRANDE	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 21.25 2. Exposed Area in Hectares : 9.74% 3. Exposure : 0.458352941176471 4. Exposed Value (PHP) : 146100000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	detrimental impacts to local economy and property owners	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
CATALUNAN GRANDE	Parks and Recreational	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 5.8 2. Exposed Area in Hectares : 1.82% 3. Exposure : 0.313793103448276 4. Exposed Value (PHP) : 27300000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	Structures in the area might slowly corrode and/or rust	Plant more trees; maintain and monitor structure

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
CATALUNAN GRANDE	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 6.03 2. Exposed Area in Hectares : 0.88 3. % Exposure : 0.145936981757877 4. Exposed Value (PHP) : 13200000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
CATALUNAN PEQUEÑO	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 197.4 2. Exposed Area in Hectares : 26.64 3. % Exposure : 0.134954407294833 4. Exposed Value (PHP) : 266400000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
CATALUNAN PEQUEÑO	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 13.65 2. Exposed Area in Hectares : 0.74 3. % Exposure : 0.0542124542124542 4. Exposed Value (PHP) : 11100000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	detrimental impacts to local economy and property owners	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
DUMOY	Tourism	1. Area per Land Use Category in Hectares : 5.83 2. Exposed Area in Hectares : 4 3. % Exposure : 0.67 4. Exposed Value (PHP) : 60000000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH	disruption of tourism related facilities	Imposition of hazard resistant design standards/ regulations within flood susceptible areas
DUMOY	Parks and Recreational	1. Area per Land Use Category in Hectares : 8.33 2. Exposed Area in Hectares : 5.15 3. % Exposure : 0.62 4. Exposed Value (PHP) : 77,250,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH	Structures in the area might slowly corrode and/or rust	Plant more trees; maintain and monitor structure
DUMOY	Residential	1. Area per Land Use Category in Hectares : 162.79 2. Exposed Area in Hectares : 28.49 3. Percentage of Exposure : 0.18 4. Exposed Value (PHP) : 284,900,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
MA-A	Residential	1.Area per Land Use Category in Hectares : 428.3 2.Exposed Area in Hectares : 136.31 3.Percentage of exposure : 0.32 4.Exposed Value (PHP) : 1,363,100,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
MA-A	Parks and Recreational	1. Area per Land Use Category in Hectares : 12.99 2. Exposed Area in Hectares : 5.36 3. Percentage of Exposure : 0.41 4. Exposed Value (PHP) : 80,400,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH	Structures in the area might slowly corrode and/or rust	Plant more trees; maintain and monitor structure
MA-A	Industrial	1.Area per Land Use Category in Hectares : 22.55 2. Exposed Area in Hectares : 18.04 3. Percentage of Exposure : 0.8 4. Exposed Value (PHP) : 270,600,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH	potential impacts to local economy will be sever due to economic disruption affecting industrial establishments	imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
MA-A	Tourism	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 16.56 2. Exposed Area in Hectares : 5.6 3. Percentage of Exposure : 0.34 4. Exposed Value (PHP) : 84,000,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	disruption of tourism related facilities	Imposition of hazard resistant design standards/ regulations within flood susceptible areas
MA-A	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 90.17 2. Exposed Area in Hectares : 27.8 3. Percentage of Exposure : 0.31 4. Exposed Value (PHP) : 417,000,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
MAGTUOD	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 53.99 2. Exposed Area in Hectares : 10.06 3. Percentage of Exposure : 0.19 4. Exposed Value (PHP) : 100,600,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
MAGTUOD	Parks and Recreational	1. Area per Land Use Category in Hectares : 10.49 2. Exposed Area in Hectares : 0.41 3. Percentage of Exposure : 0.04 4. Exposed Value (PHP) : 6,150,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH	Structures in the area might slowly corrode and/or rust	Plant more trees; maintain and monitor structure
MATINA APLAYA	Residential	1. Area per Land Use Category in Hectares : 155.55 2. Exposed Area in Hectares : 72.79 3. Percentage of Exposure : 0.47 4. Exposed Value (PHP) : 727,900,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
		5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH		
MATINA APLAYA	Commercial	1. Area per Land Use Category in Hectares : 20.48 2. Exposed Area in Hectares : 13.87 3. Percentage of Exposure : 0.68 4. Exposed Value (PHP) : 208,050,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH	potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
MATINA APLAYA	Tourism	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 2.35 2. Exposed Area in Hectares : 0.47 3. Percentage of Exposure : 0.2 4. Exposed Value (PHP) : 7,050,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	disruption of tourism related facilities	Imposition of hazard resistant design standards/regulations within flood susceptible areas
BANKAS HEIGHTS	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 29.39 2. Exposed Area in Hectares : 18.61 3. Percentage of Exposure : 0.63 4. Exposed Value (PHP) : 186,100,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 10. Vulnerability Category : HIGH 	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
CROSSING BAYABAS	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 92.31 2. Exposed Area in Hectares : 21.61 3. Percentage of Exposure : 0.23 4. Exposed Value (PHP) : 216,100,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
BINUGAO	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 52.8 2. Exposed Area in Hectares : 26.7 3. Percentage of Exposure : 0.51 4. Exposed Value (PHP) : 267,700,000 5. Degree of Impact : 3 4. Adaptive Capacity : 3 5. Vulnerability Index : 9 6. Vulnerability Category : HIGH 	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
BINUGAO	Parks and Recreational	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 1.34 2. Exposed Area in Hectares : 1.34 3. Percentage of Exposure : 1 4. Exposed Value (PHP) : 20,100,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	Structures in the area might slowly corrode and/or rust	Plant more trees; maintain and monitor structure
BINUGAO	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 63.36 2. Exposed Area in Hectares : 48.27 3. Percentage of Exposure : 0.76 4. Exposed Value (PHP) : 724,050,000 5. Degree of Impact: 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	potential impacts to local economy will be sever due to economic disruption affecting industrial establishments	imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
BINUGAO	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 3.44 2. Exposed Area in Hectares : 1.44 3. Percentage of Exposure : 0.42 4. Exposed Value (PHP) : 21,600,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
DALIAO	Tourism	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 1.79 2. Exposed Area in Hectares : 1.46 3. Percentage of Exposure : 0.86 4. Exposed Value (PHP) : 21,900,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	disruption of tourism related facilities	Imposition of hazard resistant design standards/ regulations within flood susceptible areas
DALIAO	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 107.79 2. Exposed Area in Hectares : 23.42 3. Percentage of Exposure : 0.28 4. Exposed Value (PHP) : 351,300,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
EDEN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 51.49 2. Exposed Area in Hectares : 2.35 3. Percentage of Exposure : 0.05 4. Exposed Value (PHP) : 23,500,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
LIZADA	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 5.18 2. Exposed Area in Hectares : 2.1 	detrimental impacts to local economy and property owners	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
LIZADA	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 100.96 2. Exposed Area in Hectares : 19.82 3. Percentage of Exposure : 0.20 4. Exposed Value (PHP) : 198,200,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
LIZADA	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 13.44 2. Exposed Area in Hectares : 1.42 3. Percentage of Exposure : 0.11 4. Exposed Value (PHP) : 21,300,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	potential impacts to local economy will be sever due to economic disruption affecting industrial establishments	imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
LUBOGAN	Residential	1. Area per Land Use Category in Hectares : 90.18 2. Exposed Area in Hectares : 32.08 3. Percentage of Exposure : 0.36 4. Exposed Value (PHP) : 481,200,000 5. Degree of Impact : 3 Adaptive Capacity : 3 Vulnerability Index : 9 Vulnerability Category : HIGH	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
MARAPANGI	Agri-Industrial	1. Area per Land Use Category in Hectares : 9.85 Exposed Area in Hectares : 8.44 3. Percentage of Exposure : 0.86 Exposed Value (PHP) : 126,600,000 5. Degree of Impact : 3 Adaptive Capacity : 3 Vulnerability Index : 9 Vulnerability Category : HIGH	detrimental impacts to local economy and property owners	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
MARAPANGI	Residential	1. Area per Land Use Category in Hectares : 76.92 Exposed Area in Hectares : 12.97 3. Percentage of Exposure : 0.17 Exposed Value (PHP) : 129,700,000 5. Degree of Impact : 3 Adaptive Capacity : 3 Vulnerability Index : 9 Vulnerability Category : HIGH	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
ANGALAN	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 12.3 2. Exposed Area in Hectares : 12.3 3. Percentage of Exposure : 1 4. Exposed Value (PHP) : 184,500,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	detrimental impacts to local economy and property owners	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
ANGALAN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 11.73 2. Exposed Area in Hectares : 11.73 3. Percentage of Exposure : 1 4. Exposed Value (PHP) : 117,300,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
BALENGAENG	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 35.49 2. Exposed Area in Hectares : 35.49 3. Percentage of Exposure : 1 4. Exposed Value (PHP) : 532,350,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	detrimental impacts to local economy and property owners	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
BIAO ESCUELA	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 36.45 2. Exposed Area in Hectares : 16.81 3. Percentage of Exposure : 0.46 4. Exposed Value (PHP) : 252,150,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	detrimental impacts to local economy and property owners	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation
BIAO ESCUELA	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 8.59 2. Exposed Area in Hectares : 1.62 3. Percentage of Exposure : 0.19 4. Exposed Value (PHP) : 16,200,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 Vulnerability Category : HIGH 	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementaiont of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
BIAO GUIANGA	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 3.83 2. Exposed Area in Hectares : 1.69 3. Percentage of Exposure : 0.44 4. Exposed Value (PHP) : 16,900,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementaiont of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

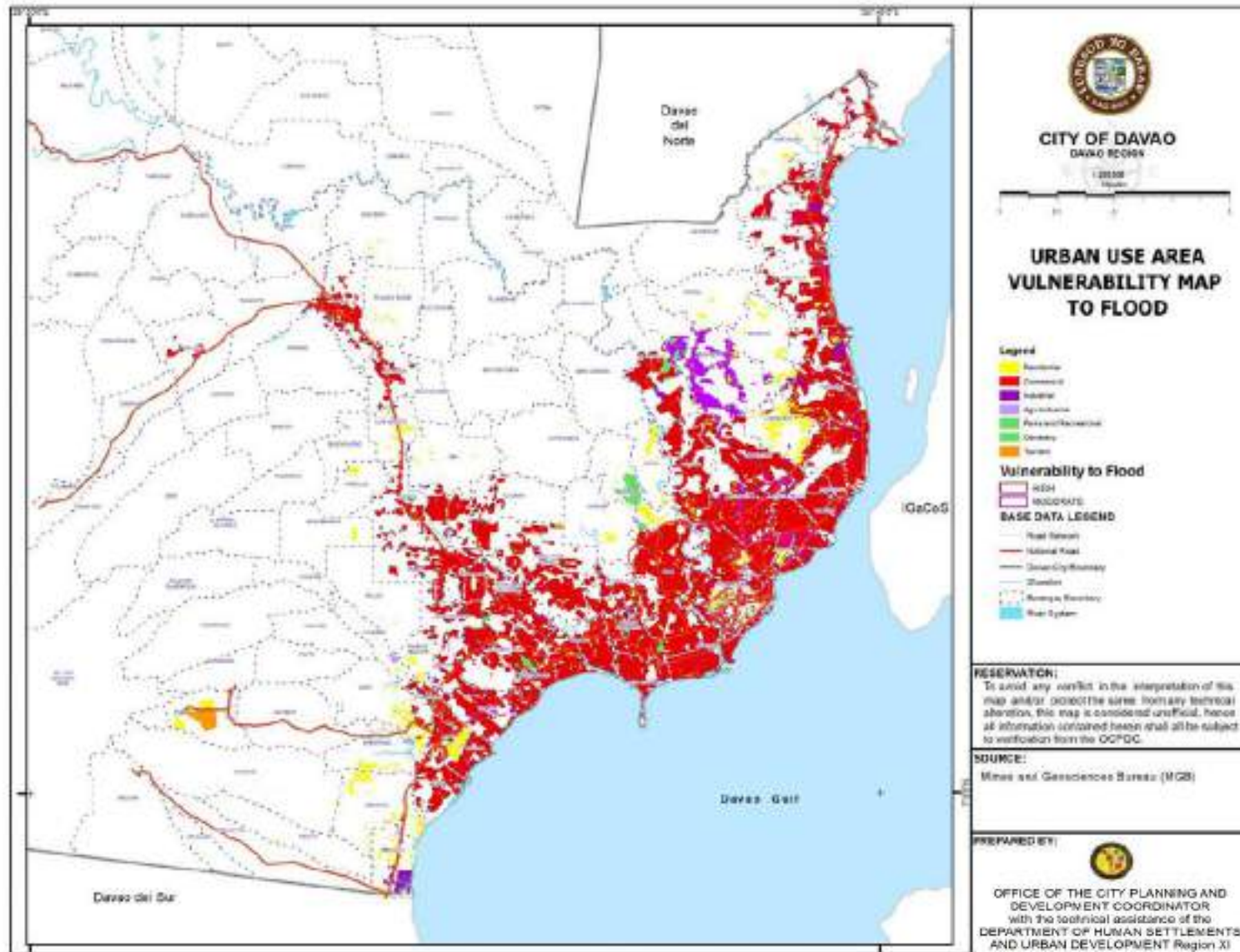
Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
LOS AMIGOS	Tourism	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 0.63 2.Exposed Area in Hectares : 0.63 3. Percentage of Exposure : 1 4. Exposed Value (PHP) : 9,450,000 5.Degree of Impact : 3 6.Adaptive Capacity : 3 7.Vulnerability Index : 9 8. Vulnerability Category : HIGH 	disruption of tourism related facilities	Imposition of hazard resistant design standards/regulations within flood susceptible areas
LOS AMIGOS	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 39.99 2. Exposed Area in Hectares : 38.62 3. Percentage of Exposure : 0.97 4. Exposed Value (PHP) : 386,200,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
LOS AMIGOS	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 1.03 2.Exposed Area in Hectares : 1.03 3. Percentage of Exposure : 1 4. Exposed Value (PHP) : 15,450,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	potential impacts to local economy will be severe due to economic disruption affecting commercial establishments	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Table U-22. Climate Change Vulnerability Assessment Matrix for Flood, Davao City

Barangay	Land Use Category	Technical Findings	Implications	Policy Interventions
MANAMBULAN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 9.65 2.Exposed Area in Hectares : 9.1 3. Percentage of Exposure : 0.94 4. Exposed Value (PHP) : 91,000,000 5. Degree of Impact : 3 6. Adaptive Capacity : 3 7. Vulnerability Index : 9 8. Vulnerability Category : HIGH 	light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementaiont of the zoning ordinance for structures within flood prone zone i.e construction of at least 2-storey structures only must be followed and the 30-meter buffer zone
MANUEL GUI-ANGA	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares : 4.52 2.Exposed Area in Hectares : 1.69 3. Percentage of Exposure : 0.37 4. Exposed Value (PHP) : 25,350,000 5. Degree of Impact : 3 6.Adaptive Capacity : 3 7.Vulnerability Index : 9 8. Vulnerability Category : HIGH 	detrimental impacts to local economy and property owners	Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation

Map 4.5 Urban Use Areas Vulnerability Map to Flood



LANDSLIDE

There are 69 barangays vulnerable to landslide out of the original 90 barangays which are moderately to highly susceptible to landslide. This same barangays have the highest degree of impact score, which takes up 21.4% of the total allotted residential area of 69 barangays mentioned. These barangays are also those included in areas with low adaptive capacity. The low adaptive capacity is attributed to the high level of no access/area coverage to infrastructure related hazard mitigation measures of the area.

Table U-23. Urban Use Areas Vulnerability, Landslide Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
19-B	Commercial	28.23	1.86	6.59%	279,000,000	2	2	4	moderate
19-B	Residential	179.82	1.32	0.73%	132,000,000	2	3	6	moderate
CARMEN	Residential	1.49	1.26	84.56%	126,000,000	3	3	9	High
GUMALANG	Agri-Industrial	21.27	2.68	12.60%	402,000,000	3	3	9	High
GUMALANG	Residential	4.56	0.38	8.33%	38,000,000	2	2	4	moderate
MALAGOS	Agri-Industrial	7.18	0.43	5.99%	64,500,000	3	3	9	High
MALAGOS	Tourism	13.48	0.12	0.89%	18,000,000	2	2	4	moderate
TAMBOBONG	Residential	4.49	4.49	100.00%	449,000,000	3	3	9	High
TAWAN-TAWAN	Residential	2.60	0.04	1.54%	4,000,000	1	2	2	low
ACACIA	Residential	15.14	15.14	100.00%	1,514,000,000	3	3	9	High
ACACIA	Parks and Recreational	0.04	0.04	95.24%	6,000,000	2	2	4	moderate
BUHANGIN	Cemetery	8.84	7.54	85.29%	1,131,000,000	3	3	9	High
BUHANGIN	Industrial	4.40	2.45	55.68%	367,500,000	3	3	9	High
BUHANGIN	Parks and Recreational	0.96	0.26	27.08%	39,000,000	2	2	4	moderate
BUHANGIN	Residential	335.29	36.71	10.95%	3,671,000,000	3	3	9	High
BUHANGIN	Commercial	52.90	0.54	1.02%	81,000,000	2	3	6	moderate
CABANTIAN	Cemetery	0.28	0.28	100.00%	42,000,000	3	2	6	moderate
CABANTIAN	Residential	304.36	83.13	27.31%	8,313,000,000	3	3	9	High
CABANTIAN	Commercial	23.10	3.71	16.06%	556,500,000	3	3	9	High
CABANTIAN	Industrial	26.46	1.69	6.39%	253,500,000	3	3	9	High

Table U-23. Urban Use Areas Vulnerability, Landslide Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
CALLAWA	Residential	7.90	0.68	8.61%	68,000,000	2	3	6	moderate
COMMUNAL	Tourism	20.15	12.51	62.08%	1,876,500,000	3	3	9	High
COMMUNAL	Residential	161.79	67.72	41.86%	6,772,000,000	3	3	9	High
COMMUNAL	Commercial	11.99	1.26	10.51%	189,000,000	3	3	9	High
COMMUNAL	Industrial	4.48	0.43	9.60%	64,500,000	3	3	9	High
INDANGAN	Tourism	0.01	0.01	100.00%	1,500,000	2	2	4	moderate
INDANGAN	Commercial	1.70	1.58	92.94%	237,000,000	3	3	9	High
INDANGAN	Parks and Recreational	56.26	33.27	59.14%	4,990,500,000	3	3	9	High
INDANGAN	Industrial	11.16	1.86	16.67%	279,000,000	3	3	9	High
INDANGAN	Residential	247.61	23.10	9.33%	2,310,000,000	3	3	9	High
MANDUG	Parks and Recreational	32.36	20.19	62.39%	3,028,500,000	2	3	6	moderate
MANDUG	Residential	168.39	20.17	11.98%	2,017,000,000	3	3	9	High
MANDUG	Agri-Industrial	6.55	0.32	4.89%	48,000,000	2	2	4	moderate
MANDUG	Industrial	19.99	0.90	4.50%	135,000,000	3	3	9	High
SASA	Residential	223.79	1.14	0.51%	114,000,000	2	3	6	moderate
TIGATTO	Industrial	13.02	7.17	55.07%	1,075,500,000	3	3	9	High
TIGATTO	Residential	256.29	39.43	15.38%	3,943,000,000	3	3	9	High
WAAN	Cemetery	3.83	3.83	100.00%	574,500,000	3	3	9	High
WAAN	Residential	38.48	7.17	18.63%	717,000,000	3	3	9	High
A. ANGLIONGTO	Residential	155.67	0.72	0.46%	72,000,000	1	2	2	low
A. ANGLIONGTO	Industrial	17.15	0.01	0.06%	1,500,000	1	2	2	low
BUNAWAN	Industrial	115.60	11.07	9.58%	1,660,500,000	3	3	9	High
BUNAWAN	Residential	123.76	7.75	6.26%	775,000,000	3	3	9	High
GATUNGAN	Agri-Industrial	2.17	2.17	100.00%	325,500,000	3	3	9	High
GATUNGAN	Industrial	0.38	0.38	100.00%	57,000,000	3	3	9	High
GATUNGAN	Parks and Recreational	0.01	0.01	100.00%	1,200,000	1	2	2	low
GATUNGAN	Residential	1.98	1.70	85.86%	170,000,000.00	3	3	9	High
ILANG	Residential	125.67	16.66	13.26%	1,666,000,000.00	3	3	9	High

Table U-23. Urban Use Areas Vulnerability, Landslide Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
ILANG	Industrial	90.12	0.07	0.08%	10,500,000.00	1	2	2	low
MAHAYAG	Agri-Industrial	26.18	6.41	24.48%	961,500,000.00	3	3	9	High
MAHAYAG	Industrial	70.08	15.68	22.37%	2,352,000,000.00	3	3	9	High
MAHAYAG	Residential	57.77	7.19	12.45%	719,000,000.00	3	3	9	High
MAHAYAG	Commercial	8.62	0.39	4.52%	58,500,000.00	3	3	9	High
MUDIANG	Residential	67.96	38.15	56.14%	3,815,000,000.00	3	3	9	High
MUDIANG	Industrial	6.42	3.09	48.13%	463,500,000.00	3	3	9	High
MUDIANG	Agri-Industrial	1.88	0.42	22.34%	63,000,000.00	3	3	9	High
PANACAN	Residential	256.99	67.73	26.36%	6,773,000,000.00	3	3	9	High
PANACAN	Industrial	120.37	21.00	17.45%	3,150,000,000.00	3	3	9	High
SAN ISIDRO	Residential	26.46	3.40	12.85%	340,000,000.00	3	3	9	High
SAN ISIDRO	Industrial	4.21	0.01	0.24%	1,500,000.00	1	2	2	low
TIBUNGCO	Agri-Industrial	4.17	0.99	23.74%	148,500,000.00	3	3	9	High
TIBUNGCO	Industrial	41.73	8.15	19.53%	1,222,500,000.00	3	3	9	High
TIBUNGCO	Residential	131.99	18.18	13.77%	1,818,000,000.00	3	3	9	High
BIAO JOAQUIN	Residential	3.19	0.82	25.71%	82,000,000.00	2	3	6	moderate
BIAO JOAQUIN	Agri-Industrial	20.15	4.09	20.30%	613,500,000.00	2	3	6	moderate
CALINAN	Residential	107.30	0.02	0.02%	2,000,000.00	1	2	2	low
DACUDAO	Agri-Industrial	37.72	2.24	5.94%	336,000,000.00	3	3	9	High
DALAGDAG	Residential	2.54	1.14	44.88%	114,000,000.00	3	3	9	High
DOMINGA	Residential	1.76	0.11	6.25%	11,000,000.00	2	2	4	moderate
INAYANGAN	Residential	3.02	1.89	62.58%	189,000,000.00	3	3	9	High
LACSON	Agri-Industrial	11.02	6.44	58.44%	966,000,000.00	3	3	9	High
LACSON	Residential	5.16	0.07	1.36%	7,000,000.00	1	2	2	low
LAMANAN	Residential	4.53	4.47	98.68%	447,000,000.00	3	3	9	High
LAMPIANAO	Residential	2.13	1.85	86.85%	185,000,000.00	3	3	9	High
MEGKAWAYAN	Residential	5.51	5.51	100.00%	551,000,000.00	3	3	9	High

Table U-23. Urban Use Areas Vulnerability, Landslide Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
MEGKAWAYAN	Tourism	1.93	1.93	100.00%	289,500,000.00	3	3	9	High
PANGYAN	Residential	5.09	1.33	26.13%	133,000,000.00	3	3	9	High
SALOY	Residential	1.78	1.77	99.44%	177,000,000.00	3	3	9	High
SIRIB	Residential	7.56	0.90	11.90%	90,000,000.00	3	3	9	High
TALOMO RIVER	Agri-Industrial	18.30	1.18	6.45%	177,000,000.00	3	3	9	High
TALOMO RIVER	Residential	21.81	0.10	0.46%	10,000,000.00	1	2	2	low
TAMAYONG	Residential	4.57	2.67	58.42%	267,000,000.00	3	3	9	High
BAGANIHAN	Tourism	3.95	0.47	11.90%	70,500,000.00	2	3	6	moderate
BAGANIHAN	Residential	3.08	0.16	5.19%	16,000,000.00	2	3	6	moderate
BANTOL	Residential	2.61	2.61	100.00%	261,000,000.00	3	3	9	High
BUDA	Residential	19.63	4.07	20.73%	407,000,000.00	3	3	9	High
DALAG LUMOT	Residential	9.86	9.86	100.00%	986,000,000.00	3	3	9	High
DATU SALUMAY	Residential	21.30	4.94	23.19%	494,000,000.00	3	3	9	High
DATU SALUMAY	Tourism	8.83	0.29	3.28%	43,500,000.00	3	2	6	moderate
GUMITAN	Residential	8.82	6.63	75.17%	663,000,000.00	3	3	9	High
MAGSAYSAY	Residential	8.68	8.68	100.00%	868,000,000.00	3	3	9	High
MAGSAYSAY	Tourism	0.99	0.99	100.00%	148,500,000.00	3	3	9	High
MALAMBA	Residential	13.13	10.09	76.85%	1,009,000,000.00	3	3	9	High
MARILOG	Residential	92.60	91.12	98.40%	9,112,000,000.00	3	3	9	High
MARILOG	Tourism	29.99	26.29	87.66%	3,943,500,000.00	3	3	9	High
SALAYSAY	Residential	10.06	10.00	99.40%	1,000,000,000.00	3	3	9	High
SUAWAN	Residential	7.31	7.31	100.00%	731,000,000.00	3	3	9	High
SUAWAN	Agri-Industrial	19.10	1.77	9.27%	265,500,000.00	3	3	9	High
COLOSAS	Residential	9.67	9.65	99.79%	965,000,000.00	3	3	9	High
FATIMA	Residential	9.80	7.61	77.65%	1,141,500,000.00	3	3	9	High
LUMIAD	Residential	8.61	8.61	100.00%	861,000,000.00	3	3	9	High
MABUHAY	Residential	7.35	0.68	9.25%	68,000,000.00	2	3	6	moderate
MALABOG	Residential	18.21	18.21	100.00%	1,821,000,000.00	3	3	9	High
MALABOG	Tourism	4.34	4.34	100.00%	651,000,000.00	3	3	9	High
MAPULA	Residential	14.69	14.69	100.00%	1,469,000,000.00	3	3	9	High
PANDAITAN	Residential	9.35	9.34	99.89%	934,000,000.00	3	3	9	High

Table U-23. Urban Use Areas Vulnerability, Landslide Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
PAÑALUM	Residential	2.07	2.07	100.00%	207,000,000.00	3	3	9	High
PAQUIBATO	Residential	12.53	12.53	100.00%	1,253,000,000.00	3	3	9	High
PAQUIBATO	Tourism	0.99	0.99	100.00%	148,500,000.00	3	3	9	High
PARADISE EMBAC	Residential	1.90	1.90	100.00%	190,000,000.00	3	3	9	High
SALAPAWAN	Residential	3.04	3.03	99.67%	303,000,000.00	3	3	9	High
SUMIMAO	Residential	1.77	1.77	100.00%	177,000,000.00	3	3	9	High
TAPAK	Residential	18.67	18.46	98.88%	1,846,000,000.00	3	3	9	High
CATALUNAN GRANDE	Residential	301.75	5.07	1.68%	507,000,000.00	2	3	6	moderate
CATALUNAN GRANDE	Parks and Recreational	5.79	0.02	0.35%	3,000,000.00	1	2	2	low
LANGUB	Parks and Recreational	2.13	2.13	100.00%	319,500,000.00	3	3	9	High
LANGUB	Tourism	0.32	0.32	100.00%	48,000,000.00	2	2	4	moderate
LANGUB	Commercial	0.01	0.01	100.00%	1,500,000.00	2	2	4	moderate
LANGUB	Residential	13.61	13.48	99.04%	1,348,000,000.00	3	3	9	High
MA-A	Tourism	16.55	6.86	41.45%	1,029,000,000.00	3	3	9	High
MA-A	Parks and Recreational	12.99	4.05	31.18%	607,500,000.00	3	3	9	High
MA-A	Residential	428.26	101.76	23.76%	10,176,000,000.00	3	3	9	High
MA-A	Commercial	90.16	10.05	11.15%	1,507,500,000.00	3	3	9	High
MA-A	Cemetery	25.41	2.15	8.46%	322,500,000.00	3	3	9	High
MA-A	Industrial	22.53	0.09	0.40%	13,500,000.00	2	2	4	moderate
MAGTUOD	Parks and Recreational	10.48	10.43	99.52%	1,564,500,000.00	3	3	9	High
MAGTUOD	Cemetery	91.87	84.30	91.76%	12,645,000,000.00	3	3	9	High
MAGTUOD	Residential	53.99	46.37	85.89%	4,637,000,000.00	3	3	9	High
MAGTUOD	Commercial	0.77	0.11	14.29%	16,500,000.00	3	2	6	moderate
MATINA CROSSING	Industrial	5.72	4.06	70.98%	609,000,000.00	3	3	9	High
MATINA CROSSING	Residential	250.40	29.25	11.68%	2,925,000,000.00	3	3	9	High

Table U-23. Urban Use Areas Vulnerability, Landslide Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
MATINA CROSSING	Commercial	50.80	0.21	0.41%	31,500,000.00	1	2	2	low
MATINA PANGI	Commercial	4.88	4.88	100.00%	732,000,000.00	3	3	9	High
MATINA PANGI	Parks and Recreational	0.53	0.40	75.47%	60,000,000.00	3	3	9	High
MATINA PANGI	Tourism	0.55	0.31	56.36%	46,500,000.00	3	2	6	moderate
MATINA PANGI	Residential	152.49	64.73	42.45%	9,709,500,000.00	3	3	9	High
MATINA PANGI	Industrial	0.03	0.01	33.33%	1,500,000.00	2	2	4	moderate
TALOMO	Industrial	15.84	2.61	16.48%	391,500,000.00	2	2	4	moderate
TALOMO	Commercial	20.65	0.82	3.97%	123,000,000.00	2	2	4	moderate
TALOMO	Residential	297.55	10.51	3.53%	1,051,000,000.00	2	3	6	moderate
ALAMBRE	Residential	7.80	0.09	1.15%	9,000,000.00	1	2	2	low
ATAN-AWE	Residential	0.88	0.88	100.00%	88,000,000.00	3	3	9	High
BARACATAN	Residential	4.30	1.55	36.05%	155,000,000.00	3	3	9	High
BATO	Residential	44.80	1.00	2.23%	100,000,000.00	2	3	6	moderate
BAYABAS	Tourism	0.08	0.08	100.00%	12,000,000.00	3	2	6	moderate
BAYABAS	Residential	3.34	2.05	61.38%	205,000,000.00	2	3	6	moderate
BINUGAO	Agri-Industrial	13.50	10.65	78.89%	1,597,500,000.00	3	3	9	High
BINUGAO	Residential	52.79	24.70	46.79%	2,470,000,000.00	3	3	9	High
BINUGAO	Industrial	63.36	9.79	15.45%	1,468,500,000.00	3	3	9	High
BINUGAO	Commercial	3.43	0.04	1.17%	6,000,000.00	1	2	2	low
CAMANSI	Residential	2.44	1.73	70.90%	173,000,000.00	3	3	9	High
CATIGAN	Residential	6.30	2.21	35.08%	221,000,000.00	3	3	9	High
DALIAON PLANTATION	Residential	5.55	2.17	39.10%	217,000,000.00	3	3	9	High
EDEN	Residential	51.48	51.48	100.00%	5,148,000,000.00	3	3	9	High
EDEN	Agri-Industrial	1.27	1.27	100.00%	190,500,000.00	3	3	9	High
EDEN	Parks and Recreational	0.55	0.55	100.00%	82,500,000.00	3	3	9	High

Table U-23. Urban Use Areas Vulnerability, Landslide Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
EDEN	Commercial	0.08	0.08	100.00%	12,000,000.00	3	2	6	moderate
EDEN	Tourism	98.40	94.89	96.43%	14,233,500,000.00	3	3	9	High
KILATE	Residential	2.60	0.19	7.31%	19,000,000.00	2	2	4	moderate
MARAPANGI	Tourism	0.19	0.07	36.84%	10,500,000.00	3	2	6	moderate
MARAPANGI	Residential	76.91	1.99	2.59%	199,000,000.00	3	3	9	High
SIBULAN	Residential	2.13	2.13	100.00%	213,000,000.00	3	3	9	High
SIRAWAN	Agri-Industrial	85.27	14.86	17.43%	2,229,000,000.00	3	3	9	High
SIRAWAN	Residential	83.94	7.50	8.93%	750,000,000.00	3	3	9	High
TAGURANO	Residential	1.66	0.60	36.14%	60,000,000.00	3	3	9	High
TIBULOY	Agri-Industrial	7.75	7.75	100.00%	1,162,500,000.00	3	3	9	High
TIBULOY	Residential	3.76	3.57	94.95%	357,000,000.00	3	3	9	High
TUNGKALAN	Residential	3.84	1.09	28.39%	109,000,000.00	3	3	9	High
MATINA BIAO	Agri-Industrial	6.89	0.82	11.90%	123,000,000.00	3	3	9	High
MATINA BIAO	Residential	2.76	0.05	1.81%	5,000,000.00	1	2	2	low
MANAMBULAN	Residential	9.65	0.12	1.24%	12,000,000.00	2	2	4	moderate
NEW CARMEN	Parks and Recreational	0.09	0.09	100.00%	13,500,000.00	3	2	6	moderate
NEW CARMEN	Residential	15.64	2.26	14.45%	226,000,000.00	3	3	9	High
NEW VALENCIA	Residential	4.93	1.00	20.28%	100,000,000.00	3	3	9	High
TALANDANG	Agri-Industrial	24.65	8.55	34.69%	1,282,500,000.00	3	3	9	High

The table below shows the Climate Change Vulnerability Assessment for Landslide which enumerates the technical findings per land use category per barangay. Implications per type of land use describe the consequences of damage due to flood. In order to mitigate impacts and raise the adaptive capacity of urban use areas during the onslaught of the hazard, various policy interventions are also suggested for consideration.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City				
Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
GUMALANG	Agri-Industrial	1. Area per Land Use Category in Hectares:21.27 2. Exposed Area in Hectares:2.68 3. % Exposure:0.12599905970851 5. Exposed Value (PHP):402000000 6. Degree of Impact:3 7. Adaptive Capacity:3 8. Vulnerability Index:9 9. Vulnerability Category:High	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.
MALAGOS	Agri-Industrial	1. Area per Land Use Category in Hectares:7.18 2. Exposed Area in Hectares:0.43 3. % Exposure:0.0598885793871866 4. Exposed Value (PHP):64500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.
GATUNGAN	Agri-Industrial	Area per Land Use Category in Hectares:2.17 Exposed Area in Hectares:2.17 Exposure:1 Exposed Value (PHP):325500000 Degree of Impact:3 Adaptive Capacity:3 Vulnerability Index:9 Vulnerability Category:High	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.
MAHAYAG	Agri-Industrial	1. Area per Land Use Category in Hectares:26.18 2. Exposed Area in Hectares:6.41 3. % Exposure:0.244843391902215 4. Exposed Value (PHP):961500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
MUDIANG	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:1.88 2. Exposed Area in Hectares:0.42 3. % Exposure:0.223404255319149 4. Exposed Value (PHP):63000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.
TIBUNGCO	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:4.17 2. Exposed Area in Hectares:0.99 3. % Exposure:0.237410071942446 4. Exposed Value (PHP):148500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.
DACUDAO	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:37.72 2. Exposed Area in Hectares:2.24 3. % Exposure:0.0593849416755037 4. Exposed Value (PHP):336000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.
LACSON	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:11.02 2. Exposed Area in Hectares:6.44 3. % Exposure:0.584392014519056 4. Exposed Value (PHP):966000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
TALOMO RIVER	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:18.3 2. Exposed Area in Hectares:1.18 3. % Exposure:0.0644808743169399 4. Exposed Value (PHP):177000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.
SUAWAN	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:19.1 2. Exposed Area in Hectares:1.77 3. % Exposure:0.0926701570680628 4. Exposed Value (PHP):265500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.
BINUGAO	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:13.5 2. Exposed Area in Hectares:10.65 3. % Exposure:0.788888888888889 4. Exposed Value (PHP):1597500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.
EDEN	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:1.27 2. Exposed Area in Hectares:1.27 3. % Exposure:1 4. Exposed Value (PHP):190500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
SIRAWAN	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:85.27 2. Exposed Area in Hectares:14.8 3. 6% Exposure:0.174269965990383 4. Exposed Value (PHP):2229000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.
TIBULOY	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:7.75 2. Exposed Area in Hectares:7.75 3. % Exposure:1 4. Exposed Value (PHP):116250000055.Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.
MATINA BIAO	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:6.89 2. Exposed Area in Hectares:0.82 3. % Exposure:0.119013062409289 4. Exposed Value (PHP):123000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.
TALANDANG	Agri-Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:24.65 2. Exposed Area in Hectares:8.55 3. % Exposure:0.34685598377282 4. Exposed Value (PHP):128250000055. Degree of Impact:3 6. Adaptive Capacity:3 	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
		7. Vulnerability Index:9 8. Vulnerability Category:High		
BUHANGIN	Cemetery	Area per Land Use Category in Hec- tares:8.84Exposed Area in Hec- tares:7.54% Exposure:7.54Exposed Value (PHP):1131000000Degree of Impact:3Adaptive Capaci- ty:3Vulnerability Index:9Vulnerability Category:High	Loss of public memorial park. Burden to the public who cannot afford high end private memorial parks.	Rehabilitation support through immediate replacement of lost or damaged land and facilities.
WAAN	Cemetery	1. Area per Land Use Category in Hectares:3.83 2. Exposed Area in Hectares:3.83 3. % Exposure:3.83 4. Exposed Value (PHP):574500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Loss of public memorial park. Burden to the public who can not afford high end private memorial parks.	Rehabilitation support through immediate replacement of lost or damaged land and facilities.
MA-A	Cemetery	1. Area per Land Use Category in Hectares:25.41 2. Exposed Area in Hectares:2.15 3. % Exposure:2.15 4. Exposed Value (PHP):322500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Loss of public memorial park. Burden to the public who can not afford high end private memorial parks.	Rehabilitation support through immediate replacement of lost or damaged land and facilities.
MAGTUOD	Cemetery	1. Area per Land Use Category in Hectares:91.87 2. Exposed Area in Hectares:84.3 3. % Exposure:84.3 4. Exposed Value (PHP):126450000005. Degree of Im- pact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Loss of public memorial park. Burden to the public who can not afford high end private memorial parks.	Rehabilitation support through immediate replacement of lost or damaged land and facilities.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
CABANTIAN	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:23.1 2. Exposed Area in Hectares:3.71 3. % Exposure:0.160606060606061 4. Exposed Value (PHP):556500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged structures entails financial instability of the businesses of small entrepreneurs; Discourages future investors.	Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; Encourage structure owners to secure building insurances.
COMMUNAL	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:11.99 2. Exposed Area in Hectares:1.26 3. % Exposure:0.105087572977481 4. Exposed Value (PHP):189000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged structures entails financial instability of the businesses of small entrepreneurs; Discourages future investors.	Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; Encourage structure owners to secure building insurances.
INDANGAN	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:1.7 2. Exposed Area in Hectares:1.58 3. % Exposure:0.929411764705882 4. Exposed Value (PHP):237000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged structures entails financial instability of the businesses of small entrepreneurs; Discourages future investors.	Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; Encourage structure owners to secure building insurances.
MAHAYAG	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:8.62 2. Exposed Area in Hectares:0.39 3. % Exposure:0.0452436194895592 4. Exposed Value (PHP):58500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged structures entails financial instability of the businesses of small entrepreneurs; Discourages future investors.	Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; Encourage structure owners to secure building insurances.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
MA-A	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:90.16 2. Exposed Area in Hectares:10.05 3. % Exposure:0.111468500443656 4. Exposed Value (PHP):150750000055. Degree of Impact:3 5. Adaptive Capacity:3 6. Vulnerability Index:9 7. Vulnerability Category:High 	Damaged structures entails financial instability of the businesses of small entrepreneurs; Discourages future investors.	Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; Encourage structure owners to secure building insurances.
MATINA PANGI	Commercial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:4.88 2. Exposed Area in Hectares:4.88 3. % Exposure:1 4. Exposed Value (PHP):732000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Damaged structures entails financial instability of the businesses of small entrepreneurs; Discourages future investors.	Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; Encourage structure owners to secure building insurances.
BUHANGIN	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:4.4 2. Exposed Area in Hectares:2.45 3. % Exposure:0.556818181818182 4. Exposed Value (PHP):367500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.
CABANTIAN	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:26.46 2. Exposed Area in Hectares:1.69 3. % Exposure:0.063869992441421 4. Exposed Value (PHP):253500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
COMMUNAL	Industrial	1. Area per Land Use Category in Hectares:4.48 2. Exposed Area in Hectares:0.43 3. % Exposure:0.0959821428571428 4. Exposed Value (PHP):64500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.
INDANGAN	Industrial	1. Area per Land Use Category in Hectares:11.16 2. Exposed Area in Hectares:1.86 3. % Exposure:0.166666666666667 4. Exposed Value (PHP):279000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.
MANDUG	Industrial	1. Area per Land Use Category in Hectares: 19.99 2. Exposed Area in Hectares:0.9% 3.Exposure:0.0450225112556278 4. Exposed Value (PHP):135000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:High	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.
TIGATTO	Industrial	1. Area per Land Use Category in Hectares:13.02 2. Exposed Area in Hectares:7.17 3. % Exposure:0.550691244239631 4. Exposed Value (PHP):10755000005. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
BUNAWAN	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:115.6 2. Exposed Area in Hectares:11.07 3. % Exposure:0.097 4. Exposed Value (PHP):1,660,500,000 5. Degree of Impact:3 6. Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:High 	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.
GATUNGAN	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:0.38 2. Exposed Area in Hectares:0.38 3. % Exposure:1 4. Exposed Value (PHP):57000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.
MAHAYAG	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:70.08 2. Exposed Area in Hectares:15.68 3. % Exposure:0.223744292237443 4. Exposed Value (PHP):2352000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.
MUDIANG	Industrial	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:6.42 2. Exposed Area in Hectares:3.09 3. % Exposure:0.481308411214953 4. Exposed Value (PHP):463500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
PANACAN	Industrial	1. Area per Land Use Category in Hectares:120.37 2.Exposed Area in Hectares:21% 3.Exposure:0.174462075267924 4.Exposed Value (PHP):3150000000 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:High	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.
TIBUNGCO	Industrial	1. Area per Land Use Category in Hectares:41.73 2. Exposed Area in Hectares:8.15 3. % Exposure:0.195303139228373 4. Exposed Value (PHP):12225000005 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.
MATINA CROSSING	Industrial	Area per Land Use Category in Hectares:5.72Exposed Area in Hectares:4.06% Exposure:0.70979020979021Exposed Value (PHP):609000000Degree of Impact:3Adaptive Capacity:3Vulnerability Index:9Vulnerability Category:High	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.
BINUGAO	Industrial	1. Area per Land Use Category in Hectares:63.36 2. Exposed Area in Hectares:9.79 3. % Exposure:0.15451388888889 4. Exposed Value (PHP):146850000055. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
INDANGAN	Parks and Recreational	1. Area per Land Use Category in Hectares:56.26 2. Exposed Area in Hectares:33.27 3. % Exposure:0.591361535726982 4. Exposed Value (PHP):499050000055. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.
LANGUB	Parks and Recreational	1.Area per Land Use Category in Hectares:2.13 2.Exposed Area in Hectares:2.13 3. % Exposure:1Exposed Value (PHP):319500000 4.Degree of Impact:3 5.Adaptive Capacity:3 6.Vulnerability Index:9 7.Vulnerability Category:High	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.
MA-A	Parks and Recreational	1. Area per Land Use Category in Hectares:12.99 2. Exposed Area in Hectares:4.05 3. % Exposure:0.311778290993072 4. Exposed Value (PHP):607500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.
MAGTUOD	Parks and Recreational	1. Area per Land Use Category in Hectares:10.48 2.Exposed Area in Hectares:10.43 3. % Exposure:0.995229007633588 4.Exposed Value (PHP):1564500000 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:High	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
MATINA PANGI	Parks and Recreational	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:0.53 2. Exposed Area in Hectares:0.4 3. % Exposure:0.754716981132076 4. Exposed Value (PHP):60000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.
EDEN	Parks and Recreational	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:0.55 2. Exposed Area in Hectares:0.55 3. % Exposure:1 4. Exposed Value (PHP):82500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/structures at the affected areas.
CARMEN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:1.49 2. Exposed Area in Hectares:1.26 3. % Exposure:0.845637583892617 4. Exposed Value (PHP)126000000: 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
TAMBOBONG	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:4.49 2. Exposed Area in Hectares:4.49 3. % Exposure:1 4. Exposed Value (PHP):449000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
ACACIA	Residential	1. Area per Land Use Category in Hectares:15.14 2. Exposed Area in Hectares:15.14 3. % Exposure:1 4. Exposed Value (PHP):1514000005 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
BUHANGIN	Residential	1. Area per Land Use Category in Hectares:335.29 Exposed Area in Hectares:36.71 Exposure:0.109487309493274 Exposed Value (PHP):3671000000 Degree of Impact:3 Adaptive Capacity:3 Vulnerability Index:9 Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
CABANTIAN	Residential	1. Area per Land Use Category in Hectares:304.36 2. Exposed Area in Hectares:83.13 3. % Exposure:0.273130503351295 4. Exposed Value (PHP):831300000055. 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
COMMUNAL	Residential	1. Area per Land Use Category in Hectares:161.79 2. Exposed Area in Hectares:67.72 3. % Exposure:0.418567278570987 4. Exposed Value (PHP):6772000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
INDANGAN	Residential	1. Area per Land Use Category in Hectares:247.61 2. Exposed Area in Hectares:23.1 3. % Exposure:0.0932918702798756 4. Exposed Value (PHP):23100000055. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
MANDUG	Residential	1. Area per Land Use Category in Hectares:168.39 2.Exposed Area in Hectares: 20.17 3.% Exposure:0.119781459706633 4. Exposed Value (PHP):2017000000 5. Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
TIGATTO	Residential	1. Area per Land Use Category in Hectares:256.29 2. Exposed Area in Hectares:39.43 3. % Exposure:0.153849155253814 4. Exposed Value (PHP):39430000055. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
WAAN	Residential	1. Area per Land Use Category in Hectares:38.48 2. Exposed Area in Hectares:7.17 3. % Exposure:0.186330561330561 4. Exposed Value (PHP):717000000 5. Degree of Impact:3 6. Adaptive Capacity:3	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
		7. Vulnerability Index:9 8. Vulnerability Category:High		
BUNAWAN	Residential	1. Area per Land Use Category in Hectares:123.76 2. Exposed Area in Hectares:7.75 3. % Exposure:0.0626212023270847 4. Exposed Value (PHP):775000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
GATUNGAN	Residential	1. Area per Land Use Category in Hectares:1.98 2. Exposed Area in Hectares:1.7 3. % Exposure:0.858585858585859 4. Exposed Value (PHP):170000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
ILANG	Residential	1. Area per Land Use Category in Hectares:125.67 2. Exposed Area in Hectares:16.66 3. % Exposure:0.132569427866635 4. Exposed Value (PHP):16660000005 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
MAHAYAG	Residential	1.Area per Land Use Category in Hectares:57.77 2.Exposed Area in Hectares:7.19 3.% Exposure:0.12445906179678 4.Exposed Value (PHP):719000000 5.Degree of Impact:3 6.Adaptive Capacity:3	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
		7.Vulnerability Index:9 8.Vulnerability Category:High		
MUDIANG	Residential	1. Area per Land Use Category in Hectares:67.96 2. Exposed Area in Hectares:38.15 3. % Exposure:0.561359623307828 4. Exposed Value (PHP):38150000005 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
PANACAN	Residential	1. Area per Land Use Category in Hectares:256.99 2. Exposed Area in Hectares:67.73 3. % Exposure:0.263551110938169 4. Exposed Value (PHP):677300000055. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
SAN ISIDRO	Residential	1. Area per Land Use Category in Hectares:26.46 2. Exposed Area in Hectares:3.4 3. % Exposure:0.128495842781557 4. Exposed Value (PHP):340000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
TIBUNGCO	Residential	1. Area per Land Use Category in Hectares:131.99 2. Exposed Area in Hectares:18.18 3. % Exposure:0.137737707402076 4. Exposed Value (PHP):181800000055. Degree of Impact:3	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
		6. Adaptive Capacity:3 7. Vulnerability Index:9 9. Vulnerability Category:High		
DALAGDAG	Residential	1.Area per Land Use Category in Hectares:2.54 2.Exposed Area in Hectares:1.14 3.% Exposure:0.448818897637795 4.Exposed Value (PHP):114000000 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
INAYANGAN	Residential	1. Area per Land Use Category in Hectares:3.02 2. Exposed Area in Hectares:1.89 3. % Exposure:0.625827814569536 4. Exposed Value (PHP):189000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
LAMANAN	Residential	1. Area per Land Use Category in Hectares:4.53 2. Exposed Area in Hectares:4.47 3. % Exposure:0.986754966887417 4. Exposed Value (PHP):447000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
LAMPIANAO	Residential	1.Area per Land Use Category in Hectares:2.13 2. Exposed Area in Hectares:1.85 3.% Exposure:0.868544600938967 4.Exposed Value (PHP):185000000 5.Exposed Value (PHP):185000000 6.Degree of Impact:3	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
		7.Adaptive Capacity:3 8.Vulnerability Index:9 9.Vulnerability Category:High		
MEGKAWAYAN	Residential	1. Area per Land Use Category in Hectares:5.51 2. Exposed Area in Hectares:5.51 3. % Exposure:1 4. Exposed Value (PHP):551000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
PANGYAN	Residential	1. Area per Land Use Category in Hectares:5.09 2. Exposed Area in Hectares:1.33 3. % Exposure:0.261296660117878 4. Exposed Value (PHP):133000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
SALOY	Residential	1.Area per Land Use Category in Hectares:1.78 2.Exposed Area in Hectares:1.77% 3.Exposure:0.99438202247191 4.Exposed Value (PHP):177000000 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
		7.Adaptive Capacity:3 8.Vulnerability Index:9 9.Vulnerability Category:High		
MEGKAWAYAN	Residential	1. Area per Land Use Category in Hectares:5.51 2. Exposed Area in Hectares:5.51 3. % Exposure:1 4. Exposed Value (PHP):551000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
PANGYAN	Residential	1. Area per Land Use Category in Hectares:5.09 2. Exposed Area in Hectares:1.33 3. % Exposure:0.261296660117878 4. Exposed Value (PHP):133000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
SALOY	Residential	1.Area per Land Use Category in Hectares:1.78 2.Exposed Area in Hectares:1.77% 3.Exposure:0.99438202247191 4.Exposed Value (PHP):177000000 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
SIRIB	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:7.56 2. Exposed Area in Hectares:0.9 3. % Exposure:0.119047619047619 4. Exposed Value (PHP):90000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
TAMAYONG	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:4.57 2. Exposed Area in Hectares:2.67 3. % Exposure:0.584245076586433 4. Exposed Value (PHP):267000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
BANTOL	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:2.61 2. Exposed Area in Hectares:2.61 3. % Exposure:1 4. Exposed Value (PHP):261000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
BUDA	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:19.63 2. Exposed Area in Hectares:4.07 3. % Exposure:0.207335710646969 4. Exposed Value (PHP):407000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
DALAG LUMOT	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:9.86 2. Exposed Area in Hectares:9.86 3. % Exposure:1 4. Exposed Value (PHP):986000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
DATU SALUMAY	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:21.3 2. Exposed Area in Hectares:4.94 3. % Exposure:0.231924882629108 4. Exposed Value (PHP):494000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
GUMITAN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:8.82 2. Exposed Area in Hectares:6.63 3. % Exposure:0.751700680272109 4. Exposed Value (PHP):663000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
MAGSAYSAY	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:8.68 2. Exposed Area in Hectares:8.68 3. % Exposure:1 Exposed Value (PHP):868000000 Degree of Impact:3 Adaptive Capacity:3 Vulnerability Index:9 Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
MALAMBA	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:13.13 2. Exposed Area in Hectares:10.09 3. % Exposure:0.768469154607768 4. Exposed Value (PHP):100900000055. Degree of Impact:3 6. 5. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
MARILOG	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:92.6 2. Exposed Area in Hectares:91.12 3. % Exposure:0.984017278617711 4. Exposed Value (PHP):9112000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
SALAYSAY	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:10.06 2. Exposed Area in Hectares:10 3. % Exposure:0.99403578528827 4. Exposed Value (PHP):1000000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
SUAWAN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:7.31 2. Exposed Area in Hectares:7.31 3. % Exposure:1 4. Exposed Value (PHP):731000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
COLOSAS	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:9.67 2. Exposed Area in Hectares:9.65 3. % Exposure:0.997931747673216 4. Exposed Value (PHP):965000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
FATIMA	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:9.8 2. Exposed Area in Hectares:7.61 3. % Exposure:0.776530612244898 4. Exposed Value (PHP):1141500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
LUMIAD	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:8.61 2. Exposed Area in Hectares:8.61 3. % Exposure:1 4. Exposed Value (PHP):861000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
MALABOG	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:18.21 2. Exposed Area in Hectares:18.21 3. % Exposure:1 4. Exposed Value (PHP):1821000000 5. Degree of Impact:3Adaptive Capacity:3Vulnerability Index:9Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
MAPULA	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:14.69 2. Exposed Area in Hectares:14.69 3. % Exposure:1 4. Exposed Value (PHP):1469000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
PANDAITAN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:9.35 2. Exposed Area in Hectares:9.34 3. % Exposure:0.998930481283422 4. Exposed Value (PHP):934000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
PAÑALUM	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:2.07 2. Exposed Area in Hectares:2.07 3. % Exposure:1 4. Exposed Value (PHP):207000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
PAQUIBATO	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:12.53 2. Exposed Area in Hectares:12.53 3. % Exposure:1 4. Exposed Value (PHP):1253000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
PARADISE EMBAC	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:1.9 2. Exposed Area in Hectares:1.9 3. % Exposure:1 4. Exposed Value (PHP):190000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
SALAPAWAN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:3.04 2. Exposed Area in Hectares:3.03 3. % Exposure:0.996710526315789 4. Exposed Value (PHP):303000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
SUMIMAO	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:1.77 2. Exposed Area in Hectares:1.77 3. % Exposure:1 4. Exposed Value (PHP):177000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
TAPAK	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:18.67 2. Exposed Area in Hectares:18.46 3. % Exposure:0.988752008569898 4. Exposed Value (PHP):1846000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
LANGUB	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:13.61 2. Exposed Area in Hectares:13.48 3. % Exposure:0.990448199853049 4. Exposed Value (PHP):1348000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
MA-A	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:428.26 2. Exposed Area in Hectares:101.76 3. % Exposure:0.237612665203381 4. Exposed Value (PHP):10176000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
MAGTUOD	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:53.99 2. Exposed Area in Hectares:46.37 3. % Exposure:0.858862752361548 4. Exposed Value (PHP):4637000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
MATINA CROSSING	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:250.4 2. Exposed Area in Hectares:29.25 3. % Exposure:0.116813099041534 4. Exposed Value (PHP):2925000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
MATINA PANGI	Residential	Area per Land Use Category in Hectares:152.49 Exposed Area in Hectares:64.73% Exposure:0.424486851596826 Exposed Value (PHP):9709500000 Degree of Impact:3 Adaptive Capacity:3 Vulnerability Index:9 Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
ATAN-AWE	Residential	1. Area per Land Use Category in Hectares:0.88 2. Exposed Area in Hectares:0.88% Exposure:1 3. Exposed Value (PHP):88000000 4. Degree of Impact:3 5. Adaptive Capacity:3 6. Vulnerability Index:9 7. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
BARACATAN	Residential	1. Area per Land Use Category in Hectares:4.3 2. Exposed Area in Hectares:1.55 3. % Exposure:0.36046511627907 4. Exposed Value (PHP):155000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
BINUGAO	Residential	1. Area per Land Use Category in Hectares:52.79 2. Exposed Area in Hectares:24.7 3. % Exposure:0.467891646145103 4. Exposed Value (PHP):2470000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
CAMANSI	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:2.44 2. Exposed Area in Hectares:1.73 3. % Exposure:0.709016393442623 4. Exposed Value (PHP):173000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
CATIGAN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:2.44 2. Exposed Area in Hectares:1.73 3. % Exposure:0.709016393442623 4. Exposed Value (PHP):173000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
DALIAON PLANTATION	Residential	<ol style="list-style-type: none"> 1.Area per Land Use Category in Hectares:5.55Exposed 2.Area in Hectares:2.17 3.% Exposure:0.390990990990991 4.Exposed Value (PHP):217000000 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
EDEN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:51.48 2. Exposed Area in Hectares:51.48 3. % Exposure:1 4. Exposed Value (PHP):5148000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
MARAPANGI	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:76.91 2. Exposed Area in Hectares:1.99 3. % Exposure:0.0258743986477701 4. Exposed Value (PHP):199000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
SIBULAN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:2.13 2. Exposed Area in Hectares:2.13 3. % Exposure:1 4. Exposed Value (PHP):213000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
SIRAWAN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:83.94 2. Exposed Area in Hectares:7.5 3. % Exposure:0.089349535382416 4. Exposed Value (PHP):750000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
TAGURANO	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:1.66 2. Exposed Area in Hectares:0.6 3. % Exposure:0.36144578313253 4. Exposed Value (PHP):60000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
TIBULOY	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:3.76 2. Exposed Area in Hectares:3.57 3. % Exposure:0.949468085106383 4. Exposed Value (PHP):357000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
TUNGKALAN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:3.84 2. Exposed Area in Hectares:1.09 3. % Exposure:0.283854166666667 4. Exposed Value (PHP):109000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
NEW CARMEN	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:15.64 2. Exposed Area in Hectares:2.26 3. % Exposure:0.144501278772379 4. Exposed Value (PHP):226000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
NEW VALENCIA	Residential	<ol style="list-style-type: none"> 1. Area per Land Use Category in Hectares:4.93 2. Exposed Area in Hectares:1 3. % Exposure:0.202839756592292 4. Exposed Value (PHP):100000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
COMMUNAL	Tourism	1. Area per Land Use Category in Hectares:20.15 2. Exposed Area in Hectares:12.51 3. % Exposure:0.620843672456576 4. Exposed Value (PHP):1876500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Damage to land, facilities and interruption of transportation system may cause or reduce tourist revenues.	Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.
MEGKAWAYAN	Tourism	1. Area per Land Use Category in Hectares:1.93 2. Exposed Area in Hectares:1.93 3. % Exposure:1 4. Exposed Value (PHP):289500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Damage to land, facilities and interruption of transportation system may cause or reduce tourist revenues.	Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.
MAGSAYSAY	Tourism	1. Area per Land Use Category in Hectares:0.99 2. Exposed Area in Hectares:0.99 3. % Exposure:1 4. Exposed Value (PHP):148500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Damage to land, facilities and interruption of transportation system may cause or reduce tourist revenues.	Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.
MARILOG	Tourism	1. Area per Land Use Category in Hectares:29.99 2. Exposed Area in Hectares:26.29 3. % Exposure:0.876625541847282 4. Exposed Value (PHP):3943500000 5. Degree of Impact:3 6. Adaptive Capacity:3	Damage to land, facilities and interruption of transportation system may cause or reduce tourist revenues.	Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
		7. Vulnerability Index:9 8. Vulnerability Category:High		
MALABOG	Tourism	1. Area per Land Use Category in Hectares:4.34 2. Exposed Area in Hectares:4.34 3. % Exposure:1 4. Exposed Value (PHP):651000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Damage to land, facilities and interruption of transportation system may cause or reduce tourist revenues.	Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.
PAQUIBATO	Tourism	1. Area per Land Use Category in Hectares:0.99 2. Exposed Area in Hectares:0.99 3. % Exposure:1 4. Exposed Value (PHP):148500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Damage to land, facilities and interruption of transportation system may cause or reduce tourist revenues.	Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.
MA-A	Tourism	1. Area per Land Use Category in Hectares:16.55 2. Exposed Area in Hectares:6.86 3. % Exposure:0.414501510574018 4. Exposed Value (PHP):1029000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Damage to land, facilities and interruption of transportation system may cause or reduce tourist revenues.	Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.

Table U-24. Climate Change Vulnerability Assessment for Landslide, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
EDEN	Tourism	1. Area per Land Use Category in Hectares:98.4 2. Exposed Area in Hectares:94.89 3. % Exposure:0.964329268292683 4. Exposed Value (PHP):14233500000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:High	Damage to land, facilities and interruption of transportation system may cause or reduce tourist revenues.	Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.

LIQUEFACTION

According to the presented result from the urban use assessment for vulnerability, only the residential area in 79 barangays have high vulnerability to storm surge. Based on the table, these barangays have “low rating” on structure employing hazard resistant/adaptation design and a “very high” rating on no access/area coverage to infrastructure related hazard mitigation. While this is the reality among the structures, findings also disclose that 40 barangays have “high” to “very high” rating on the proportion of buildings with walls with light to salvageable materials and this number also equals to number of barangays with “high” to “very high” proportion of buildings in dilapidated/condemned condition. What makes this barangays an area of concern to liquefaction is that the same barangays have low adaptive capacity, having no capacity and willingness to retrofit or relocate or conform to new regulations and no insurance coverage. Hence, the presence of liquefaction hazard can further be addressed by implementation of zoning regulations, identification of alternate sites and utilization of government resources.

Table U-25. Urban Use Areas Vulnerability, Liquefaction Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
1-A	Residential	6.95	6.69	96.19%	668,759,626.53	3	3	9	HIGH
1-A	Commercial	1.40	1.40	100.00%	210,517,192.30	3	2	6	MODERATE
1-A	Parks and Recreational	0.08	0.08	97.85%	11,505,813.54	3	2	6	MODERATE
2-A	Residential	1.62	1.61	99.34%	160,937,232.18	3	3	9	HIGH
2-A	Commercial	11.32	11.32	100.00%	1,697,980,810.46	3	2	6	MODERATE
2-A	Parks and Recreational	0.44	0.44	100.00%	66,567,762.78	3	2	6	MODERATE
3-A	Residential	0.55	0.55	100.00%	55,110,084.98	3	3	9	HIGH
3-A	Commercial	14.90	14.90	100.00%	2,234,645,239.30	3	2	6	MODERATE
3-A	Parks and Recreational	0.10	0.10	100.00%	15,358,498.74	3	2	6	MODERATE
4-A	Residential	2.93	2.93	100.00%	293,381,608.75	3	3	9	HIGH
4-A	Commercial	9.55	9.55	100.00%	1,432,224,807.14	3	2	6	MODERATE
4-A	Parks and Recreational	4.00	4.00	100.00%	600,131,302.57	3	2	6	MODERATE
4-A	Industrial	0.08	0.08	100.00%	12,539,491.89	3	2	6	MODERATE
5-A	Residential	20.41	13.27	65.02%	1,327,255,535.69	3	3	9	HIGH
5-A	Parks and Recreational	0.01	0.01	100.00%	1,995,534.93	3	2	6	MODERATE

Table U-25. Urban Use Areas Vulnerability, Liquefaction Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
5-A	Commercial	4.34	1.17	27.01%	175,965,313.03	3	2	6	MODERATE
6-A	Residential	4.39	0.93	21.18%	92,966,603.62	3	3	9	HIGH
6-A	Industrial	0.06	0.06	100.00%	8,855,098.62	3	2	6	MODERATE
6-A	Commercial	5.66	3.70	65.46%	555,622,734.63	3	2	6	MODERATE
7-A	Residential	10.18	5.60	55.02%	560,224,332.89	3	3	9	HIGH
7-A	Commercial	6.79	6.73	99.01%	1,008,959,035.34	3	2	6	MODERATE
8-A	Residential	82.83	34.14	41.22%	3,413,933,203.73	3	3	9	HIGH
8-A	Industrial	3.84	3.56	92.69%	533,886,321.61	3	2	6	MODERATE
8-A	Commercial	5.65	4.38	77.59%	657,478,527.85	3	2	6	MODERATE
8-A	Parks and Recreational	1.17	0.02	1.44%	2,513,790.82	1	2	2	LOW
8-A	Cemetery	18.90	0.01	0.08%	2,187,504.64	1	2	2	LOW
9-A	Residential	13.91	8.69	62.51%	869,383,869.54	3	3	9	HIGH
9-A	Industrial	0.22	0.22	100.00%	33,700,922.46	3	2	6	MODERATE
9-A	Commercial	7.49	7.42	99.04%	1,113,063,974.88	3	2	6	MODERATE
10-A	Residential	5.79	4.27	73.65%	426,663,756.87	3	3	9	HIGH
10-A	Industrial	0.26	0.26	100.00%	38,842,452.40	3	2	6	MODERATE
10-A	Commercial	7.70	6.64	86.22%	995,803,712.62	3	2	6	MODERATE
11-B	Residential	2.56	2.56	100.00%	256,070,679.52	3	3	9	HIGH
11-B	Commercial	4.52	4.52	100.00%	678,304,676.37	3	2	6	MODERATE
11-B	Industrial	0.61	0.61	100.00%	90,819,721.30	3	2	6	MODERATE
12-B	Residential	1.20	1.20	100.00%	119,529,526.40	3	3	9	HIGH
12-B	Commercial	12.43	12.43	100.00%	1,864,538,807.44	3	2	6	MODERATE
12-B	Parks and Recreational	0.06	0.06	100.00%	9,730,755.67	3	2	6	MODERATE
12-B	Industrial	0.01	0.01	100.00%	1,832,308.60	3	2	6	MODERATE
13-B	Residential	0.57	0.57	100.00%	57,417,430.57	3	3	9	HIGH
13-B	Commercial	8.52	8.52	100.00%	1,278,263,622.49	3	2	6	MODERATE
14-B	Residential	3.09	3.09	100.00%	309,083,330.97	3	3	9	HIGH
14-B	Commercial	7.52	7.52	100.00%	1,128,353,743.17	3	2	6	MODERATE
14-B	Industrial	0.30	0.30	100.00%	45,018,001.26	3	2	6	MODERATE
15-B	Residential	1.46	1.46	100.00%	146,470,545.79	3	3	9	HIGH
15-B	Commercial	24.46	24.46	100.00%	3,668,268,076.75	3	2	6	MODERATE

Table U-25. Urban Use Areas Vulnerability, Liquefaction Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
15-B	Parks and Recreational	0.19	0.19	100.00%	28,853,312.07	3	2	6	MODERATE
15-B	Industrial	0.00011	0.00011	100.00%	16,137.02	1	2	2	LOW
16-B	Residential	0.43	0.43	100.00%	42,608,316.39	3	3	9	HIGH
16-B	Commercial	3.38	3.38	100.00%	507,126,888.09	3	2	6	MODERATE
17-B	Residential	0.53	0.53	100.00%	52,577,744.66	3	3	9	HIGH
17-B	Commercial	3.89	3.89	100.00%	583,679,837.63	3	2	6	MODERATE
18-B	Residential	0.40	0.40	100.00%	40,499,797.62	3	3	9	HIGH
18-B	Commercial	8.95	8.95	100.00%	1,343,099,654.85	3	2	6	MODERATE
18-B	Parks and Recreational	0.42	0.42	100.00%	63,521,647.83	3	2	6	MODERATE
19-B	Residential	179.81	31.90	17.74%	3,189,532,024.73	3	3	9	HIGH
19-B	Tourism	0.23	0.23	100.00%	34,671,884.65	3	2	6	MODERATE
19-B	Commercial	28.23	12.47	44.19%	1,871,180,694.53	3	2	6	MODERATE
19-B	Parks and Recreational	0.36	0.10	28.85%	15,685,642.67	2	2	4	MODERATE
19-B	Industrial	2.48	0.13	5.14%	19,144,453.15	2	2	4	MODERATE
20-B	Residential	13.93	13.62	97.80%	1,362,240,617.82	3	3	9	HIGH
20-B	Commercial	28.61	24.30	84.95%	3,645,093,389.38	3	2	6	MODERATE
20-B	Industrial	0.28	0.25	88.75%	37,559,267.30	2	2	4	MODERATE
21-C	Residential	5.18	5.16	99.54%	515,854,291.85	3	3	9	HIGH
21-C	Commercial	0.30	0.30	100.00%	45,315,507.14	3	2	6	MODERATE
21-C	Parks and Recreational	0.07	0.07	100.00%	10,759,658.32	3	2	6	MODERATE
22-C	Residential	4.78	4.76	99.43%	475,661,619.70	3	3	9	HIGH
22-C	Commercial	0.50	0.50	100.00%	75,115,751.36	3	2	6	MODERATE
22-C	Parks and Recreational	0.05	0.05	100.00%	6,881,766.47	2	2	4	MODERATE
23-C	Residential	12.79	12.74	99.59%	1,273,965,335.14	3	3	9	HIGH
23-C	Commercial	0.87	0.87	100.00%	130,465,332.82	3	2	6	MODERATE
23-C	Parks and Recreational	0.72	0.70	98.19%	105,641,066.53	3	2	6	MODERATE
24-C	Residential	2.51	2.51	100.00%	251,444,449.30	3	3	9	HIGH

Table U-25. Urban Use Areas Vulnerability, Liquefaction Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
24-C	Commercial	3.60	3.60	100.00%	540,610,880.67	3	2	6	MODERATE
24-C	Parks and Recreational	0.05	0.05	100.00%	7,246,289.48	2	2	4	MODERATE
25-C	Residential	1.73	1.73	100.00%	172,897,030.99	3	3	9	HIGH
25-C	Commercial	2.24	2.24	100.00%	335,958,502.01	3	2	6	MODERATE
26-C	Residential	2.23	2.23	100.00%	223,439,536.27	3	3	9	HIGH
26-C	Commercial	4.32	4.32	100.00%	648,391,002.94	3	2	6	MODERATE
27-C	Residential	0.64	0.64	100.00%	64,430,739.12	3	3	9	HIGH
27-C	Commercial	18.61	18.61	100.00%	2,792,069,841.63	3	2	6	MODERATE
27-C	Industrial	0.69	0.69	100.00%	103,892,418.99	3	2	6	MODERATE
27-C	Parks and Recreational	4.10	3.97	96.80%	595,045,006.93	3	2	6	MODERATE
27-C	Tourism	0.04	0.04	100.00%	6,481,597.18	2	2	4	MODERATE
28-C	Residential	1.65	1.65	100.00%	164,904,371.86	3	3	9	HIGH
28-C	Commercial	3.95	3.95	100.00%	592,148,476.58	3	2	6	MODERATE
29-C	Residential	1.07	1.07	100.00%	106,578,472.04	3	3	9	HIGH
29-C	Commercial	6.88	6.88	100.00%	1,032,303,551.14	3	2	6	MODERATE
30-C	Residential	1.37	1.37	100.00%	136,706,623.40	3	3	9	HIGH
30-C	Commercial	14.96	14.96	100.00%	2,243,731,104.79	3	2	6	MODERATE
30-C	Industrial	0.29	0.29	100.00%	43,726,588.70	2	2	4	MODERATE
31-D	Residential	13.56	13.55	99.88%	1,354,516,309.29	3	3	9	HIGH
31-D	Commercial	0.61	0.61	100.00%	91,246,534.10	3	2	6	MODERATE
31-D	Parks and Recreational	0.13	0.13	100.00%	19,561,711.58	3	2	6	MODERATE
32-D	Residential	2.75	2.75	100.00%	274,985,420.10	3	3	9	HIGH
32-D	Commercial	5.17	5.17	100.00%	775,207,875.14	3	2	6	MODERATE
32-D	Parks and Recreational	0.20	0.20	100.00%	29,385,028.90	3	2	6	MODERATE
33-D	Residential	3.86	3.86	100.00%	386,250,542.28	3	3	9	HIGH
33-D	Commercial	2.89	2.89	100.00%	433,152,351.11	3	2	6	MODERATE
34-D	Residential	0.37	0.37	100.00%	36,876,195.80	3	3	9	HIGH
34-D	Commercial	12.70	12.70	100.00%	1,905,014,679.50	3	2	6	MODERATE
34-D	Parks and Recreational	0.00	0.00	100.00%	35,858.57	1	2	2	LOW

Table U-25. Urban Use Areas Vulnerability, Liquefaction Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
35-D	Residential	0.04	0.04	100.00%	4,296,290.38	2	3	6	MODERATE
35-D	Parks and Recreational	4.13	4.13	100.00%	620,121,371.22	3	2	6	MODERATE
35-D	Commercial	2.48	2.48	100.00%	372,155,324.57	3	2	6	MODERATE
36-D	Residential	2.39	2.39	100.00%	238,999,142.25	3	3	9	HIGH
36-D	Commercial	3.33	3.33	100.00%	499,363,982.22	3	2	6	MODERATE
36-D	Parks and Recreational	0.07	0.07	100.00%	10,425,373.15	2	2	4	MODERATE
37-D	Residential	3.54	3.54	100.00%	354,418,789.96	3	3	9	HIGH
37-D	Commercial	0.82	0.82	100.00%	123,129,696.28	3	2	6	MODERATE
38-D	Residential	1.73	1.73	100.00%	172,640,113.76	3	3	9	HIGH
38-D	Commercial	3.10	3.10	100.00%	465,690,451.04	3	2	6	MODERATE
38-D	Parks and Recreational	0.01	0.01	100.00%	1,032,136.18	1	2	2	LOW
39-D	Residential	2.92	2.92	100.00%	292,022,357.47	3	3	9	HIGH
39-D	Commercial	5.34	5.34	100.00%	801,638,610.92	3	2	6	MODERATE
39-D	Parks and Recreational	0.89	0.89	100.00%	133,631,679.19	3	2	6	MODERATE
40-D	Residential	1.34	1.34	100.00%	133,947,735.42	3	3	9	HIGH
40-D	Commercial	6.05	6.05	100.00%	907,271,520.63	3	2	6	MODERATE
AGDAO PROPER	Residential	7.62	7.62	100.00%	1,142,729,213.98	3	3	9	HIGH
AGDAO PROPER	Commercial	22.65	22.65	100.00%	3,397,577,978.24	3	2	6	MODERATE
AGDAO PROPER	Industrial	1.29	1.29	100.00%	193,897,955.89	3	2	6	MODERATE
AGDAO PROPER	Parks and Recreational	0.01	0.01	100.00%	1,612,503.96	1	2	2	LOW
WILFREDO AQUINO	Residential	26.09	19.31	74.00%	1,931,007,597.92	3	3	9	HIGH
WILFREDO AQUINO	Parks and Recreational	1.06	1.06	100.00%	159,711,995.73	3	2	6	MODERATE
WILFREDO AQUINO	Commercial	23.77	16.38	68.91%	2,457,340,460.18	3	2	6	MODERATE
WILFREDO AQUINO	Industrial	0.12	0.11	99.03%	17,100,262.62	2	2	4	MODERATE
PACIANO BANGOY	Residential	21.36	17.47	81.80%	1,747,224,664.29	3	3	9	HIGH
PACIANO BANGOY	Industrial	0.67	0.67	100.00%	100,104,649.30	3	2	6	MODERATE
PACIANO BANGOY	Commercial	37.06	28.33	76.43%	4,249,211,221.59	3	2	6	MODERATE

Table U-25. Urban Use Areas Vulnerability, Liquefaction Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
RAFAEL CASTILLO	Residential	11.86	11.86	100.00%	1,186,306,442.08	3	3	9	HIGH
RAFAEL CASTILLO	Commercial	16.41	16.41	100.00%	2,461,002,411.19	3	2	6	MODERATE
RAFAEL CASTILLO	Industrial	9.33	9.33	100.00%	1,398,997,645.74	3	2	6	MODERATE
RAFAEL CASTILLO	Parks and Recreational	0.02	0.02	100.00%	2,764,122.06	2	2	4	MODERATE
CENTRO	Residential	22.72	22.37	98.48%	2,237,168,588.75	3	3	9	HIGH
CENTRO	Commercial	1.14	1.14	100.00%	170,319,260.99	3	2	6	MODERATE
CENTRO	Industrial	10.73	10.60	98.81%	1,590,332,982.19	3	2	6	MODERATE
CENTRO	Parks and Recreational	0.04	0.04	100.00%	6,174,813.88	2	2	4	MODERATE
GOV. VICENTE DUTERTE	Residential	20.34	20.02	98.43%	2,001,596,458.56	3	3	9	HIGH
GOV. VICENTE DUTERTE	Industrial	12.56	12.56	100.00%	1,884,562,350.82	3	2	6	MODERATE
GOV. VICENTE DUTERTE	Commercial	4.95	4.95	100.00%	741,989,967.31	3	2	6	MODERATE
GOV. VICENTE DUTERTE	Parks and Recreational	0.06	0.06	100.00%	9,423,105.82	2	2	4	MODERATE
LEON GARCIA SR.	Residential	12.04	12.04	100.00%	1,204,204,820.76	3	3	9	HIGH
LEON GARCIA SR.	Commercial	1.06	1.06	100.00%	158,606,156.97	3	2	6	MODERATE
LEON GARCIA SR.	Industrial	0.29	0.29	100.00%	43,386,392.02	3	2	6	MODERATE
LEON GARCIA SR.	Parks and Recreational	0.08	0.08	100.00%	11,720,015.13	2	2	4	MODERATE
LAPU - LAPU	Residential	23.68	23.68	100.00%	2,367,807,745.32	3	3	9	HIGH
LAPU - LAPU	Commercial	1.61	1.61	100.00%	241,574,580.62	3	2	6	MODERATE
LAPU - LAPU	Industrial	22.95	22.91	99.82%	3,435,992,158.31	3	2	6	MODERATE
LAPU - LAPU	Parks and Recreational	0.04	0.04	100.00%	6,300,464.21	1	2	2	LOW
TOMAS MONTEVERDE	Residential	2.09	2.09	100.00%	209,331,746.48	3	3	9	HIGH
TOMAS MONTEVERDE	Commercial	11.83	11.83	100.00%	1,774,600,141.53	3	2	6	MODERATE
TOMAS MONTEVERDE	Industrial	0.83	0.83	100.00%	124,595,117.78	3	2	6	MODERATE
SAN ANTONIO	Residential	25.28	25.28	100.00%	2,528,393,562.43	3	3	9	HIGH
SAN ANTONIO	Commercial	43.27	43.27	100.00%	6,490,728,043.48	3	2	6	MODERATE
SAN ANTONIO	Industrial	10.51	10.51	100.00%	1,576,505,260.49	3	2	6	MODERATE
SAN ANTONIO	Parks and Recreational	0.06	0.06	100.00%	8,476,887.60	1	2	2	LOW

Table U-25. Urban Use Areas Vulnerability, Liquefaction Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
UBALDE	Residential	5.94	5.94	100.00%	593,870,521.72	3	3	9	HIGH
UBALDE	Commercial	1.53	1.53	100.00%	229,829,539.97	3	2	6	MODERATE
UBALDE	Industrial	0.21	0.21	100.00%	31,293,522.98	2	2	4	MODERATE
BUHANGIN	Residential	335.29	1.20	0.36%	120,062,974.52	3	3	9	HIGH
BUHANGIN	Industrial	4.40	0.13	2.90%	19,185,313.05	2	2	4	MODERATE
BUHANGIN	Commercial	52.91	0.0024	0.0046%	365,546.33	1	2	2	LOW
MANDUG	Residential	168.40	14.09	8.37%	1,408,849,663.61	3	3	9	HIGH
MANDUG	Agri-Industrial	6.55	3.98	60.74%	596,994,165.02	3	2	6	MODERATE
PAMPANGA	Commercial	11.31	11.31	100.00%	1,696,336,620.04	3	2	6	MODERATE
PAMPANGA	Tourism	2.99	2.99	100.00%	447,772,687.45	3	2	6	MODERATE
PAMPANGA	Industrial	26.69	23.90	89.57%	3,585,193,086.02	3	2	6	MODERATE
PAMPANGA	Residential	49.98	0.05	0.11%	5,456,768.47	1	3	3	LOW
SASA	Residential	223.80	25.93	11.59%	2,593,156,006.38	3	3	9	HIGH
SASA	Industrial	93.77	34.63	36.93%	5,193,798,341.78	3	2	6	MODERATE
SASA	Commercial	58.02	20.86	35.96%	3,129,116,617.57	3	2	6	MODERATE
SASA	Parks and Recreational	0.21	0.05	21.64%	6,879,260.67	1	2	2	LOW
TIGATTO	Residential	256.29	156.38	61.02%	15,637,877,275.48	3	3	9	HIGH
TIGATTO	Commercial	3.25	2.91	89.48%	436,358,787.31	3	2	6	MODERATE
TIGATTO	Industrial	13.03	5.15	39.52%	772,261,861.35	3	2	6	MODERATE
WAAN	Residential	38.48	18.52	48.12%	1,851,715,453.66	3	3	9	HIGH
WAAN	Parks and Recreational	0.08	0.08	100.00%	11,568,767.90	2	2	4	MODERATE
A. ANGLIONGTO	Residential	155.68	24.62	15.82%	2,462,151,601.11	3	3	9	HIGH
A. ANGLIONGTO	Commercial	38.75	31.98	82.53%	4,797,541,896.67	3	2	6	MODERATE
A. ANGLIONGTO	Industrial	17.16	3.47	20.21%	520,142,547.01	3	2	6	MODERATE
V. HIZON	Residential	118.71	52.73	44.42%	5,273,012,392.18	3	3	9	HIGH
V. HIZON	Industrial	6.31	6.31	100.00%	946,708,359.96	3	2	6	MODERATE
V. HIZON	Commercial	25.25	25.13	99.53%	3,769,698,812.30	3	2	6	MODERATE
V. HIZON	Tourism	1.52	0.69	45.20%	103,159,341.14	3	2	6	MODERATE
BUNAWAN	Residential	123.76	89.65	72.44%	8,965,265,387.13	3	3	9	HIGH
BUNAWAN	Commercial	11.86	11.67	98.45%	1,751,033,615.40	3	2	6	MODERATE

Table U-25. Urban Use Areas Vulnerability, Liquefaction Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
BUNAWAN	Industrial	115.61	79.29	68.58%	11,892,753,831.92	3	2	6	MODERATE
BUNAWAN	Agri-Industrial	1.86	1.18	63.19%	176,310,977.33	3	2	6	MODERATE
BUNAWAN	Parks and Recreational	0.24	0.18	75.90%	27,636,409.51	2	2	4	MODERATE
ILANG	Residential	125.72	10.88	8.65%	1,087,914,568.68	3	3	9	HIGH
ILANG	Industrial	90.29	33.50	37.10%	5,025,088,268.27	3	2	6	MODERATE
ILANG	Commercial	2.20	0.41	18.58%	61,233,382.40	3	2	6	MODERATE
LASANG	Residential	50.73	50.58	99.70%	5,058,098,233.04	3	3	9	HIGH
LASANG	Industrial	38.00	38.00	100.00%	5,700,555,728.53	3	2	6	MODERATE
LASANG	Commercial	2.13	2.13	100.00%	318,954,077.54	3	2	6	MODERATE
LASANG	Agri-Industrial	9.39	9.35	99.61%	1,403,109,661.19	3	2	6	MODERATE
LASANG	Parks and Recreational	0.07	0.07	100.00%	10,756,125.65	2	2	4	MODERATE
MAHAYAG	Residential	57.77	7.63	13.21%	763,277,727.56	3	3	9	HIGH
MAHAYAG	Industrial	70.08	1.04	1.48%	155,557,683.32	3	2	6	MODERATE
PANACAN	Residential	256.99	51.96	20.22%	5,196,453,706.62	3	3	9	HIGH
PANACAN	Parks and Recreational	6.97	6.97	100.00%	1,045,707,938.01	3	2	6	MODERATE
PANACAN	Cemetery	1.30	1.30	100.00%	195,635,496.94	3	2	6	MODERATE
PANACAN	Industrial	120.38	70.20	58.32%	10,530,080,704.21	3	2	6	MODERATE
PANACAN	Commercial	7.46	3.81	51.05%	571,287,446.10	3	2	6	MODERATE
PANACAN	Tourism	0.96	0.45	46.80%	67,258,881.59	3	2	6	MODERATE
SAN ISIDRO	Residential	26.47	18.25	68.95%	1,824,709,911.66	3	3	9	HIGH
SAN ISIDRO	Agri-Industrial	1.38	1.38	100.00%	207,366,014.96	3	2	6	MODERATE
SAN ISIDRO	Industrial	4.21	2.74	65.07%	411,065,887.15	3	2	6	MODERATE
SAN ISIDRO	Parks and Recreational	0.08	0.08	100.00%	11,270,954.85	2	2	4	MODERATE
TIBUNGCO	Residential	131.99	1.24	0.94%	123,605,480.56	3	3	9	HIGH
TIBUNGCO	Industrial	41.74	3.77	9.03%	565,182,964.20	3	2	6	MODERATE
BAGO APLAYA	Residential	95.45	94.69	99.20%	9,468,574,543.80	3	3	9	HIGH

Table U-25. Urban Use Areas Vulnerability, Liquefaction Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
35-D	Residential	0.04	0.04	100.00%	4,296,290.38	2	3	6	MODERATE
35-D	Parks and Recreational	4.13	4.13	100.00%	620,121,371.22	3	2	6	MODERATE
35-D	Commercial	2.48	2.48	100.00%	372,155,324.57	3	2	6	MODERATE
36-D	Residential	2.39	2.39	100.00%	238,999,142.25	3	3	9	HIGH
36-D	Commercial	3.33	3.33	100.00%	499,363,982.22	3	2	6	MODERATE
36-D	Parks and Recreational	0.07	0.07	100.00%	10,425,373.15	2	2	4	MODERATE
37-D	Residential	3.54	3.54	100.00%	354,418,789.96	3	3	9	HIGH
37-D	Commercial	0.82	0.82	100.00%	123,129,696.28	3	2	6	MODERATE
38-D	Residential	1.73	1.73	100.00%	172,640,113.76	3	3	9	HIGH
38-D	Commercial	3.10	3.10	100.00%	465,690,451.04	3	2	6	MODERATE
38-D	Parks and Recreational	0.01	0.01	100.00%	1,032,136.18	1	2	2	LOW
39-D	Residential	2.92	2.92	100.00%	292,022,357.47	3	3	9	HIGH
39-D	Commercial	5.34	5.34	100.00%	801,638,610.92	3	2	6	MODERATE
39-D	Parks and Recreational	0.89	0.89	100.00%	133,631,679.19	3	2	6	MODERATE
40-D	Residential	1.34	1.34	100.00%	133,947,735.42	3	3	9	HIGH
40-D	Commercial	6.05	6.05	100.00%	907,271,520.63	3	2	6	MODERATE
AGDAO PROPER	Residential	7.62	7.62	100.00%	1,142,729,213.98	3	3	9	HIGH
AGDAO PROPER	Commercial	22.65	22.65	100.00%	3,397,577,978.24	3	2	6	MODERATE
AGDAO PROPER	Industrial	1.29	1.29	100.00%	193,897,955.89	3	2	6	MODERATE
AGDAO PROPER	Parks and Recreational	0.01	0.01	100.00%	1,612,503.96	1	2	2	LOW
WILFREDO AQUINO	Residential	26.09	19.31	74.00%	1,931,007,597.92	3	3	9	HIGH

Table U-25. Urban Use Areas Vulnerability, Liquefaction Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
WILFREDO AQUINO	Parks and Recreational	1.06	1.06	100.00%	159,711,995.73	3	2	6	MODERATE
WILFREDO AQUINO	Commercial	23.77	16.38	68.91%	2,457,340,460.18	3	2	6	MODERATE
WILFREDO AQUINO	Industrial	0.12	0.11	99.03%	17,100,262.62	2	2	4	MODERATE
PACIANO BANGOY	Residential	21.36	17.47	81.80%	1,747,224,664.29	3	3	9	HIGH
PACIANO BANGOY	Industrial	0.67	0.67	100.00%	100,104,649.30	3	2	6	MODERATE
PACIANO BANGOY	Commercial	37.06	28.33	76.43%	4,249,211,221.59	3	2	6	MODERATE
RAFAEL CASTILLO	Residential	11.86	11.86	100.00%	1,186,306,442.08	3	3	9	HIGH
RAFAEL CASTILLO	Commercial	16.41	16.41	100.00%	2,461,002,411.19	3	2	6	MODERATE
RAFAEL CASTILLO	Industrial	9.33	9.33	100.00%	1,398,997,645.74	3	2	6	MODERATE
RAFAEL CASTILLO	Parks and Recreational	0.02	0.02	100.00%	2,764,122.06	2	2	4	MODERATE
CENTRO	Residential	22.72	22.37	98.48%	2,237,168,588.75	3	3	9	HIGH
CENTRO	Commercial	1.14	1.14	100.00%	170,319,260.99	3	2	6	MODERATE
CENTRO	Industrial	10.73	10.60	98.81%	1,590,332,982.19	3	2	6	MODERATE
CENTRO	Parks and Recreational	0.04	0.04	100.00%	6,174,813.88	2	2	4	MODERATE
GOV. VICENTE DUTERTE	Residential	20.34	20.02	98.43%	2,001,596,458.56	3	3	9	HIGH
GOV. VICENTE DUTERTE	Industrial	12.56	12.56	100.00%	1,884,562,350.82	3	2	6	MODERATE
GOV. VICENTE DUTERTE	Commercial	4.95	4.95	100.00%	741,989,967.31	3	2	6	MODERATE
GOV. VICENTE DUTERTE	Parks and Recreational	0.06	0.06	100.00%	9,423,105.82	2	2	4	MODERATE
LEON GARCIA SR.	Residential	12.04	12.04	100.00%	1,204,204,820.76	3	3	9	HIGH
LEON GARCIA SR.	Commercial	1.06	1.06	100.00%	158,606,156.97	3	2	6	MODERATE
LEON GARCIA SR.	Industrial	0.29	0.29	100.00%	43,386,392.02	3	2	6	MODERATE
LEON GARCIA SR.	Parks and Recreational	0.08	0.08	100.00%	11,720,015.13	2	2	4	MODERATE
LAPU - LAPU	Residential	23.68	23.68	100.00%	2,367,807,745.32	3	3	9	HIGH
LAPU - LAPU	Commercial	1.61	1.61	100.00%	241,574,580.62	3	2	6	MODERATE
LAPU - LAPU	Industrial	22.95	22.91	99.82%	3,435,992,158.31	3	2	6	MODERATE
LAPU - LAPU	Parks and Recreational	0.04	0.04	100.00%	6,300,464.21	1	2	2	LOW
TOMAS MONTEVERDE	Residential	2.09	2.09	100.00%	209,331,746.48	3	3	9	HIGH

Table U-25. Urban Use Areas Vulnerability, Liquefaction Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
TOMAS MONTEVERDE	Commercial	11.83	11.83	100.00%	1,774,600,141.53	3	2	6	MODERATE
TOMAS MONTEVERDE	Industrial	0.83	0.83	100.00%	124,595,117.78	3	2	6	MODERATE
SAN ANTONIO	Residential	25.28	25.28	100.00%	2,528,393,562.43	3	3	9	HIGH
SAN ANTONIO	Commercial	43.27	43.27	100.00%	6,490,728,043.48	3	2	6	MODERATE
SAN ANTONIO	Industrial	10.51	10.51	100.00%	1,576,505,260.49	3	2	6	MODERATE
SAN ANTONIO	Parks and Recreational	0.06	0.06	100.00%	8,476,887.60	1	2	2	LOW
UBALDE	Residential	5.94	5.94	100.00%	593,870,521.72	3	3	9	HIGH
UBALDE	Commercial	1.53	1.53	100.00%	229,829,539.97	3	2	6	MODERATE
UBALDE	Industrial	0.21	0.21	100.00%	31,293,522.98	2	2	4	MODERATE
BUHANGIN	Residential	335.29	1.20	0.36%	120,062,974.52	3	3	9	HIGH
BUHANGIN	Industrial	4.40	0.13	2.90%	19,185,313.05	2	2	4	MODERATE
BUHANGIN	Commercial	52.91	0.0024	0.0046%	365,546.33	1	2	2	LOW
MANDUG	Residential	168.40	14.09	8.37%	1,408,849,663.61	3	3	9	HIGH
MANDUG	Agri-Industrial	6.55	3.98	60.74%	596,994,165.02	3	2	6	MODERATE
PAMPANGA	Commercial	11.31	11.31	100.00%	1,696,336,620.04	3	2	6	MODERATE
PAMPANGA	Tourism	2.99	2.99	100.00%	447,772,687.45	3	2	6	MODERATE
PAMPANGA	Industrial	26.69	23.90	89.57%	3,585,193,086.02	3	2	6	MODERATE
PAMPANGA	Residential	49.98	0.05	0.11%	5,456,768.47	1	3	3	LOW
SASA	Residential	223.80	25.93	11.59%	2,593,156,006.38	3	3	9	HIGH
SASA	Industrial	93.77	34.63	36.93%	5,193,798,341.78	3	2	6	MODERATE
SASA	Commercial	58.02	20.86	35.96%	3,129,116,617.57	3	2	6	MODERATE
SASA	Parks and Recreational	0.21	0.05	21.64%	6,879,260.67	1	2	2	LOW
TIGATTO	Residential	256.29	156.38	61.02%	15,637,877,275.48	3	3	9	HIGH
TIGATTO	Commercial	3.25	2.91	89.48%	436,358,787.31	3	2	6	MODERATE
TIGATTO	Industrial	13.03	5.15	39.52%	772,261,861.35	3	2	6	MODERATE
WAAN	Residential	38.48	18.52	48.12%	1,851,715,453.66	3	3	9	HIGH
WAAN	Parks and Recreational	0.08	0.08	100.00%	11,568,767.90	2	2	4	MODERATE
A. ANGLIONGTO	Residential	155.68	24.62	15.82%	2,462,151,601.11	3	3	9	HIGH
A. ANGLIONGTO	Commercial	38.75	31.98	82.53%	4,797,541,896.67	3	2	6	MODERATE

Table U-25. Urban Use Areas Vulnerability, Liquefaction Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
A. ANGLIONGTO	Industrial	17.16	3.47	20.21%	520,142,547.01	3	2	6	MODERATE
V. HIZON	Residential	118.71	52.73	44.42%	5,273,012,392.18	3	3	9	HIGH
V. HIZON	Industrial	6.31	6.31	100.00%	946,708,359.96	3	2	6	MODERATE
V. HIZON	Commercial	25.25	25.13	99.53%	3,769,698,812.30	3	2	6	MODERATE
V. HIZON	Tourism	1.52	0.69	45.20%	103,159,341.14	3	2	6	MODERATE
BUNAWAN	Residential	123.76	89.65	72.44%	8,965,265,387.13	3	3	9	HIGH
BUNAWAN	Commercial	11.86	11.67	98.45%	1,751,033,615.40	3	2	6	MODERATE
BUNAWAN	Industrial	115.61	79.29	68.58%	11,892,753,831.92	3	2	6	MODERATE
BUNAWAN	Agri-Industrial	1.86	1.18	63.19%	176,310,977.33	3	2	6	MODERATE
BUNAWAN	Parks and Recreational	0.24	0.18	75.90%	27,636,409.51	2	2	4	MODERATE
ILANG	Residential	125.72	10.88	8.65%	1,087,914,568.68	3	3	9	HIGH
ILANG	Industrial	90.29	33.50	37.10%	5,025,088,268.27	3	2	6	MODERATE
ILANG	Commercial	2.20	0.41	18.58%	61,233,382.40	3	2	6	MODERATE
LASANG	Residential	50.73	50.58	99.70%	5,058,098,233.04	3	3	9	HIGH
LASANG	Industrial	38.00	38.00	100.00%	5,700,555,728.53	3	2	6	MODERATE
LASANG	Commercial	2.13	2.13	100.00%	318,954,077.54	3	2	6	MODERATE
LASANG	Agri-Industrial	9.39	9.35	99.61%	1,403,109,661.19	3	2	6	MODERATE
LASANG	Parks and Recreational	0.07	0.07	100.00%	10,756,125.65	2	2	4	MODERATE
MAHAYAG	Residential	57.77	7.63	13.21%	763,277,727.56	3	3	9	HIGH
MAHAYAG	Industrial	70.08	1.04	1.48%	155,557,683.32	3	2	6	MODERATE
PANACAN	Residential	256.99	51.96	20.22%	5,196,453,706.62	3	3	9	HIGH
PANACAN	Parks and Recreational	6.97	6.97	100.00%	1,045,707,938.01	3	2	6	MODERATE
PANACAN	Cemetery	1.30	1.30	100.00%	195,635,496.94	3	2	6	MODERATE
PANACAN	Industrial	120.38	70.20	58.32%	10,530,080,704.21	3	2	6	MODERATE
PANACAN	Commercial	7.46	3.81	51.05%	571,287,446.10	3	2	6	MODERATE
PANACAN	Tourism	0.96	0.45	46.80%	67,258,881.59	3	2	6	MODERATE
SAN ISIDRO	Residential	26.47	18.25	68.95%	1,824,709,911.66	3	3	9	HIGH
SAN ISIDRO	Agri-Industrial	1.38	1.38	100.00%	207,366,014.96	3	2	6	MODERATE

Table U-25. Urban Use Areas Vulnerability, Liquefaction Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
SAN ISIDRO	Industrial	4.21	2.74	65.07%	411,065,887.15	3	2	6	MODERATE
SAN ISIDRO	Parks and Recreational	0.08	0.08	100.00%	11,270,954.85	2	2	4	MODERATE
TIBUNGCO	Residential	131.99	1.24	0.94%	123,605,480.56	3	3	9	HIGH
TIBUNGCO	Industrial	41.74	3.77	9.03%	565,182,964.20	3	2	6	MODERATE
BAGO APLAYA	Residential	95.45	94.69	99.20%	9,468,574,543.80	3	3	9	HIGH
BAGO GALLERA	Residential	129.96	1.56	1.20%	156,147,770.86	3	3	9	HIGH
BAGO APLAYA	Industrial	16.24	16.24	100.00%	2,436,509,741.16	3	2	6	MODERATE
BAGO APLAYA	Commercial	12.91	12.82	99.29%	1,922,278,391.94	3	2	6	MODERATE
BAGO APLAYA	Parks and Recreational	5.45	5.25	96.35%	788,103,884.73	3	2	6	MODERATE
BAGO GALLERA	Parks and Recreational	63.48	9.3802	14.78%	1,407,032,731.74	3	2	6	MODERATE
BAGO GALLERA	Commercial	0.65	0.0002	0.03%	26,869.93	1	2	2	LOW
BUCANA	Residential	216.96	216.58	99.83%	21,657,754,187.75	3	3	9	HIGH
BUCANA	Parks and Recreational	1.92	1.92	100.00%	287,500,120.02	3	2	6	MODERATE
BUCANA	Commercial	63.45	63.09	99.44%	9,464,086,291.80	3	2	6	MODERATE
BUCANA	Tourism	0.67	0.66	99.35%	99,239,738.21	3	2	6	MODERATE
BUCANA	Industrial	0.12	0.12	100.00%	17,514,521.14	2	2	4	MODERATE
CATALUNAN GRANDE	Residential	301.76	0.01	0.00%	608,697.75	1	3	3	LOW
DUMOY	Residential	162.79	82.31	50.56%	8,230,754,277.10	3	3	9	HIGH
DUMOY	Tourism	5.83	5.83	100.00%	874,001,152.47	3	2	6	MODERATE
DUMOY	Parks and Recreational	8.33	8.04	96.50%	1,205,607,293.55	3	2	6	MODERATE
DUMOY	Commercial	8.18	5.79	70.86%	869,242,941.13	3	2	6	MODERATE
DUMOY	Industrial	32.56	16.42	50.44%	2,463,477,068.57	3	2	6	MODERATE
MATINA APLAYA	Residential	155.50	154.67	99.46%	15,466,659,751.19	3	3	9	HIGH
MATINA APLAYA	Tourism	2.35	2.34	99.55%	351,540,934.99	3	2	6	MODERATE
MATINA APLAYA	Commercial	20.47	20.34	99.33%	3,050,355,113.13	3	2	6	MODERATE
MATINA APLAYA	Industrial	2.91	2.87	98.82%	430,643,771.07	3	2	6	MODERATE
MATINA APLAYA	Parks and Recreational	2.27	2.21	97.55%	332,186,534.95	3	2	6	MODERATE

Table U-25. Urban Use Areas Vulnerability, Liquefaction Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
MATINA CROSSING	Residential	250.40	170.46	68.07%	17,045,624,248.24	3	3	9	HIGH
MATINA CROSSING	Commercial	50.86	40.51	79.66%	6,076,973,082.65	3	2	6	MODERATE
MATINA CROSSING	Industrial	5.73	1.45	25.37%	217,986,259.43	3	2	6	MODERATE
MATINA CROSSING	Parks and Recreational	18.39	3.91	21.29%	587,219,779.47	3	2	6	MODERATE
MATINA CROSSING	Tourism	0.35	0.02	5.44%	2,885,957.22	1	2	2	LOW
MATINA PANGI	Residential	152.50	42.34	27.77%	4,234,146,266.64	3	3	9	HIGH
MATINA PANGI	Industrial	0.04	0.03	79.94%	4,496,776.71	2	2	4	MODERATE
MATINA PANGI	Parks and Recreational	0.54	0.10	18.24%	14,718,941.42	2	2	4	MODERATE
TALOMO	Residential	297.56	226.37	76.08%	22,636,705,778.28	3	3	9	HIGH
MA-A	Residential	428.27	232.93	54.39%	23,293,021,468.97	3	3	9	HIGH
MA-A	Industrial	22.54	21.06	93.46%	3,159,224,523.44	3	2	6	MODERATE
MA-A	Cemetery	25.42	14.51	57.08%	2,176,100,238.35	3	2	6	MODERATE
MA-A	Commercial	90.16	51.11	56.68%	7,665,881,304.79	3	2	6	MODERATE
TALOMO	Tourism	1.55	0.84	54.26%	126,092,259.32	3	2	6	MODERATE
TALOMO	Commercial	20.65	9.98	48.33%	1,497,362,859.58	3	2	6	MODERATE
MA-A	Parks and Recreational	12.99	5.92	45.58%	888,246,652.98	3	2	6	MODERATE
MA-A	Tourism	16.56	5.54	33.43%	830,268,413.78	3	2	6	MODERATE
TALOMO	Parks and Recreational	5.46	1.31	23.92%	195,905,297.94	3	2	6	MODERATE
TALOMO	Industrial	15.85	2.23	14.07%	334,394,932.65	3	2	6	MODERATE
CROSSING BAYABAS	Residential	93.21	0.01	0.01%	863,460.12	1	3	3	LOW
CROSSING BAYABAS	Commercial	9.26	0.01	0.06%	806,367.26	1	2	2	LOW
BINUGAO	Residential	52.80	15.57	29.49%	1,556,937,502.14	3	3	9	HIGH
BINUGAO	Parks and Recreational	1.34	1.31	98.08%	196,714,670.75	3	2	6	MODERATE
BINUGAO	Commercial	3.44	3.05	88.77%	457,874,584.52	3	2	6	MODERATE
BINUGAO	Industrial	63.36	53.20	83.96%	7,980,233,775.99	3	2	6	MODERATE
BINUGAO	Agri-Industrial	13.50	0.22	1.63%	33,107,063.92	2	2	4	MODERATE
DALIAO	Residential	107.79	106.80	99.09%	10,680,348,977.07	3	3	9	HIGH

Table U-25. Urban Use Areas Vulnerability, Liquefaction Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
DALIAO	Industrial	14.75	14.75	100.00%	2,213,132,533.61	3	2	6	MODERATE
DALIAO	Tourism	1.79	1.79	100.00%	268,157,597.97	3	2	6	MODERATE
DALIAO	Parks and Recreational	0.16	0.16	100.00%	23,834,181.92	2	2	4	MODERATE
DALIAO	Commercial	0.07	0.07	100.00%	10,872,775.79	2	2	4	MODERATE
LIZADA	Residential	100.96	98.22	97.28%	9,821,953,362.16	3	3	9	HIGH
LIZADA	Industrial	13.44	13.44	100.00%	2,015,844,149.64	3	2	6	MODERATE
LIZADA	Commercial	2.79	2.79	100.00%	418,663,206.86	3	2	6	MODERATE
LIZADA	Parks and Recreational	0.19	0.19	100.00%	28,055,563.27	2	2	4	MODERATE
LIZADA	Tourism	0.08	0.08	100.00%	12,102,495.64	2	2	4	MODERATE
LIZADA	Agri-Industrial	5.18	0.04	0.83%	6,423,153.77	1	2	2	LOW
SIRAWAN	Residential	83.94	24.35	29.01%	2,435,005,448.17	3	3	9	HIGH
SIRAWAN	Agri-Industrial	85.28	1.74	2.04%	261,050,376.78	3	2	6	MODERATE
SIRAWAN	Industrial	1.85	0.06	3.48%	9,673,389.54	2	2	4	MODERATE
SIRAWAN	Parks and Recreational	0.04	0.04	100.00%	6,667,004.87	1	2	2	LOW
SIRAWAN	Commercial	0.83	0.01	1.00%	1,243,126.00	1	2	2	LOW
TORIL	Residential	69.46	48.61	69.97%	4,860,613,368.09	3	3	9	HIGH
TORIL	Industrial	2.86	2.86	100.00%	428,606,130.51	3	2	6	MODERATE
TORIL	Commercial	24.53	14.72	60.01%	2,208,388,947.16	3	2	6	MODERATE
NEW CARMEN	Residential	15.64	11.98	76.58%	1,197,922,126.49	3	3	9	HIGH

The table below shows the Climate Change Vulnerability Assessment for Liquefaction which enumerates the technical findings per land use category per barangay. Implications per type of land use describe the consequences of damage due to flood. In order to mitigate impacts and raise the adaptive capacity of urban use areas during the onslaught of the hazard, various policy interventions are also suggested for consideration.

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
1-A	Residential	1. Area per Land Use Category in Hectares:6.95224527022213 2. Exposed Area in Hectares:6.68759626530733 3. % Exposure:0.96193330433143 4. Exposed Value (PHP):668759626.530733 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
2-A	Residential	1. Area per Land Use Category in Hectares:1.62012120050653 2. Exposed Area in Hectares:1.60937232178483 3. % Exposure:0.993365386047452 4. Exposed Value (PHP):160937232.178483 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
3-A	Residential	1. Area per Land Use Category in Hectares:0.5511008498056 2. Exposed Area in Hectares:0.5511008498056 3. Exposed Value (PHP):55110084.98056 4. Degree of Impact:3 5. Adaptive Capacity:3 6. Vulnerability Index:9 7. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
4-A	Residential	1. Area per Land Use Category in Hectares:2.93381608745813 2. Exposed Area in Hectares:2.93381608745813 3. % Exposure:1 4. Exposed Value (PHP):293381608.745813 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
5-A	Residential	1. Area per Land Use Category in Hectares:20.4116517905453 2. Exposed Area in Hectares:13.2725553569157 3. % Exposure:0.650244061240725 4. Exposed Value (PHP):1327255535.69157 5. Degree of Impact:3 6. Adaptive Capacity:2 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
6-A	Residential	1. Area per Land Use Category in Hectares:4.39032642655835 2. Exposed Area in Hectares:0.929666036223545 3. % Exposure: 0.211753283446016 4. Exposed Value (PHP):92966603.6223545 5. Degree of Impact:3 6. Adaptive Capacity:2 7. Vulnerability Index:9 8. Vulnerability Category: HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
7-A	Residential	1. Area per Land Use Category in Hectares:10.1817313704535 2. Exposed Area in Hectares: 5.60224332893184 3. % Exposure: 0.550225018231088 4. Exposed Value (PHP): 560224332.893184 5. De- gree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category: HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
8-A	Residential	1. Area per Land Use Category in Hectares: 82.8322891332809 2. Exposed Area in Hectares: 34.1393320373214 3. % Exposure: 0.41215004914798 4. Exposed Value (PHP):3413933203.73214 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
9-A	Residential	1. Area per Land Use Category in Hectares:13.9073418122875 2. Exposed Area in Hectares: 8.69383869542816 3. % Exposure: 0.625125837329095 4. Exposed Value (PHP):869383869.542816 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vul- nerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
10-A	Residential	1. Area per Land Use Category in Hectares:5.79297252133387 2. Exposed Area in Hectares: 4.26663756872838 3. % Exposure: 0.736519559348084 4. Exposed Value (PHP): 426663756.872838 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
11-B	Residential	1. Area per Land Use Category in Hectares: 2.56070679524445 3. Exposed Area in Hectares: 3.56070679524445 4. % Exposure:1Exposed Value (PHP): 256070679.524445 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
12-B	Residential	1. Area per Land Use Category in Hectares: 1.19529526403939 2. Exposed Area in Hectares: 1.19529526403939 3. % Exposure:1 4. Exposed Value (PHP): 119529526.403939 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
13-B	Residential	1. Area per Land Use Category in Hectares: 0.574174305741948 2. Exposed Area in Hectares:0.574174305741948% 3. Exposure:1 4. Exposed Value (PHP):57417430.5741948 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
14-B	Residential	1. Area per Land Use Category in Hectares: 3.09083330973662 2. Exposed Area in Hectares: 3.09083330973662 3. % Exposure:1 4. Exposed Value (PHP):309083330.973662 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
15-B	Residential	1. Area per Land Use Category in Hectares: 1.46470545791015 2. Exposed Area in Hectares:1.46470545791015 3. % Exposure:1 4. Exposed Value (PHP):146470545.791015 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
16-B	Residential	1. Area per Land Use Category in Hectares: 0.426083163918123 2. Exposed Area in Hectares:0.426083163918123 3. % Exposure:1 4. Exposed Value (PHP):42608316.3918123 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
17-B	Residential	1. Area per Land Use Category in Hectares:0.525777446567946 2.Exposed Area in Hectares:0.525777446567946 3.3% Exposure:1 4. Exposed Value (PHP):52577744.6567946 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
18-B	Residential	1. Area per Land Use Category in Hectares:0.404997976170666 2. Exposed Area in Hectares:0.404997976170666 3. % Exposure:1 4. Exposed Value (PHP):40499797.6170666 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
19-B	Residential	1. Area per Land Use Category in Hectares:179.814444435804 2. Exposed Area in Hectares:31.8953202472618 3. % Exposure: 0.177379077344639 4. Exposed Value (PHP):3189532024.72618 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
20-B	Residential	1. Area per Land Use Category in Hectares:13.9291699794789 2. Exposed Area in Hectares:13.622406178199 3. % Exposure: 0.977976878612882 4. Exposed Value (PHP):1362240617.8199 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
21-C	Residential	1. Area per Land Use Category in Hectares: 5.18243085942056 2. Exposed Area in Hectares: 5.15854291845986 3. % Exposure: 0.995390591479426 4. Exposed Value (PHP):515854291.845986 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
22-C	Residential	1. Area per Land Use Category in Hectares: 4.78374107118591 2. Exposed Area in Hectares: 4.7566161970478 3. % Exposure: 0.994329777942731 4. Exposed Value (PHP):475661619.70478 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
23-C	Residential	1. Area per Land Use Category in Hectares: 12.791819331001 2. Exposed Area in Hectares: 12.7396533513874 3. % Exposure: 0.99592192648569 4. Exposed Value (PHP): 1273965335.13874 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
24-C	Residential	1. Area per Land Use Category in Hectares: 2.51444449303295 2. Exposed Area in Hectares: 2.51444449303295 3. % Exposure:1 4. Exposed Value (PHP): 251444449.303295 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
25-C	Residential	1. Area per Land Use Category in Hectares: 1.72897030990044 2. Exposed Area in Hectares: 1.72897030990044 3. % Exposure:1 4. Exposed Value (PHP): 172897030.990044 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
26-C	Residential	1. Area per Land Use Category in Hectares: 2.23439536274111 2. Exposed Area in Hectares: 2.23439536274111 3. % Exposure:1 4. Exposed Value (PHP): 223439536.274111 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
27-C	Residential	1. Area per Land Use Category in Hectares: 0.64430739122801 2. Exposed Area in Hectares: 0.64430739122801 3. % Exposure:1 4. Exposed Value (PHP):64430739.122801 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
28-C	Residential	1.Area per Land Use Category in Hectares:1.6490437185709 2.Exposed Area in Hectares:1.6490437185709 3.% Exposure:1 4.Exposed Value (PHP):164904371.85709 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
29-C	Residential	1. Area per Land Use Category in Hectares: 1.06578472040491 2. Exposed Area in Hectares: 1.06578472040491 3. % Exposure:1 4. Exposed Value (PHP): 106578472.040491 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
30-C	Residential	1. Area per Land Use Category in Hectares: 1.3670662339902 2. Exposed Area in Hectares: 1.3670662339902 3. % Exposure:1 4. Exposed Value (PHP): 136706623.39902 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
31-D	Residential	1. Area per Land Use Category in Hectares: 13.5610118104425 2. Exposed Area in Hectares: 13.5451630929145 3. % Exposure: 0.998831302726557 4. Exposed Value (PHP): 1354516309.29145 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
32-D	Residential	1. Area per Land Use Category in Hectares: 2.74985420097519 2. Exposed Area in Hectares: 2.74985420097519 3. % Exposure:1 4. Exposed Value (PHP):274985420.09752 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
33-D	Residential	1. Area per Land Use Category in Hectares: 2. 86250542279911 2. Exposed Area in Hectares: 0.86250542279911 3. % Exposure:1 4. Exposed Value (PHP): 386250542.279911 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
34-D	Residential	1. Area per Land Use Category in Hectares: 2.36876195800465 2. Exposed Area in Hectares: 2.36876195800465 3. % Exposure:1 4. Exposed Value (PHP): 36876195.800465 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
36-D	Residential	1. Area per Land Use Category in Hectares:2.38999142248503 2. Exposed Area in Hectares: 2.38999142248503 3. % Exposure:1 4. Exposed Value (PHP):238999142.248503 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
37-D	Residential	1. Area per Land Use Category in Hectares:3.54418789961495 2. Exposed Area in Hectares:3.54418789961495 3. % Exposure:1 4. Exposed Value (PHP):354418789.961495 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
38-D	Residential	1. Area per Land Use Category in Hectares:1.72640113756133 2. Exposed Area in Hectares:1.72640113756133 3. % Exposure:1 4. Exposed Value (PHP):172640113.756133 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
39-D	Residential	1. Area per Land Use Category in Hectares:2.92022357467797 2. Exposed Area in Hectares:2.92022357467797 3. % Exposure:1 4. Exposed Value (PHP):292022357.467797 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
40-D	Residential	1. Area per Land Use Category in Hectares:1.33947735415882 2. Exposed Area in Hectares:1.33947735415882 3. % Exposure:1 4. Exposed Value (PHP):133947735.415882 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
AGDAO PROPER	Residential	1. Area per Land Use Category in Hectares:7.61819475984731 2. Exposed Area in Hectares:7.61819475984731 3. % Exposure:1 4. Exposed Value (PHP):1142729213.9771 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
WILFREDO AQUINO	Residential	1.Area per Land Use Category in Hectares:26.0946272897943 2.Exposed Area in Hectares:19.3100759791874 3.% Exposure:0.740001984498151 4.Exposed Value (PHP):1931007597.91874 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
PACIANO BANGOY	Residential	1. Area per Land Use Category in Hectares:21.3589915410575 2. Exposed Area in Hectares:17.4722466429481 3. % Exposure:0.818027696174789 4. Exposed Value (PHP):1747224664.29481 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
RAFAEL CASTILLO	Residential	1. Area per Land Use Category in Hectares:11.8630644207727 2. Exposed Area in Hectares:11.8630644207727 3. % Exposure:1 4. Exposed Value (PHP):1186306442.07727 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
CENTRO	Residential	1. Area per Land Use Category in Hectares:22.7158960846953 2. Exposed Area in Hectares:22.3716858874933 3. % Exposure:0.984847166234669 4. Exposed Value (PHP):2237168588.74933 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
GOV. VICENTE DUTERTE	Residential	1. Area per Land Use Category in Hectares:20.3355574922934 2. Exposed Area in Hectares:20.0159645856256 3. % Exposure:0.984284035154241 4. Exposed Value (PHP):2001596458.56256 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
LEON GARCIA SR.	Residential	1. Area per Land Use Category in Hectares:12.0420482075683 2. Exposed Area in Hectares:12.0420482075683 3. % Exposure:1 4. Exposed Value (PHP):1204204820.75683 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
LAPU - LAPU	Residential	1. Area per Land Use Category in Hectares:23.678077453246 2. Exposed Area in Hectares:23.678077453246 3. % Exposure:1 4. Exposed Value (PHP):2367807745.3246 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
TOMAS MONTEVERDE	Residential	1. Area per Land Use Category in Hectares:2.09331746475425 2. Exposed Area in Hectares:2.09331746475425 3. % Exposure:1 4. Exposed Value (PHP):209331746.475425 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
SAN ANTONIO	Residential	1. Area per Land Use Category in Hectares:25.2839356242625 2. Exposed Area in Hectares:25.2839356242625 3. % Exposure:1Exposed Value (PHP):2528393562.42625 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
UBALDE	Residential	1. Area per Land Use Category in Hectares:5.93870521715554 2. Exposed Area in Hectares:5.93870521715554 3. % Exposure:1 4. Exposed Value (PHP):593870521.715554 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
BUHANGIN	Residential	1. Area per Land Use Category in Hectares:335.293271214601 2. Exposed Area in Hectares:1.2006297451572 3. % Exposure:0.00358083459536157 4. Exposed Value (PHP):120062974.51572 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
MANDUG	Residential	1. Area per Land Use Category in Hectares:168.397566936921 2.Exposed Area in Hectares:14.0884966360668 3. % Exposure:0.0836621151500609 4.Exposed Value (PHP):1408849663.60668 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
SASA	Residential	1. Area per Land Use Category in Hectares:223.796343448807 2. Exposed Area in Hectares:25.9315600637873 3. % Exposure:0.115871241076462 4. Exposed Value (PHP):2593156006.37873 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
TIGATTO	Residential	1. Area per Land Use Category in Hectares:256.292909886007 2. Exposed Area in Hectares:156.378772754848 3. % Exposure:0.610156452725911 4. Exposed Value (PHP):15637877275.4848 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
WAAN	Residential	1.Area per Land Use Category in Hectares:38.4812399575874 2.Exposed Area in Hectares:18.5171545365792 3. % Exposure:0.481199528835042 4.Exposed Value (PHP):1851715453.65792 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
A. ANGLIONGTO	Residential	1. Area per Land Use Category in Hectares:155.679879781497 2. Exposed Area in Hectares:24.6215160110729 3. % Exposure:0.158154772765949 4. Exposed Value (PHP):2462151601.10729 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
V. HIZON	Residential	1. Area per Land Use Category in Hectares:118.707353086469 2. Exposed Area in Hectares:52.7301239217656 3. % Exposure:0.444202676167464 4. Exposed Value (PHP):5273012392.17656 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
BUNAWAN	Residential	1. Area per Land Use Category in Hectares:123.764582983028 2. Exposed Area in Hectares:89.6526538713172 3. % Exposure:0.724380527211175 4. Exposed Value (PHP):8965265387.13172 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
ILANG	Residential	1. Area per Land Use Category in Hectares:125.718005792071 2. Exposed Area in Hectares:10.8791456867788 3. % Exposure:0.086536098136747 4. Exposed Value (PHP):1087914568.67788 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
LASANG	Residential	1. Area per Land Use Category in Hectares:50.7310321069045 2. Exposed Area in Hectares:50.5809823304163 3. % Exposure:0.99704224869362 4. Exposed Value (PHP):5058098233.04163 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
MAHAYAG	Residential	1. Area per Land Use Category in Hectares:57.7737430635278 2. Exposed Area in Hectares:7.63277727559891 3. % Exposure:0.132114986339139 4. Exposed Value (PHP):763277727.559891 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
PANACAN	Residential	1. Area per Land Use Category in Hectares:256.992059416437 2. Exposed Area in Hectares:51.9645370661543 3. % Exposure:0.202202889786371 4. Exposed Value (PHP):5196453706.61543 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
SAN ISIDRO	Residential	1. Area per Land Use Category in Hectares:26.465495472307 2. Exposed Area in Hectares:18.2470991166126 3. % Exposure:0.68946750442311 4. Exposed Value (PHP):1824709911.66126 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
TIBUNGCO	Residential	1. Area per Land Use Category in Hectares:131.994163363408 2. Exposed Area in Hectares:1.2360548055608 3. % Exposure:0.00936446562532977 4. Exposed Value (PHP):123605480.55608 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
BAGO APLAYA	Residential	1. Area per Land Use Category in Hectares:95.4533316266947 2. Exposed Area in Hectares:94.6857454380055 3. % Exposure:0.991958518622576 4. Exposed Value (PHP):9468574543.80055 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
BAGO GALLERA	Residential	1. Area per Land Use Category in Hectares:129.961226257924 2. Exposed Area in Hectares:1.56147770857446 3. % Exposure:0.0120149505628357 4. Exposed Value (PHP):156147770.857446 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
BUCANA	Residential	1. Area per Land Use Category in Hectares:216.95551691447 2. Exposed Area in Hectares:216.577541877521 3. % Exposure:0.998257822422201 4. Exposed Value (PHP):21657754187.7521 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
DUMOY	Residential	1. Area per Land Use Category in Hectares:162.790230652438 2. Exposed Area in Hectares:82.3075427709633 3. % Exposure:0.50560492752598 4. Exposed Value (PHP):8230754277.09633 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
MATINA APLAYA	Residential	1. Area per Land Use Category in Hectares:155.500921182196 2. Exposed Area in Hectares:154.666597511855 3. % Exposure:0.99463460625186 4. Exposed Value (PHP):15466659751.1855 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
MATINA CROSSING	Residential	1. Area per Land Use Category in Hectares:250.401618807435 2. Exposed Area in Hectares:170.456242482393 3. % Exposure:0.680731391810519 4. Exposed Value (PHP):17045624248.2393 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
MATINA PANGI	Residential	1. Area per Land Use Category in Hectares:152.495884174245 2. Exposed Area in Hectares:42.3414626664359 3. % Exposure:0.277656429192907 4. Exposed Value (PHP):4234146266.64359 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
TALOMO	Residential	1. Area per Land Use Category in Hectares:297.555786577592 2. Exposed Area in Hectares:226.367057782816 3. % Exposure:0.760755018030165 4. Exposed Value (PHP):22636705778.2816 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
MA-A	Residential	1. Area per Land Use Category in Hectares:428.266679120621 2. Exposed Area in Hectares:232.930214689678 3. % Exposure:0.543890585109175 4. Exposed Value (PHP):23293021468.9678 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
BINUGAO	Residential	1. Area per Land Use Category in Hectares:52.7984548486288 2. Exposed Area in Hectares:15.569375021409 3. % Exposure:0.29488315644929 4. Exposed Value (PHP):1556937502.1409 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
DALIAO	Residential	1. Area per Land Use Category in Hectares:107.789589854232 2. Exposed Area in Hectares:106.803489770652 3. % Exposure:0.990851620412384 4. Exposed Value (PHP):10680348977.0652 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
LIZADA	Residential	1.Area per Land Use Category in Hectares:100.964257252113 2.Exposed Area in Hectares:98.2195336215751 3.% Exposure:0.972814898012032 4.Exposed Value (PHP):9821953362.15751 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
SIRAWAN	Residential	1. Area per Land Use Category in Hectares:83.9411591374086 2. Exposed Area in Hectares:24.3500544816818 3. % Exposure:0.290084801447901 4. Exposed Value (PHP):2435005448.16818 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;
TORIL	Residential	1. Area per Land Use Category in Hectares:69.4639320121984 2. Exposed Area in Hectares:48.6061336808686 3. % Exposure:0.699731965537641 4. Exposed Value (PHP):4860613368.08686 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

Table U-26. Climate Change Vulnerability Assessment for Liquefaction, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
NEW CARMEN	Residential	1. Area per Land Use Category in Hectares:15.6418392757896 2. Exposed Area in Hectares:11.9792212648738 3. % Exposure:0.765844799557249 4. Exposed Value (PHP):1197922126.48738 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	Damage to properties	conduct site specific flood hazard mapping as basis for the establishment of structural design regulation;

FAULTLINE

Of the total of 46 barangays susceptible to fault line, four (4) are highly vulnerable. Residential areas are among the urban use likely to be affected. This is because of the high degree of impact in residential areas in the proportion of buildings with walls with light to salvageable materials and in proportion of buildings in dilapidated/ condemned condition. These areas also have “moderate” rating on the “structure employing hazard resistant/adaptation design” and in “no access/area coverage to infrastructure related hazard mitigation measures employing hazard resistant/adaptation’. As to the adaptive capacity, these areas have low adaptive capacity attributed to no insurance coverage and no capacity and willingness to retrofit or conform to new regulations. The imminent danger of strong quakes is posed to incur damage of Php 294,951,425, such could still be prevented by strong implementation of zoning regulations identification of alternative sites and utilization of government resources.

Table U-27. Urban Use Areas Vulnerability, Faultline Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
MALAGOS	Residential	18.01	0.08	0.43%	768	2	3	6	moderate
BIAO JOAQUIN	Agri-Industrial	20.15	0.32	1.61%	3,247	1	2	2	low
CALINAN	Residential	107.31	0.16	0.15%	1,645	1	3	3	low
CALINAN	Commercial	19.53	0.05	0.26%	500	1	2	2	low
CAWAYAN	Agri-Industrial	5.98	0.27	4.51%	2,698	2	2	4	moderate
PANGYAN	Residential	5.09	0.11	2.13%	1,083	2	3	6	moderate
RIVERSIDE	Residential	21.18	0.74	3.48%	7,365	2	3	6	moderate
RIVERSIDE	Parks and Recreational	0.07	0.01	12.96%	91	1	2	2	low
RIVERSIDE	Commercial	1.11	0.04	3.84%	426	1	2	2	low
SUBASTA	Residential	9.56	0.15	1.58%	1,514	3	3	9	high
TALOMO RIVER	Residential	21.82	0.15	0.69%	1,497	2	3	6	moderate
TALOMO RIVER	Agri-Industrial	18.35	0.16	0.89%	1,634	1	2	2	low
WANGAN	Residential	3.34	0.05	1.35%	450	2	3	6	moderate
TAMUGAN	Residential	10.19	0.16	1.60%	1,631	1	3	3	low
TAMUGAN	Agri-Industrial	21.52	0.22	1.02%	2,205	1	2	2	low

Table U-27. Urban Use Areas Vulnerability, Faultline Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
LOS AMIGOS	Residential	39.99	0.16	0.39%	1,560	2	3	6	moderate
LOS AMIGOS	Tourism	0.63	0.03	5.10%	322	1	2	2	low
LOS AMIGOS	Commercial	1.03	0.01	0.74%	76	1	2	2	low
MALABOG	Residential	18.22	0.00	0.02%	44	1	3	3	low
PANALUM	Residential	2.08	0.00	0.01%	1	1	3	3	low
SUMIMAO	Residential	1.78	0.01	0.41%	73	2	3	6	moderate
BALIOK	Industrial	6.36	0.02	0.29%	187	1	2	2	low
CATALUNAN GRANDE	Residential	301.76	0.49	0.16%	4,860	2	3	6	moderate
CATALUNAN PEQUENO	Residential	197.43	1.26	0.64%	12,645	3	3	9	high
CATALUNAN PEQUENO	Tourism	1.32	0.02	1.37%	181	1	2	2	low
CATALUNAN PEQUENO	Agri-Industrial	13.65	0.13	0.93%	1,274	1	2	2	low
TALOMO	Residential	297.56	0.38	0.13%	3,845	2	3	6	moderate
BANKAS HEIGHTS	Residential	29.39	0.07	0.24%	718	1	3	3	low
BINUGAO	Residential	52.80	0.59	1.12%	5,890	2	3	6	moderate
BINUGAO	Industrial	63.36	0.58	0.92%	5,801	2	2	4	moderate
BINUGAO	Commercial	3.44	0.04	1.16%	400	1	2	2	low
LIZADA	Residential	100.96	0.0004	0.0004%	4	2	3	6	moderate
SIRAWAN	Residential	83.94	0.54	0.64%	5,353	2	3	6	moderate
SIRAWAN	Agri-Industrial	85.28	0.01	0.01%	83	1	2	2	low
ANGALAN	Residential	11.70	0.01	0.11%	130	2	3	6	moderate
BAGO OSHIRO	Residential	138.54	0.10	0.07%	1,022	2	3	6	moderate
BIAO ESCUELA	Agri-Industrial	36.45	0.08	0.23%	837	1	2	2	low
MINTAL	Residential	150.20	1.06	0.71%	10,635	3	3	9	high
MINTAL	Parks and Recreational	0.41	0.04	9.78%	401	1	2	2	low
STO. NINO	Residential	80.86	0.47	0.58%	4,701	3	3	9	high
TAGAKPAN	Residential	9.67	0.04	0.38%	370	2	3	6	moderate
TAGAKPAN	Parks and Recreational	2.42	0.01	0.47%	113	1	2	2	low
TALANDANG	Agri-Industrial	24.66	0.29	1.16%	2,871	2	2	4	moderate

Table U-27. Urban Use Areas Vulnerability, Faultline Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
TUGBOK	Residential	114.40	0.75	0.66%	7,529	2	3	6	moderate
TUGBOK	Cemetery	3.97	0.22	5.53%	2,197	1	2	2	low
TUGBOK	Agri-Industrial	4.70	0.04	0.78%	366	1	2	2	low

The table below shows the Climate Change Vulnerability Assessment for Fault Line which enumerates the technical findings per land use category per barangay. Implications per type of land use describe the consequences of damage due to flood. In order to mitigate impacts and raise the adaptive capacity of urban use areas during the onslaught of the hazard, various policy interventions are also suggested for consideration.

The table below shows the Climate Change Vulnerability Assessment for Landslide which enumerates the technical findings per land use category per barangay. Implications per type of land use describe the consequences of damage due to flood. In order to mitigate impacts and raise the adaptive capacity of urban use areas during the onslaught of the hazard, various policy interventions are also suggested for consideration.

Table U-28. Climate Change Vulnerability Assessment for Fault Line, Davao City			
Barangays	Technical Findings	Implications	Policy Interventions
SUBASTA Residential area	1.Area per Land Use Category in Hectares: 9.56% 2. % Exposure: 0.0158372791797071 3. Exposed Value: (PHP) 1514.04388958 4. Degree of Impact:3 5. Adaptive Capacity:3 6. Vulnerability Index: 9 7.Vulnerability Category: High	damage of properties; loss of lives	Conduct site specific hazard mapping as basis for the establishment of structural design regulation; no future developments within the identified area
CATALUNAN PEQUENO Residential Areas	1. Area per Land Use Category in Hectares: 197.43 2. Exposed Area in Hectares: 1.26446558643448 3.% Exposure: 0.00640462739418769 4.Exposed Value: (PHP) 12644.6558643448 5. Degree of Impact: 3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8.Vulnerability Category: High	damage of properties; loss of lives	Conduct site specific hazard mapping as basis for the establishment of structural design regulation; no future developments within the identified area

Table U-28. Climate Change Vulnerability Assessment for Fault Line, Davao City

Barangays	Technical Findings	Implications	Policy Interventions
MINTAL Residential Areas	1. Area per Land Use Category in Hectares: 150.2 2. Exposed Area in Hectares: 1.06353158868937 3. % of exposure: 0.00708076956517558 4. Exposed Value: (PHP) 10635.3158868937 5. Degree of Impact: 3 4. Adaptive Capacity: 3 5. Vulnerability Index: 9 Vulnerability Category: high	damage of properties; loss of lives	Conduct site specific hazard mapping as basis for the establishment of structural design regulation; no future developments within the identified area
STO. NINO Residential Areas	1. Area per Land Use Category in Hectares :80.86 2. Exposed Area in Hectares: .470112685012384 3. % xposure:0.0058 4. Exposed Value (PHP)4701.13 5. Degree of Impact:3 6. Adaptive Capacity: 3 7. Vulnerability Index: 9 8. Vulnerability Category:high	damage of properties; loss of lives	Conduct site specific hazard mapping as basis for the establishment of structural design regulation; no future developments within the identified area

STORM SURGE

According to the presented result from the urban use assessment for vulnerability, only the residential area in 71 barangays have high vulnerability to storm surge. Based on the table, these barangays have “very high” rating on no access/area coverage to infrastructure related hazard mitigation. While this is the reality among the structures, findings also disclose that 38 barangays have “high” to “very high” rating on the proportion of buildings with walls with light to salvageable materials, equals to number of barangays with “high” to “very high” proportion of buildings in dilapidated/condemned condition and those with no structure employing hazard resistant/adaptation design. These barangays are areas of concern for storm surge because they have low adaptive capacity also to brace the degree of impact that may result to worth Php 90,925,469,601.34 of damage. While currently, these barangays have no capacity and willingness to retrofit or relocate or conform to new regulations and does not have insurance coverage, such hazard impact can be further addressed through implementation of zoning regulations, identification of alternate sites and utilization of government resources.

Table U-29. Urban Use Areas Vulnerability, Storm Surge Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
1-A	Commercial	1.40	1.14	81.43%	171,000,000.00	3	2	6	MODERATE
1-A	Parks and Recreational	0.08	0.08	100.00%	12,000,000.00	3	2	6	MODERATE
1-A	Residential	6.95	6.95	100.00%	695,000,000.00	3	3	9	HIGH
2-A	Commercial	11.32	9.14	80.79%	1,371,732,731.02	3	2	6	MODERATE
2-A	Parks and Recreational	0.44	0.44	100.00%	66,567,818.65	3	2	6	MODERATE
2-A	Residential	1.62	1.62	99.89%	161,836,733.90	3	3	9	HIGH
3-A	Commercial	14.90	14.90	100.00%	2,234,604,689.15	3	2	6	MODERATE
3-A	Parks and Recreational	0.10	0.10	100.00%	15,358,451.09	3	2	6	MODERATE
3-A	Residential	0.55	0.55	100.00%	55,110,065.12	3	3	9	HIGH
4-A	Commercial	9.55	9.55	100.00%	1,432,224,844.85	3	2	6	MODERATE
4-A	Industrial	0.08	0.08	100.00%	12,539,491.89	3	2	6	MODERATE
4-A	Parks and Recreational	4.00	4.00	100.00%	600,131,108.50	3	2	6	MODERATE
4-A	Residential	2.93	2.93	100.00%	293,381,599.56	3	3	9	HIGH
5-A	Commercial	4.34	1.51	34.67%	225,891,312.78	3	2	6	MODERATE
5-A	Residential	20.41	10.31	50.50%	1,030,738,916.39	3	3	9	HIGH
6-A	Commercial	5.66	0.78	13.78%	116,980,567.71	3	2	6	MODERATE

Table U-29. Urban Use Areas Vulnerability, Storm Surge Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
6-A	Residential	4.39	0.51	11.53%	50,627,731.15	3	3	9	HIGH
7-A	Commercial	6.79	3.25	47.78%	486,873,588.36	3	2	6	MODERATE
7-A	Residential	10.18	0.59	5.83%	59,402,194.99	3	3	9	HIGH
8-A	Residential	82.83	9.24	11.15%	923,606,706.71	3	3	9	HIGH
9-A	Commercial	247.36	0.66	0.27%	99,000,000.00	2	2	4	MODERATE
9-A	Industrial	7.49	0.66	8.86%	99,572,259.48	3	2	6	MODERATE
9-A	Residential	0.22	0.21	91.54%	20,567,176.36	3	3	9	HIGH
10-A	Commercial	7.60	5.52	72.63%	828,000,000.00	3	2	6	MODERATE
10-A	Industrial	0.25	0.25	100.00%	37,500,000.00	3	2	6	MODERATE
10-A	Residential	5.79	3.30	56.99%	330,000,000.00	3	3	9	HIGH
11-B	Commercial	4.52	4.52	100.00%	678,000,000.00	3	2	6	MODERATE
11-B	Industrial	0.61	0.61	100.00%	91,500,000.00	3	2	6	MODERATE
11-B	Residential	2.56	2.56	100.00%	256,000,000.00	3	3	9	HIGH
12-B	Commercial	12.43	12.31	99.03%	1,846,500,000.00	3	2	6	MODERATE
12-B	Industrial	0.01	0.01	100.00%	1,500,000.00	1	2	2	LOW
12-B	Parks and Recreational	0.06	0.0600	100.0000%	9,000,000.00	2	2	4	MODERATE
12-B	Residential	1.20	1.20	100.00%	120,000,000.00	3	3	9	HIGH
13-B	Commercial	8.52	8.52	100.00%	1,278,000,000.00	3	2	6	MODERATE
13-B	Residential	0.57	0.57	100.00%	57,000,000.00	3	3	9	HIGH
14-B	Commercial	7.52	7.52	100.00%	1,128,000,000.00	3	2	6	MODERATE
14-B	Industrial	0.30	0.30	100.00%	45,000,000.00	3	2	6	MODERATE
14-B	Residential	3.09	3.09	100.00%	309,000,000.00	3	3	9	HIGH
15-B	Commercial	24.46	24.46	100.00%	3,669,000,000.00	3	2	6	MODERATE
15-B	Parks and Recreational	0.19	0.19	100.00%	28,500,000.00	3	2	6	MODERATE
15-B	Residential	1.46	1.46	100.00%	146,000,000.00	3	3	9	HIGH
16-B	Commercial	3.38	3.38	100.00%	507,000,000.00	3	2	6	MODERATE
16-B	Residential	0.42	0.42	100.00%	42,000,000.00	3	3	9	HIGH
17-B	Commercial	3.89	3.89	100.00%	583,500,000.00	3	2	6	MODERATE
17-B	Residential	0.52	0.52	100.00%	52,000,000.00	3	3	9	HIGH
18-B	Commercial	8.95	8.95	100.00%	1,342,500,000.00	3	2	6	MODERATE
18-B	Parks and Recreational	0.42	0.42	100.00%	63,000,000.00	3	2	6	MODERATE

Table U-29. Urban Use Areas Vulnerability, Storm Surge Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
18-B	Residential	0.40	0.40	100.00%	40,000,000.00	3	3	9	HIGH
19-B	Commercial	28.23	2.58	9.14%	387,000,000.00	3	2	6	MODERATE
20-B	Commercial	28.60	11.85	41.43%	1,777,500,000.00	3	2	6	MODERATE
20-B	Residential	13.92	8.94	64.22%	894,000,000.00	3	3	9	HIGH
21-C	Commercial	0.30	0.30	100.00%	45,000,000.00	3	2	6	MODERATE
21-C	Parks and Recreational	0.07	0.07	100.00%	10,500,000.00	3	2	6	MODERATE
21-C	Residential	5.18	5.18	100.00%	518,000,000.00	3	3	9	HIGH
22-C	Commercial	0.50	0.50	100.00%	75,000,000.00	3	2	6	MODERATE
22-C	Parks and Recreational	0.05	0.05	100.00%	7,500,000.00	2	2	4	MODERATE
22-C	Residential	4.78	4.78	100.00%	478,000,000.00	3	3	9	HIGH
23-C	Commercial	0.87	0.87	100.00%	130,500,000.00	3	2	6	MODERATE
23-C	Parks and Recreational	0.72	0.72	100.00%	108,000,000.00	3	2	6	MODERATE
23-C	Residential	12.79	12.79	100.00%	1,279,000,000.00	3	3	9	HIGH
24-C	Commercial	3.60	3.60	100.00%	540,000,000.00	3	2	6	MODERATE
24-C	Parks and Recreational	0.05	0.05	100.00%	7,500,000.00	2	2	4	MODERATE
24-C	Residential	3.60	2.51	69.72%	251,000,000.00	3	3	9	HIGH
25-C	Commercial	2.24	2.24	100.00%	336,000,000.00	3	2	6	MODERATE
25-C	Residential	1.73	1.73	100.00%	173,000,000.00	3	3	9	HIGH
26-C	Commercial	4.32	4.32	100.00%	648,000,000.00	3	2	6	MODERATE
26-C	Residential	2.23	2.23	100.00%	223,000,000.00	3	3	9	HIGH
27-C	Commercial	18.61	18.61	100.00%	2,791,500,000.00	3	2	6	MODERATE
27-C	Industrial	0.69	0.69	100.00%	103,500,000.00	3	2	6	MODERATE
27-C	Parks and Recreational	4.10	4.10	100.00%	615,000,000.00	3	2	6	MODERATE
27-C	Residential	0.64	0.64	100.00%	64,430,783.06	3	3	9	HIGH
27-C	Tourism	0.04	0.04	100.00%	6,481,597.18	3	2	6	MODERATE
28-C	Commercial	3.95	3.95	100.00%	592,148,326.85	3	2	6	MODERATE
28-C	Residential	1.65	1.65	100.00%	164,904,358.72	3	3	9	HIGH
29-C	Commercial	6.88	6.88	100.00%	1,032,303,475.68	3	2	6	MODERATE

Table U-29. Urban Use Areas Vulnerability, Storm Surge Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
29-C	Residential	1.07	1.07	100.00%	106,578,556.98	3	3	9	HIGH
30-C	Commercial	14.96	14.96	100.00%	2,243,730,999.11	3	2	6	MODERATE
30-C	Industrial	0.29	0.29	100.00%	43,726,594.40	3	2	6	MODERATE
30-C	Residential	1.37	1.37	100.00%	136,706,617.66	3	3	9	HIGH
31-D	Commercial	0.61	0.61	100.00%	91,246,593.76	3	2	6	MODERATE
31-D	Parks and Recreational	0.13	0.13	100.00%	19,561,694.62	3	2	6	MODERATE
31-D	Residential	13.56	13.56	100.00%	1,356,101,073.23	3	3	9	HIGH
32-D	Commercial	5.17	5.17	100.00%	775,208,195.52	3	2	6	MODERATE
32-D	Parks and Recreational	0.20	0.20	100.00%	29,385,040.36	3	2	6	MODERATE
32-D	Residential	2.75	2.75	100.00%	274,985,473.05	3	3	9	HIGH
33-D	Commercial	2.89	2.89	100.00%	433,152,447.07	3	2	6	MODERATE
33-D	Residential	3.86	3.86	100.00%	386,250,546.69	3	3	9	HIGH
34-D	Commercial	12.70	12.70	100.00%	1,905,014,792.46	3	2	6	MODERATE
34-D	Industrial	0.00	0.00	100.00%	35,858.57	1	2	2	LOW
34-D	Parks and Recreational	0.37	0.37	100.00%	55,314,292.62	3	2	6	MODERATE
34-D	Residential	2.48	2.48	100.00%	248,103,494.79	3	3	9	HIGH
35-D	Commercial	4.13	4.13	100.00%	620,121,662.03	3	2	6	MODERATE
35-D	Parks and Recreational	0.04	0.04	100.00%	6,444,448.78	2	2	4	MODERATE
35-D	Residential	0.35	0.35	100.00%	34,684,421.49	3	3	9	HIGH
36-D	Commercial	3.33	3.33	100.00%	499,363,988.12	3	2	6	MODERATE
36-D	Parks and Recreational	0.07	0.07	100.00%	10,425,406.61	3	2	6	MODERATE
36-D	Residential	2.39	2.39	100.00%	238,999,142.25	3	3	9	HIGH
37-D	Commercial	0.82	0.82	100.00%	123,129,455.68	3	2	6	MODERATE
37-D	Residential	3.54	3.54	100.00%	354,418,912.16	3	3	9	HIGH
38-D	Commercial	3.10	3.10	100.00%	465,690,522.39	3	2	6	MODERATE
38-D	Parks and Recreational	0.01	0.01	100.00%	1,032,136.18	1	2	2	LOW
38-D	Residential	1.73	1.73	100.00%	172,640,143.97	3	3	9	HIGH

Table U-29. Urban Use Areas Vulnerability, Storm Surge Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
39-D	Commercial	5.34	5.34	100.00%	801,638,866.43	3	2	6	MODERATE
39-D	Parks and Recreational	0.89	0.89	100.00%	133,631,730.63	3	2	6	MODERATE
39-D	Residential	2.92	2.92	100.00%	292,022,426.40	3	3	9	HIGH
40-D	Commercial	6.05	6.05	100.00%	907,271,894.76	3	2	6	MODERATE
40-D	Residential	1.34	1.34	100.00%	133,947,526.34	3	3	9	HIGH
AGDAO PROPER	Commercial	22.65	22.65	100.00%	3,397,578,352.27	3	2	6	MODERATE
AGDAO PROPER	Industrial	1.29	1.29	100.00%	193,897,927.91	3	2	6	MODERATE
AGDAO PROPER	Parks and Recreational	0.01	0.01	100.00%	1,612,487.80	1	2	2	LOW
AGDAO PROPER	Residential	7.62	7.62	100.00%	761,819,333.62	3	3	9	HIGH
WILFREDO AQUINO	Commercial	23.77	11.73	49.33%	1,759,265,765.79	3	2	6	MODERATE
WILFREDO AQUINO	Industrial	0.12	0.11	98.60%	17,026,982.97	3	2	6	MODERATE
WILFREDO AQUINO	Parks and Recreational	1.06	0.21	19.74%	31,522,470.25	3	2	6	MODERATE
WILFREDO AQUINO	Residential	26.09	8.59	32.93%	859,283,570.24	3	3	9	HIGH
PACIANO BANGOY	Commercial	37.06	26.00	70.14%	3,899,437,527.29	3	2	6	MODERATE
PACIANO BANGOY	Industrial	0.67	0.67	100.00%	100,104,760.91	3	2	6	MODERATE
PACIANO BANGOY	Residential	21.36	14.39	67.35%	1,438,505,620.27	3	3	9	HIGH
RAFAEL CASTILLO	Commercial	16.41	16.34	99.58%	2,450,664,622.06	3	2	6	MODERATE
RAFAEL CASTILLO	Industrial	9.33	9.33	100.00%	1,398,997,714.83	3	2	6	MODERATE
RAFAEL CASTILLO	Parks and Recreational	0.02	0.02	100.00%	2,764,122.06	2	2	4	MODERATE
RAFAEL CASTILLO	Residential	11.86	11.86	100.00%	1,186,306,694.99	3	3	9	HIGH
CENTRO	Commercial	1.14	1.14	100.00%	170,319,219.74	3	2	6	MODERATE
CENTRO	Industrial	10.73	10.73	100.00%	1,609,490,361.01	3	2	6	MODERATE
CENTRO	Parks and Recreational	0.04	0.04	100.00%	6,174,813.88	2	2	4	MODERATE
CENTRO	Residential	22.72	22.72	100.00%	2,271,589,342.20	3	3	9	HIGH
GOV. VICENTE DUTERTE	Commercial	4.95	4.95	100.00%	741,990,041.23	3	2	6	MODERATE
GOV. VICENTE DUTERTE	Industrial	12.56	12.56	100.00%	1,884,562,137.22	3	2	6	MODERATE
GOV. VICENTE DUTERTE	Parks and Recreational	0.06	0.06	100.00%	9,423,105.42	2	2	4	MODERATE

Table U-29. Urban Use Areas Vulnerability, Storm Surge Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
GOV. VICENTE DUTERTE	Residential	20.34	20.34	100.00%	2,033,555,834.25	3	3	9	HIGH
LEON GARCIA SR.	Commercial	1.06	1.06	100.00%	158,606,120.04	3	2	6	MODERATE
LEON GARCIA SR.	Industrial	0.29	0.29	100.00%	43,386,408.60	3	2	6	MODERATE
LEON GARCIA SR.	Parks and Recreational	0.08	0.08	100.00%	11,720,018.15	3	2	6	MODERATE
LEON GARCIA SR.	Residential	12.04	12.04	100.00%	1,204,204,893.53	3	3	9	HIGH
LAPU - LAPU	Commercial	1.61	1.61	100.00%	241,574,388.17	3	2	6	MODERATE
LAPU - LAPU	Industrial	22.95	22.95	100.00%	3,442,184,815.31	3	2	6	MODERATE
LAPU - LAPU	Parks and Recreational	0.04	0.04	100.00%	6,300,480.75	2	2	4	MODERATE
LAPU - LAPU	Residential	23.68	23.68	100.00%	2,367,807,879.40	3	3	9	HIGH
TOMAS MONTEVERDE	Commercial	11.83	11.83	100.00%	1,774,599,927.95	3	2	6	MODERATE
TOMAS MONTEVERDE	Industrial	0.83	0.83	100.00%	124,595,134.07	3	2	6	MODERATE
TOMAS MONTEVERDE	Residential	2.09	2.09	100.00%	209,331,813.25	3	3	9	HIGH
SAN ANTONIO	Commercial	43.27	40.77	94.23%	6,116,149,628.24	3	2	6	MODERATE
SAN ANTONIO	Industrial	10.51	10.51	100.00%	1,576,505,130.86	3	2	6	MODERATE
SAN ANTONIO	Parks and Recreational	0.06	0.06	100.00%	8,476,891.29	2	2	4	MODERATE
SAN ANTONIO	Residential	25.28	25.28	100.00%	2,528,310,391.01	3	3	9	HIGH
UBALDE	Commercial	1.53	1.53	100.00%	229,829,626.68	3	2	6	MODERATE
UBALDE	Industrial	0.21	0.21	100.00%	31,293,618.69	3	2	6	MODERATE
UBALDE	Residential	5.94	5.94	100.00%	593,870,630.71	3	3	9	HIGH
PAMPANGA	Commercial	11.31	9.68	85.59%	1,451,849,595.57	3	2	6	MODERATE
PAMPANGA	Industrial	26.69	22.14	82.98%	3,321,504,237.62	3	2	6	MODERATE
PAMPANGA	Residential	49.98	0.07	0.13%	6,650,659.71	2	3	6	MODERATE
PAMPANGA	Tourism	2.99	2.99	100.00%	447,772,676.38	3	2	6	MODERATE
SASA	Commercial	58.02	9.87	17.02%	1,481,011,406.31	3	2	6	MODERATE
SASA	Industrial	93.77	7.96	8.49%	1,193,938,159.28	2	2	4	MODERATE
SASA	Residential	223.80	15.53	6.94%	1,553,348,198.72	3	3	9	HIGH
A. ANGLIONGTO	Commercial	38.75	16.74	43.20%	2,511,503,441.71	3	2	6	MODERATE
A. ANGLIONGTO	Industrial	17.16	2.95	17.19%	442,465,662.96	3	2	6	MODERATE
A. ANGLIONGTO	Residential	155.68	3.71	2.39%	371,340,252.39	3	3	9	HIGH
V. HIZON	Commercial	25.25	22.61	89.55%	3,391,652,239.64	3	2	6	MODERATE

Table U-29. Urban Use Areas Vulnerability, Storm Surge Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
V. HIZON	Industrial	6.31	6.29	99.73%	944,162,773.44	3	2	6	MODERATE
V. HIZON	Residential	118.71	34.45	29.02%	3,445,009,803.24	3	3	9	HIGH
V. HIZON	Tourism	1.52	0.69	45.20%	103,159,309.35	3	2	6	MODERATE
BUNAWAN	Agri-Industrial	1.86	1.18	63.19%	176,310,936.40	3	2	6	MODERATE
BUNAWAN	Commercial	11.86	10.44	88.01%	1,565,375,961.43	3	2	6	MODERATE
BUNAWAN	Industrial	115.61	71.18	61.57%	10,677,533,101.42	3	2	6	MODERATE
BUNAWAN	Parks and Recreational	0.24	0.18	75.90%	27,636,318.14	3	2	6	MODERATE
BUNAWAN	Residential	123.76	73.00	58.98%	7,299,529,543.00	3	3	9	HIGH
ILANG	Industrial	90.12	20.88	23.17%	3,132,663,525.14	3	2	6	MODERATE
ILANG	Residential	125.68	11.24	8.95%	1,124,445,330.35	3	3	9	HIGH
LASANG	Commercial	2.13	0.59	27.59%	87,993,359.55	3	2	6	MODERATE
LASANG	Industrial	38.00	10.51	27.64%	1,575,904,231.58	3	2	6	MODERATE
LASANG	Parks and Recreational	0.07	0.07	100.00%	10,756,125.65	3	2	6	MODERATE
LASANG	Residential	50.73	37.91	74.73%	3,791,015,974.16	3	3	9	HIGH
MAHAYAG	Industrial	70.08	2.18	3.12%	327,490,389.66	3	2	6	MODERATE
MAHAYAG	Residential	57.77	8.08	13.99%	808,039,809.18	3	3	9	HIGH
PANACAN	Commercial	7.46	3.53	47.37%	530,072,420.12	3	2	6	MODERATE
PANACAN	Industrial	120.38	39.42	32.75%	5,913,217,853.51	3	2	6	MODERATE
PANACAN	Parks and Recreational	6.97	6.91	99.07%	1,035,970,786.26	3	2	6	MODERATE
PANACAN	Residential	256.99	32.21	12.53%	3,221,054,544.67	3	3	9	HIGH
PANACAN	Tourism	0.96	0.76	79.24%	113,878,781.56	3	2	6	MODERATE
TIBUNGCO	Industrial	41.74	5.60	13.42%	840,477,503.05	3	2	6	MODERATE
TIBUNGCO	Residential	11.83	11.83	100.00%	1,183,066,618.64	3	3	9	HIGH
BAGO APLAYA	Commercial	12.91	9.29	71.96%	1,392,984,605.26	3	2	6	MODERATE
BAGO APLAYA	Industrial	16.24	15.91	97.95%	2,386,594,737.70	3	2	6	MODERATE
BAGO APLAYA	Parks and Recreational	5.45	5.45	99.89%	817,011,372.54	3	2	6	MODERATE
BAGO APLAYA	Residential	95.45	83.51	87.48%	8,350,523,697.88	3	3	9	HIGH
BAGO GALLERA	Parks and Recreational	63.48	20.79	32.76%	3,119,077,919.81	3	2	6	MODERATE

Table U-29. Urban Use Areas Vulnerability, Storm Surge Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
BAGO GALLERA	Residential	129.96	1.52	1.17%	151,684,311.52	3	3	9	HIGH
BUCANA	Commercial	63.45	53.33	84.04%	7,999,105,327.65	3	2	6	MODERATE
BUCANA	Industrial	0.12	0.12	100.00%	17,514,521.14	3	2	6	MODERATE
BUCANA	Parks and Recreational	1.92	1.84	96.21%	276,608,516.54	3	2	6	MODERATE
BUCANA	Residential	216.96	189.27	87.24%	18,927,308,315.83	3	3	9	HIGH
BUCANA	Tourism	0.67	0.67	100.00%	99,886,927.88	3	2	6	MODERATE
DUMOY	Commercial	8.18	2.03	24.80%	304,280,609.76	3	2	6	MODERATE
DUMOY	Industrial	32.56	3.85	11.83%	577,795,389.33	3	2	6	MODERATE
DUMOY	Parks and Recreational	8.33	8.04	96.50%	1,205,608,019.16	3	2	6	MODERATE
DUMOY	Residential	162.79	40.74	25.03%	6,111,718,427.68	3	3	9	HIGH
DUMOY	Tourism	5.83	5.83	100.00%	582,667,328.21	3	2	6	MODERATE
MA-A	Commercial	90.16	2.88	3.19%	431,464,196.51	3	2	6	MODERATE
MA-A	Industrial	22.54	2.08	9.22%	311,738,761.33	3	2	6	MODERATE
MA-A	Parks and Recreational	12.99	0.05	0.41%	8,003,319.22	2	2	4	MODERATE
MA-A	Residential	428.27	7.45	1.74%	744,643,837.80	3	3	9	HIGH
MATINA APLAYA	Commercial	20.47	15.77	77.01%	2,364,923,678.33	3	2	6	MODERATE
MATINA APLAYA	Industrial	2.91	2.65	91.29%	397,836,146.49	3	2	6	MODERATE
MATINA APLAYA	Parks and Recreational	2.27	1.51	66.30%	225,771,374.70	3	2	6	MODERATE
MATINA APLAYA	Residential	155.50	131.23	84.39%	13,122,695,931.23	3	3	9	HIGH
MATINA APLAYA	Tourism	2.35	1.79	75.83%	267,773,888.10	3	2	6	MODERATE
MATINA CROSSING	Commercial	50.86	1.06	2.08%	158,999,255.72	3	2	6	MODERATE
MATINA CROSSING	Residential	250.40	20.70	8.26%	2,069,535,118.57	3	3	9	HIGH
TALOMO	Commercial	20.65	4.99	24.18%	749,217,882.81	3	2	6	MODERATE
TALOMO	Industrial	15.85	2.63	16.61%	394,878,666.01	3	2	6	MODERATE
TALOMO	Parks and Recreational	5.46	1.19	21.79%	178,456,030.72	3	2	6	MODERATE
TALOMO	Residential	297.56	202.72	68.13%	20,271,618,543.12	3	3	9	HIGH
TALOMO	Tourism	1.55	0.84	54.26%	126,092,259.60	3	2	6	MODERATE
BINUGAO	Industrial	63.36	28.66	45.24%	4,299,580,048.70	3	2	6	MODERATE

Table U-29. Urban Use Areas Vulnerability, Storm Surge Impact Areas, Davao City

Barangay	Land Use Category	Area per Land Use Category in Hectares	Exposed Area in Hectares	% Exposure	Exposed Value (PHP)	Degree of Impact	Adaptive Capacity	Vulnerability Index	Vulnerability Category
BINUGAO	Parks and Recreational	1.34	1.27	94.94%	190,405,495.62	3	2	6	MODERATE
BINUGAO	Residential	52.80	5.83	11.04%	582,772,276.73	3	3	9	HIGH
DALIAO	Commercial	0.07	0.07	100.00%	10,872,775.79	3	2	6	MODERATE
DALIAO	Industrial	14.75	13.79	93.47%	2,068,701,954.04	3	2	6	MODERATE
DALIAO	Parks and Recreational	0.16	0.16	100.00%	23,834,181.92	3	2	6	MODERATE
DALIAO	Residential	107.79	48.79	45.27%	4,879,317,807.20	3	3	9	HIGH
DALIAO	Tourism	1.79	1.79	100.00%	268,157,669.73	3	2	6	MODERATE
LIZADA	Industrial	13.44	3.90	29.03%	585,111,028.13	3	2	6	MODERATE
LIZADA	Parks and Recreational	0.19	0.11	61.34%	17,208,696.54	3	2	6	MODERATE
LIZADA	Residential	100.96	71.85	71.16%	7,184,785,765.72	3	3	9	HIGH
LIZADA	Tourism	0.08	0.08	100.00%	12,102,495.64	3	2	6	MODERATE
SIRAWAN	Parks and Recreational	0.04	0.04	100.00%	6,667,004.87	2	2	4	MODERATE
SIRAWAN	Residential	83.94	17.36	20.68%	1,735,603,133.59	3	3	9	HIGH

The table below shows the Climate Change Vulnerability Assessment for Storm Surge which enumerates the technical findings per land use category per barangay. Implications per type of land use describe the consequences of damage due to flood. In order to mitigate impacts and raise the adaptive capacity of urban use areas during the onslaught of the hazard, various policy interventions are also suggested for consideration.

Table U-30. Climate Change Vulnerability Assessment for Storm Surge, Davao City				
Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
1-A	Residential	1. Area per Land Use Category in Hectares:6.95 2.Exposed Area in Hectares:6.95 3.% Exposure:1 4.Exposed Value (PHP):695000000 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
2-A	Residential	1. Area per Land Use Category in Hectares: 1.62 2. Exposed Area in Hectares: 1.62 3.%Exposure:99.89% 4.Exposed Value (PHP):161836733.90 5.Degree of Impact:3 6. Adaptive Capacity:3 7.Vulnerability Index:9 8. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
3-A	Residential	1. Area per Land Use Category in Hectares:0.55 2. Exposed Area in Hectares:0.55 3. % Exposure:100% 4. Exposed Value (PHP):55110065.12 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

Table U-30. Climate Change Vulnerability Assessment for Storm Surge, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
4-A	Residential	1. Area per Land Use Category in Hectares:2.93 2. Exposed Area in Hectares:2.93 3. % Exposure:1 4. Exposed Value (PHP):293381599.558623 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
5-A	Residential	1. Area per Land Use Category in Hectares: 20.41 2. Exposed Area in Hectares:10.31 3.%Exposure:50.50% 4.Exposed Value (PHP):1030738916.39384 5. Degree of Impact:3 6.Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
6-A	Residential	1. Area per Land Use Category in Hectares:4.39 2. Exposed Area in Hectares:0.51 3.%Exposure:0.12 4.Exposed Value (PHP):50627731.148045 5.Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
7-A	Residential	1.Area per Land Use Category in Hectares:10.18 2. Exposed Area in Hectares:0.59 3. % Exposure:5.83% 4. Exposed Value (PHP):59402194.992652 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
8-A	Residential	1.Area per Land Use Category in Hectares:82.83 2. Exposed Area in Hectares:9.24 3.% Exposure: 11.15% 4. Exposed Value (PHP):923606706.710092 5.Degree of Impact:3 4. Adaptive Capacity:3 5. Vulnerability Index:9 6. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
9-A	Residential	1. Area per Land Use Category in Hectares:0.22 2. Exposed Area in Hectares:0.21 3.%Exposure:91.54% 4. Exposed Value (PHP):20567176.3613 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

Table U-30. Climate Change Vulnerability Assessment for Storm Surge, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
10-A	Residential	1. Area per Land Use Category in Hectares:5.79 2.Exposed Area in Hectares:3.30 3.%Exposure: 56.99% 4.Exposed Value (PHP):330000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
11-B	Residential	1. Area per Land Use Category in Hectares:2.56 2. Exposed Area in Hectares:2.56 3. % Exposure:100% 4. Exposed Value (PHP):256000000 5.Degree of Impact:3 4. Adaptive Capacity:3 5. Vulnerability Index:9 6. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
12-B	Residential	1. Area per Land Use Category in Hectares:1.20 2. Exposed Area in Hectares:1.20 3.% Exposure:1 4. Exposed Value (PHP):120000000 5.Degree of Impact:3 6. Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
13-B	Residential	1. Area per Land Use Category in Hectares:0.57 2. Exposed Area in Hectares:0.57 3. % Exposure:1 4.Exposed Value (PHP):57000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
14-B	Residential	1. Area per Land Use Category in Hectares:3.09 2. Exposed Area in Hectares:3.09 3.%Exposure:100% 4. Exposed Value (PHP):309000000 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
15-B	Residential	1.Area per Land Use Category in Hectares:1.46 2.Exposed Area in Hectares:1.46 3.% Exposure:100% 4.Exposed Value (PHP):146000000 5.Degree of Impact:3 6. Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
16-B	Residential	1.Area per Land Use Category in Hectares:0.42 2. Exposed Area in Hectares:0.42 3.%Exposure:100% 4.Exposed Value (PHP):42000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
17-B	Residential	1.Area per Land Use Category in Hectares:0.52 2. Exposed Area in Hectares:0.52 3.%Exposure:100% 4.Exposed Value (PHP):52000000 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
18-B	Residential	1.Area per Land Use Category in Hectares:0.40 2.Exposed Area in Hectares:0.40 3.% Exposure:100% 4.Exposed Value (PHP):40000000 5. Degree of Impact:3 6.Adaptive Capacity:3 7. Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
20-B	Residential	1. Area per Land Use Category in Hectares:13.92 2. Exposed Area in Hectares:8.94 3. %Exposure: 64.22% 4. Exposed Value (PHP):894000000 5. Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
21-C	Residential	1.Area per Land Use Category in Hectares:5.18 2.Exposed Area in Hectares:5.18 3. %Exposure:100% 4.Exposed Value (PHP):518000000 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
22-C	Residential	1.Area per Land Use Category in Hectares:4.78 2.Exposed Area in Hectares:4.78 3. %Exposure:100% 4.Exposed Value (PHP):478000000 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
23-C	Residential	1.Area per Land Use Category in Hectares:12.79 2.Exposed Area in Hectares:12.79 3. %Exposure:100% 4.Exposed Value (PHP):1279000000 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
24-C	Residential	1.Area per Land Use Category in Hectares:3.60 2.Exposed Area in Hectares:2.51 3. % Exposure:69.72% 4.Exposed Value (PHP):251000000 5. Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
25-C	Residential	1. Area per Land Use Category in Hectares:1.73 2.Exposed Area in Hectares:1.73% 3.Exposure:1 4.Exposed Value (PHP):173000000 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
26-C	Residential	1.Area per Land Use Category in Hectares:2.23 2.Exposed Area in Hectares:2.23 3.%Exposure:100% 4. Exposed Value (PHP):223000000 5. Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
27-C	Residential	1. Area per Land Use Category in Hectares:0.64 2. Exposed Area in Hectares:0.64 3.% Exposure:100% 4.Exposed Value (PHP):64430783.061681 5. Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
28-C	Residential	1. Area per Land Use Category in Hectares:1.65 2.Exposed Area in Hectares:1.65 3.% Exposure:100% 4. Exposed Value (PHP):164904358.71535 5.Degree of Impact:3 6. Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
29-C	Residential	1.Area per Land Use Category in Hectares:1.07 2.Exposed Area in Hectares:1.07 3.% Exposure:100% 4.Exposed Value (PHP):106578556.982212 5.Degree of Impact:3 4.Adaptive Capacity:3 5.Vulnerability Index:9 6Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
30-C	Residential	1. Area per Land Use Category in Hectares:1.37 2. Exposed Area in Hectares:1.37 3. % Exposure:100% 4. Exposed Value (PHP):136706617.66008 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
31-D	Residential	1. Area per Land Use Category in Hectares:13.56 2. Exposed Area in Hectares:13.56 3. % Exposure:100% 4. Exposed Value (PHP):1356101073.23407 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
32-D	Residential	1. Area per Land Use Category in Hectares:2.75 2. Exposed Area in Hectares:2.75 3. % Exposure:100% 4. Exposed Value (PHP):274985473.053486 5. Degree of Impact:3 6. Adaptive Capacity:3 7. Vulnerability Index:9 8. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
33-D	Residential	1. Area per Land Use Category in Hectares:3.86 2.Exposed Area in Hectares:3.86 3.% Exposure:100% 4.Exposed Value (PHP):386250546.688752 4. Degree of Impact:3 5.Adaptive Capacity:3 6.Vulnerability Index:9 7.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
34-D	Residential	1. Area per Land Use Category in Hectares:2.48 2. Exposed Area in Hectares:2.48 3.% Exposure:0.1 4. Exposed Value (PHP):248103494.79071 5. Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
35-D	Residential	1Area per Land Use Category in Hectares:0.35 2.Exposed Area in Hectares:0.35 3.% Exposure:100% 4.Exposed Value (PHP):34684421.4919194 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
36-D	Residential	1.Area per Land Use Category in Hectares:2.39 2.Exposed Area in Hectares:2.39 3.% Exposure:100% 4. Exposed Value (PHP):238999142.248503 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
37-D	Residential	1.Area per Land Use Category in Hectares:3.54 2.Exposed Area in Hectares:3.54 3.% Exposure:100% 4.Exposed Value (PHP):354418912.162225 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
38-D	Residential	1.Area per Land Use Category in Hectares:1.73 2.Exposed Area in Hectares:1.73 3.% Exposure:100% 4.Exposed Value (PHP):172640143.966133 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
39-D	Residential	1.Area per Land Use Category in Hectares:2.92 2.Exposed Area in Hectares:2.92 3.% Exposure:100% 4.Exposed Value (PHP):292022426.401746 5.Degree of Impact:3 6. Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
40-D	Residential	1.Area per Land Use Category in Hectares:1.34 2.Exposed Area in Hectares:1.34 3.% Exposure:100% 4.Exposed Value (PHP):133947526.343698 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
AGDAO PROPER	Residential	1.Area per Land Use Category in Hectares:7.62 2.Exposed Area in Hectares:7.62 3.% Exposure:100% 4.Exposed Value (PHP):761819333.62 5. Degree of Impact:3 6. Adaptive Capacity:3 7.Vulnerability Index:9 8. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
WILFREDO AQUINO	Residential	1.Area per Land Use Category in Hectares:26.09 2. Exposed Area in Hectares:8.59 3.% Exposure:32.93% 4.Exposed Value (PHP):859283570.238144 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
PACIANO BANGOY	Residential	1. Area per Land Use Category in Hectares:21.36 2.Exposed Area in Hectares:14.39 3.% Exposure:67.35% 4.Exposed Value (PHP):1438505620.2669 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
RAFAEL CASTILLO	Residential	1.Area per Land Use Category in Hectares:11.86 2. Exposed Area in Hectares:11.86 3.%Exposure: 100% 4.Exposed Value (PHP):1186306694.99 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
CENTRO	Residential	1. Area per Land Use Category in Hectares:22.72 2.Exposed Area in Hectares:22.72 3.% Exposure:100% 4.Exposed Value (PHP):2271589342.19605 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
GOV. VICENTE DUTERTE	Residential	1.Area per Land Use Category in Hectares:20.34 2.Exposed Area in Hectares:20.34 3.% Exposure:100% 4.Exposed Value (PHP):2033555834.24919 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
LEON GARCIA SR.	Residential	1.Area per Land Use Category in Hectares:12.04 2.Exposed Area in Hectares:12.04 3.% Exposure:100% 4.Exposed Value (PHP):1204204893.52702 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
LAPU - LAPU	Residential	1.Area per Land Use Category in Hectares:23.68 2.Exposed Area in Hectares:23.68 3.% Exposure:100% 4.Exposed Value (PHP):2367807879.40017 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
TOMAS MONTEVERDE	Residential	1.Area per Land Use Category in Hectares:2.09 2.Exposed Area in Hectares:2.09 3.% Exposure:100% 4.Exposed Value (PHP):209331813.245192 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
SAN ANTONIO	Residential	1.Area per Land Use Category in Hectares:25.28 2.Exposed Area in Hectares:25.28 3.% Exposure:100% 4.Exposed Value (PHP):2528310391.00541 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

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Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
UBALDE	Residential	1. Area per Land Use Category in Hectares:5.94 2.Exposed Area in Hectares:5.94 3.% Exposure:100% 4.Exposed Value (PHP):593870630.705971 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
SASA	Residential	1.Area per Land Use Category in Hectares:223.78 2.Exposed Area in Hectares:15.53 3.% Exposure:6.94% 4.Exposed Value (PHP):1553348198.71735 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
A. ANGLIONGTO	Residential	1. Area per Land Use Category in Hectares:155.68 2.Exposed Area in Hectares:3.71 3.% Exposure:2.39% 4.Exposed Value (PHP):371340252.387133 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

Table U-30. Climate Change Vulnerability Assessment for Storm Surge, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
V. HIZON	Residential	1. Area per Land Use Category in Hectares:118.71 2.Exposed Area in Hectares:34.45 3.% Exposure:29.02% 4.Exposed Value (PHP):3445009803.23508 5. Degree of Impact:3 6. Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
BUNAWAN	Residential	1.Area per Land Use Category in Hectares:123.76 2.Exposed Area in Hectares:73 3.Exposure:58.98% 4.Exposed Value (PHP):7299529543.00025 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
ILANG	Residential	1.Area per Land Use Category in Hectares:125.68 2.Exposed Area in Hectares:11.24 3.% Exposure:8.95% 4. Exposed Value (PHP):1124445330.35 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

Table U-30. Climate Change Vulnerability Assessment for Storm Surge, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
LASANG	Residential	1.Area per Land Use Category in Hectares:50.73 2.Exposed Area in Hectares:37.91 3.% Exposure:74.73% 4.Exposed Value (PHP):3791015974.15739 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
MAHAYAG	Residential	1.Area per Land Use Category in Hectares:57.77 2.Exposed Area in Hectares:8.08 3.% Exposure: 13.99% 4.Exposed Value (PHP):808039809.18 Degree of Impact:3 Adaptive Capacity:3 Vulnerability Index:9 Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
PANACAN	Residential	1. Area per Land Use Category in Hectares:256.99 2.Exposed Area in Hectares:32.21 3.% Exposure:12.53% 4. Exposed Value (PHP):3221054544.67 5.Degree of Impact:3 6.Adaptive Capacity:3 7. Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

Table U-30. Climate Change Vulnerability Assessment for Storm Surge, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
TIBUNGCO	Residential	1. Area per Land Use Category in Hectares:11.83 2.Exposed Area in Hectares:11.83 3.%Exposure:1 4.Exposed Value (PHP):1183066618.64 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
BAGO APLAYA	Residential	1.Area per Land Use Category in Hectares:95.45 2.Exposed Area in Hectares:83.51 3.% Exposure:87.48% 4.Exposed Value (PHP):8350523697.88 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
BAGO GALLERA	Residential	1.Area per Land Use Category in Hectares:129.961212555582 2.Exposed Area in Hectares:1.52 3.% Exposure:1.17% 4.Exposed Value (PHP):151684311.51723 5.Degree of Impact:3 6. Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

Table U-30. Climate Change Vulnerability Assessment for Storm Surge, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
BUCANA	Residential	1.Area per Land Use Category in Hectares:216.96 2.Exposed Area in Hectares:189.27 3.% Exposure:87.24% 4.Exposed Value (PHP):18927308315.8282 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
DUMOY	Residential	1. Area per Land Use Category in Hectares:162.79 2.Exposed Area in Hectares:40.74 3.% Exposure: 25.03% 4.Exposed Value (PHP):6111718427.68377 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
MA-A	Residential	1.Area per Land Use Category in Hectares:428.27 2.Exposed Area in Hectares:7.45 3.% Exposure:1.74% 4.Exposed Value (PHP):744643837.801936 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

Table U-30. Climate Change Vulnerability Assessment for Storm Surge, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
MATINA APLAYA	Residential	1. Area per Land Use Category in Hectares:155.50 2. Exposed Area in Hectares:131.23 3.%Exposure:84.39% 4.Exposed Value (PHP):13122695931.2257 5.Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
MATINA CROSSING	Residential	1. Area per Land Use Category in Hectares:250.40 2.Exposed Area in Hectares:20.70 3.% Exposure:8.26% 4. Exposed Value (PHP):2069535118.56826 5.Degree of Impact:3 6. Adaptive Capacity:3 7.Vulnerability Index:9 8. Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
TALOMO	Residential	1. Area per Land Use Category in Hectares:297.56 2. Exposed Area in Hectares:202.72 3. % Exposure:68.13% 4.Exposed Value (PHP):20271618543.1206 5.Degree of Impact:3 6. Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

Table U-30. Climate Change Vulnerability Assessment for Storm Surge, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
BINUGAO	Residential	1. Area per Land Use Category in Hectares:52.80 2.Exposed Area in Hectares:5.83 3.% Exposure:11.04% 4.Exposed Value (PHP):582772276.73372 5.Degree of Impact:3 6. Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards
DALIAO	Residential	1. Area per Land Use Category in Hectares:107.79 2.Exposed Area in Hectares:48.79 3. %Exposure:45.27% 4. Exposed Value (PHP):4879317807.19873 5.Degree of Impact:3 6.Adaptive Capacity:3 7. Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;
LIZADA	Residential	1. Area per Land Use Category in Hectares:100.96 2.Exposed Area in Hectares:71.85 3.% Exposure:71.16% 4. Exposed Value (PHP):7184785765.72199 5. Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

Table U-30. Climate Change Vulnerability Assessment for Storm Surge, Davao City

Barangays	Land Use Category	Technical Findings	Planning Implications	Policy Interventions
SIRAWAN	Residential	1.Area per Land Use Category in Hectares:83.94 2.Exposed Area in Hectares:17.36 3.% Exposure:20.68% 4.Exposed Value (PHP):1735603133.58763 5. Degree of Impact:3 6.Adaptive Capacity:3 7.Vulnerability Index/:9 8.Vulnerability Category:HIGH	There is immediate need to identify relocation sites to accommodate informal settler families; structural mitigation of buildings and construction of sea walls will be very costly	Strengthen EWS and formulation of contingency plans to prevent fatalities and injuries due to potential changes in tidal pattern during sudden onset of hazards;

DISASTER RISK ASSESSMENT

EXPOSURE

FLOOD

In disaster risk assessment, only hazards with history of occurrence in the city are considered. This assessment was accomplished by analysing the frequency of disasters throughout the years based on the data of the City Social Welfare and Development Office. This frequency of disasters is reflected through the likelihood of occurrence rating, which is measured through the following scores: 6 – frequent, which happens every 1 to 3 years; 5 – moderate, occurs every 3 to 10 years; 4 – occasional, happens every 10 to 30 years; 3 – improbable, every 30-100 years; 2 – rare event, every 100-200 years; and 1- very rare event which happens every 200 years. It can be noted that for the purpose of this study only hazards such as flood and landslide which have history of occurrence in the city is assessed. The other hazards such as storm surge, active fault and liquefaction were not included.

The table below shows 53 barangays which registered the score of six (6), most of which are residential in use followed by industrial, and third as commercial.

At least 36 barangays scored five (5), 52 are rated four (4), and three (3) barangays are rated at 3.

Table U-31. Urban Use Areas Exposure to Flood, Davao City

Barangay	HAZARD			EXPOSURE					
	Flood Susceptibility	Expected Flood Depth	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
1-A	HF	> 1 meter	3	Residential	6.95	6.94	99.86%	10,000.00	69,400,000.00
1-A	VHF	> 1 meter	3	Parks and Recreational	0.08	0.08	100.00%	15,000.00	1,200,000.00
1-A	HF	> 1 meter	3	Commercial	1.41	1.02	72.34%	15,000.00	15,300,000.00
2-A	HF	> 1 meter	4	Residential	1.62	1.23	75.93%	10,000.00	12,300,000.00
2-A	HF	> 1 meter	4	Commercial	11.32	1.53	13.52%	15,000.00	22,950,000.00
5-A	VHF	> 1 meter	3	Residential	20.41	14.12	69.18%	10,000.00	141,200,000.00
5-A	VHF	> 1 meter	3	Parks and Recreational	0.01	0.01	100.00%	15,000.00	150,000.00
5-A	VHF	> 1 meter	3	Commercial	4.34	0.14	3.23%	15,000.00	2,100,000.00
8-A	VHF	> 1 meter	4	Residential	82.83	47.94	57.88%	10,000.00	479,400,000.00
8-A	VHF	> 1 meter	4	Industrial	3.84	3.84	100.00%	15,000.00	57,600,000.00
8-A	VHF	> 1 meter	4	Commercial	5.65	4.29	75.93%	15,000.00	64,350,000.00
8-A	VHF	> 1 meter	4	Cemetery	18.90	3.17	16.77%	15,000.00	47,550,000.00
8-A	VHF	> 1 meter	4	Parks and Recreational	1.17	0.04	3.42%	15,000.00	600,000.00

Table U-31. Urban Use Areas Exposure to Flood, Davao City

HAZARD				EXPOSURE					
Barangay	Flood Susceptibility	Expected Flood Depth	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
15-B	MF	> 1 meter	3	Residential	1.46	0.22	15.07%	10,000.00	2,200,000.00
15-B	MF	> 1 meter	3	Commercial	24.46	1.20	4.91%	15,000.00	18,000,000.00
19-B	HF	> 1 meter	6	Residential	179.82	40.47	22.51%	10,000.00	404,700,000.00
19-B	VHF	> 1 meter	6	Parks and Recreational	0.36	0.10	27.78%	15,000.00	1,500,000.00
19-B	VHF	> 1 meter	6	Commercial	28.23	4.90	17.36%	15,000.00	73,500,000.00
19-B	VHF	> 1 meter	6	Industrial	2.48	0.16	6.45%	15,000.00	2,400,000.00
21-C	HF	> 1 meter	3	Residential	5.18	1.32	25.48%	10,000.00	13,200,000.00
22-C	HF	> 1 meter	3	Residential	4.78	3.53	73.85%	10,000.00	35,300,000.00
22-C	HF	> 1 meter	3	Parks and Recreational	0.05	0.00	2.00%	15,000.00	15,000.00
23-C	HF	> 1 meter	3	Residential	12.79	11.18	87.41%	10,000.00	111,800,000.00
23-C	HF	> 1 meter	3	Parks and Recreational	0.72	0.43	59.72%	15,000.00	6,450,000.00
27-C	HF	> 1 meter	4	Tourism	0.04	0.04	100.00%	15,000.00	600,000.00
27-C	HF	> 1 meter	3	Parks and Recreational	4.10	3.01	73.41%	15,000.00	45,150,000.00
31-D	VHF	> 1 meter	3	Residential	13.56	7.74	57.08%	10,000.00	77,400,000.00
31-D	HF	> 1 meter	3	Parks and Recreational	0.13	0.11	84.62%	15,000.00	1,650,000.00
37-D	VHF	> 1 meter	3	Residential	3.55	0.76	21.41%	10,000.00	7,600,000.00
39-D	VHF	> 1 meter	3	Residential	2.93	2.53	86.35%	10,000.00	25,300,000.00
39-D	HF	> 1 meter	3	Commercial	5.35	3.03	56.64%	15,000.00	45,450,000.00
39-D	HF	> 1 meter	3	Parks and Recreational	0.89	0.16	17.98%	15,000.00	2,400,000.00
40-D	VHF	> 1 meter	3	Residential	1.34	1.30	97.01%	10,000.00	13,000,000.00
40-D	VHF	> 1 meter	3	Commercial	6.05	6.04	99.83%	15,000.00	90,600,000.00
AGDAO PROPER	MF	> 1 meter	3	Residential	7.62	7.62	100.00%	10,000.00	76,200,000.00
AGDAO PROPER	MF	> 1 meter	3	Parks and Recreational	0.01	0.01	100.00%	15,000.00	150,000.00
AGDAO PROPER	MF	> 1 meter	3	Industrial	1.29	1.29	100.00%	15,000.00	19,350,000.00

Table U-31. Urban Use Areas Exposure to Flood, Davao City

HAZARD				EXPOSURE					
Barangay	Flood Susceptibility	Expected Flood Depth	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
AGDAO PROPER	MF	> 1 meter	3	Commercial	22.65	19.23	84.90%	15,000.00	288,450,000.00
CENTRO	HF	> 1 meter	3	Residential	22.72	18.39	80.94%	10,000.00	183,900,000.00
CENTRO	MF	> 1 meter	3	Parks and Recreational	0.04	0.04	100.00%	15,000.00	600,000.00
CENTRO	HF	> 1 meter	3	Industrial	10.73	8.83	82.29%	15,000.00	132,450,000.00
CENTRO	HF	> 1 meter	3	Commercial	1.14	0.26	22.81%	15,000.00	3,900,000.00
GOV. VICENTE DUTERTE	HF	> 1 meter	3	Residential	20.34	14.16	69.62%	10,000.00	141,600,000.00
GOV. VICENTE DUTERTE	MF	> 1 meter	3	Commercial	4.95	2.49	50.30%	15,000.00	37,350,000.00
GOV. VICENTE DUTERTE	MF	> 1 meter	3	Industrial	12.57	3.99	31.74%	15,000.00	59,850,000.00
LEON GARCIA SR.	HF	> 1 meter	3	Residential	12.04	10.85	90.12%	10,000.00	108,500,000.00
LEON GARCIA SR.	HF	> 1 meter	3	Parks and Recreational	0.08	0.08	100.00%	15,000.00	1,200,000.00
LEON GARCIA SR.	HF	> 1 meter	3	Industrial	0.29	0.29	100.00%	15,000.00	4,350,000.00
LEON GARCIA SR.	MF	> 1 meter	3	Commercial	1.06	0.82	77.36%	15,000.00	12,300,000.00
LAPU - LAPU	HF	> 1 meter	3	Residential	23.68	17.27	72.93%	10,000.00	172,700,000.00
LAPU - LAPU	MF	> 1 meter	3	Parks and Recreational	0.04	0.04	100.00%	15,000.00	600,000.00
LAPU - LAPU	HF	> 1 meter	3	Commercial	1.61	0.89	55.28%	15,000.00	13,350,000.00
LAPU - LAPU	HF	> 1 meter	3	Industrial	22.95	5.97	26.01%	15,000.00	89,550,000.00
BAGUIO	MF	> 1 meter	3	Residential	12.03	8.10	67.33%	10,000.00	81,000,000.00
BAGUIO	MF	> 1 meter	3	Agri-Industrial	6.17	3.03	49.11%	15,000.00	45,450,000.00
GUMALANG	MF	> 1 meter	4	Parks and Recreational	0.05	0.05	100.00%	15,000.00	750,000.00
GUMALANG	MF	> 1 meter	4	Agri-Industrial	21.28	0.30	1.41%	15,000.00	4,500,000.00
MALAGOS	HF	> 1 meter	4	Residential	18.01	4.89	27.15%	10,000.00	48,900,000.00
MALAGOS	MF	> 1 meter	4	Industrial	3.05	0.79	25.90%	15,000.00	11,850,000.00
MALAGOS	VHF	> 1 meter	4	Tourism	13.49	0.95	7.04%	15,000.00	14,250,000.00
MALAGOS	HF	> 1 meter	4	Agri-Industrial	7.82	0.17	2.17%	15,000.00	2,550,000.00
BUHANGIN	HF	> 1 meter	5	Industrial	4.40	0.46	10.45%	15,000.00	6,900,000.00
BUHANGIN	HF	> 1 meter	5	Residential	335.40	9.41	2.81%	10,000.00	94,100,000.00
BUHANGIN	HF	> 1 meter	5	Commercial	52.91	0.16	0.30%	15,000.00	2,400,000.00

Table U-31. Urban Use Areas Exposure to Flood, Davao City

HAZARD				EXPOSURE					
Barangay	Flood Susceptibility	Expected Flood Depth	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
BUHANGIN	HF	> 1 meter	5	Cemetery	8.84	0.25	2.83%	15,000.00	3,750,000.00
CABANTIAN	HF	> 1 meter	3	Residential	305.58	5.47	1.79%	10,000.00	54,700,000.00
CABANTIAN	HF	> 1 meter	3	Industrial	26.47	0.04	0.15%	15,000.00	600,000.00
CABANTIAN	HF	> 1 meter	3	Commercial	23.17	0.07	0.30%	15,000.00	1,050,000.00
CALLAWA	VHF	> 1 meter	3	Residential	7.91	0.11	1.39%	10,000.00	1,100,000.00
COMMUNAL	HF	> 1 meter	4	Tourism	20.16	0.70	3.47%	15,000.00	10,500,000.00
COMMUNAL	HF	> 1 meter	4	Residential	162.84	7.08	4.35%	10,000.00	70,800,000.00
COMMUNAL	HF	> 1 meter	4	Commercial	11.99	0.02	0.17%	15,000.00	300,000.00
INDANGAN	HF	> 1 meter	3	Commercial	1.71	0.45	26.32%	15,000.00	6,750,000.00
INDANGAN	HF	> 1 meter	3	Residential	247.61	0.40	0.16%	10,000.00	4,000,000.00
MANDUG	VHF	> 1 meter	6	Agri-Industrial	6.55	6.54	99.85%	15,000.00	98,100,000.00
MANDUG	VHF	> 1 meter	6	Residential	168.40	20.99	12.46%	10,000.00	209,900,000.00
A. ANGLIONGTO	VHF	> 1 meter	3	Residential	155.73	6.30	4.05%	10,000.00	63,000,000.00
A. ANGLIONGTO	HF	> 1 meter	3	Commercial	38.75	0.51	1.32%	15,000.00	7,650,000.00
BUNAWAN	HF	> 1 meter	6	Residential	124.56	35.10	28.18%	10,000.00	351,000,000.00
BUNAWAN	MF	> 1 meter	6	Parks and Recreational	0.24	0.11	45.83%	15,000.00	1,650,000.00
BUNAWAN	HF	> 1 meter	6	Commercial	11.86	5.74	48.40%	15,000.00	86,100,000.00
BUNAWAN	HF	> 1 meter	6	Industrial	115.63	25.79	22.30%	15,000.00	386,850,000.00
BUNAWAN	HF	> 1 meter	6	Agri-Industrial	1.86	0.10	5.38%	15,000.00	1,500,000.00
GATUNGAN	HF	> 1 meter	3	Parks and Recreational	0.01	0.01	100.00%	15,000.00	150,000.00
GATUNGAN	HF	> 1 meter	3	Residential	1.99	0.04	2.01%	10,000.00	400,000.00
ILANG	VHF	> 1 meter	3	Residential	125.68	7.03	5.59%	10,000.00	70,300,000.00
ILANG	VHF	> 1 meter	3	Industrial	90.12	7.34	8.14%	15,000.00	110,100,000.00
LASANG	HF	> 1 meter	6	Residential	50.73	20.65	40.71%	10,000.00	206,500,000.00
LASANG	MF	> 1 meter	6	Parks and Recreational	0.07	0.07	100.00%	15,000.00	1,050,000.00
LASANG	HF	> 1 meter	6	Agri-Industrial	9.39	4.10	43.66%	15,000.00	61,500,000.00
LASANG	HF	> 1 meter	6	Industrial	38.20	6.57	17.20%	15,000.00	98,550,000.00
LASANG	HF	> 1 meter	6	Commercial	2.13	0.13	6.10%	15,000.00	1,950,000.00

Table U-31. Urban Use Areas Exposure to Flood, Davao City

HAZARD				EXPOSURE					
Barangay	Flood Susceptibility	Expected Flood Depth	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
MAHAYAG	HF	> 1 meter	4	Residential	57.77	0.74	1.28%	10,000.00	7,400,000.00
MAHAYAG	HF	> 1 meter	4	Industrial	26.18	1.17	4.47%	15,000.00	17,550,000.00
BIAO JOAQUIN	MF	> 1 meter	3	Residential	3.20	2.38	74.38%	10,000.00	23,800,000.00
BIAO JOAQUIN	MF	> 1 meter	3	Agri-Industrial	20.15	16.06	79.70%	15,000.00	240,900,000.00
CALINAN	HF	> 1 meter	5	Residential	107.32	107.19	99.88%	10,000.00	1,071,900,000.00
CALINAN	HF	> 1 meter	5	Parks and Recreational	0.75	0.75	100.00%	15,000.00	11,250,000.00
CALINAN	HF	> 1 meter	5	Industrial	2.17	2.17	100.00%	15,000.00	32,550,000.00
CALINAN	HF	> 1 meter	5	Commercial	19.53	19.53	100.00%	15,000.00	292,950,000.00
CALINAN	HF	> 1 meter	5	Cemetery	5.97	5.97	100.00%	15,000.00	89,550,000.00
CALINAN	HF	> 1 meter	5	Agri-Industrial	3.12	3.12	100.00%	15,000.00	46,800,000.00
CAWAYAN	HF	> 1 meter	3	Residential	1.84	0.30	16.30%	10,000.00	3,000,000.00
DACUDAO	MF	> 1 meter	3	Agri-Industrial	37.73	6.60	17.49%	15,000.00	99,000,000.00
DACUDAO	HF	> 1 meter	3	Residential	7.13	0.29	4.07%	10,000.00	2,900,000.00
DALAGDAG	HF	> 1 meter	3	Residential	2.54	1.18	46.46%	10,000.00	11,800,000.00
DOMINGA	HF	> 1 meter	3	Residential	1.77	1.73	97.74%	10,000.00	17,300,000.00
INAYANGAN	HF	> 1 meter	3	Residential	30.20	0.01	0.03%	10,000.00	100,000.00
LACSON	HF	> 1 meter	3	Residential	5.16	1.30	25.19%	10,000.00	13,000,000.00
LACSON	HF	> 1 meter	3	Agri-Industrial	11.02	1.06	9.62%	15,000.00	15,900,000.00
LAMANAN	VHF	> 1 meter	3	Residential	4.54	0.06	1.32%	10,000.00	600,000.00
LAMPIANA O	MF	> 1 meter	3	Residential	2.14	0.29	13.55%	10,000.00	2,900,000.00
GUMITAN	HF	> 1 meter	6	Residential	8.23	0.03	0.36%	10,000.00	300,000.00
MALAMBA	VHF	> 1 meter	5	Residential	13.12	1.40	10.67%	10,000.00	14,000,000.00
MARILOG	HF	> 1 meter	5	Residential	92.61	0.10	0.11%	10,000.00	1,000,000.00
MALABOG	HF	> 1 meter	3	Residential	18.22	0.03	0.16%	10,000.00	300,000.00
BAGO APLAYA	HF	> 1 meter	5	Residential	95.45	28.28	29.63%	10,000.00	282,800,000.00
BAGO APLAYA	HF	> 1 meter	5	Industrial	16.24	5.86	36.08%	15,000.00	87,900,000.00
BAGO APLAYA	HF	> 1 meter	5	Commercial	12.91	4.13	31.99%	15,000.00	61,950,000.00
BAGO APLAYA	MF	> 1 meter	5	Parks and Recreational	5.45	0.40	7.34%	15,000.00	6,000,000.00
BAGO GALLERA	HF	> 1 meter	4	Residential	129.96	49.25	37.90%	10,000.00	492,500,000.00

Table U-31. Urban Use Areas Exposure to Flood, Davao City

HAZARD				EXPOSURE					
Barangay	Flood Susceptibility	Expected Flood Depth	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
BAGO GALLERA	MF	> 1 meter	4	Industrial	0.12	0.11	91.67%	15,000.00	1,650,000.00
BAGO GALLERA	MF	> 1 meter	4	Commercial	0.65	0.28	43.08%	15,000.00	4,200,000.00
BALIOK	MF	> 1 meter	3	Residential	77.41	14.12	18.24%	10,000.00	141,200,000.00
BALIOK	MF	> 1 meter	3	Parks and Recreational	0.35	0.09	25.71%	15,000.00	1,350,000.00
BUCANA	HF	> 1 meter	4	Tourism	0.67	0.30	44.78%	15,000.00	4,500,000.00
BUCANA	VHF	> 1 meter	4	Residential	216.99	86.42	39.83%	10,000.00	864,200,000.00
BUCANA	HF	> 1 meter	4	Parks and Recreational	1.92	0.22	11.46%	15,000.00	3,300,000.00
BUCANA	HF	> 1 meter	4	Commercial	63.45	6.95	10.95%	15,000.00	104,250,000.00
CATALUNAN GRANDE	VHF	> 1 meter	3	Residential	301.77	69.62	23.07%	10,000.00	696,200,000.00
CATALUNAN GRANDE	HF	> 1 meter	3	Agri-Industrial	21.25	9.74	45.84%	15,000.00	146,100,000.00
CATALUNAN GRANDE	HF	> 1 meter	3	Parks and Recreational	5.80	1.82	31.38%	15,000.00	27,300,000.00
CATALUNAN GRANDE	HF	> 1 meter	3	Commercial	6.03	0.88	14.59%	15,000.00	13,200,000.00
CATALUNAN PEQUEÑO	MF	> 1 meter	3	Tourism	1.32	0.22	16.67%	15,000.00	3,300,000.00
CATALUNAN PEQUEÑO	HF	> 1 meter	3	Residential	197.40	26.64	13.50%	10,000.00	266,400,000.00
CATALUNAN PEQUEÑO		< 1meter	3	Industrial	2.15	0.00	0.09%	15,000.00	30,000.00
CATALUNAN PEQUEÑO	MF	> 1 meter	3	Commercial	3.55	0.30	8.45%	15,000.00	4,500,000.00
CATALUNAN PEQUEÑO	MF	> 1 meter	3	Agri-Industrial	13.65	0.74	5.42%	15,000.00	11,100,000.00
DUMOY	HF	> 1 meter	4	Tourism	5.83	4.00	68.61%	15,000.00	60,000,000.00
DUMOY	HF	> 1 meter	4	Parks and Recreational	8.33	5.15	61.82%	15,000.00	77,250,000.00
DUMOY	HF	> 1 meter	4	Residential	162.79	28.49	17.50%	10,000.00	284,900,000.00
DUMOY	MF	> 1 meter	4	Industrial	32.56	0.25	0.77%	15,000.00	3,750,000.00
LANGUB	HF	> 1 meter	3	Residential	13.62	0.01	0.07%	10,000.00	100,000.00
MA-A	VHF	> 1 meter	6	Residential	428.30	136.31	31.83%	10,000.00	1,363,100,000.00
MA-A	VHF	> 1 meter	6	Parks and Recreational	12.99	5.36	41.26%	15,000.00	80,400,000.00
MA-A	VHF	> 1 meter	6	Industrial	22.55	18.04	80.00%	15,000.00	270,600,000.00
MA-A	VHF	> 1 meter	6	Tourism	16.56	5.60	33.82%	15,000.00	84,000,000.00

Table U-31. Urban Use Areas Exposure to Flood, Davao City

HAZARD				EXPOSURE					
Barangay	Flood Susceptibility	Expected Flood Depth	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
DUMOY	MF	> 1 meter	4	Industrial	32.56	0.25	0.77%	15,000.00	3,750,000.00
LANGUB	HF	> 1 meter	3	Residential	13.62	0.01	0.07%	10,000.00	100,000.00
MA-A	VHF	> 1 meter	6	Residential	428.30	136.31	31.83%	10,000.00	1,363,100,000.00
MA-A	VHF	> 1 meter	6	Parks and Recreational	12.99	5.36	41.26%	15,000.00	80,400,000.00
MA-A	VHF	> 1 meter	6	Industrial	22.55	18.04	80.00%	15,000.00	270,600,000.00
MA-A	VHF	> 1 meter	6	Tourism	16.56	5.60	33.82%	15,000.00	84,000,000.00
MA-A	VHF	> 1 meter	6	Commercial	90.17	27.80	30.83%	15,000.00	417,000,000.00
MAGTUOD	HF	> 1 meter	3	Residential	53.99	10.06	18.63%	10,000.00	100,600,000.00
MAGTUOD	HF	> 1 meter	3	Parks and Recreational	10.49	0.41	3.91%	15,000.00	6,150,000.00
MATINA APLAYA	VHF	> 1 meter	6	Residential	155.55	72.79	46.80%	10,000.00	727,900,000.00
MATINA APLAYA		< 1meter	6	Parks and Recreational	2.27	1.37	60.35%	15,000.00	20,550,000.00
MATINA APLAYA	VHF	> 1 meter	6	Commercial	20.48	13.87	67.72%	15,000.00	208,050,000.00
MATINA APLAYA	MF	> 1 meter	6	Tourism	2.35	0.47	20.00%	15,000.00	7,050,000.00
ALAMBRE	HF	> 1 meter	3	Residential	7.87	0.09	1.14%	10,000.00	900,000.00
ALAMBRE		< 1meter	3	Agri-Industrial	12.70	0.00	0.0024%	15,000.00	4,500.00
BANKAS HEIGHTS	HF	> 1 meter	3	Residential	29.39	18.61	63.32%	10,000.00	186,100,000.00
BANKAS HEIGHTS	HF	> 1 meter	3	Agri-Industrial	1.67	0.18	10.78%	15,000.00	2,700,000.00
BATO	HF	> 1 meter	3	Commercial	0.47	0.33	70.21%	15,000.00	4,950,000.00
BATO	HF	> 1 meter	3	Residential	44.81	2.08	4.64%	10,000.00	20,800,000.00

Table U-31. Urban Use Areas Exposure to Flood, Davao City

HAZARD				EXPOSURE					
Barangay	Flood Susceptibility	Expected Flood Depth	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
CROSSING BAYABAS	HF	> 1 meter	5	Residential	92.31	21.61	23.41%	10,000.00	216,100,000.00
BINUGAO	HF	> 1 meter	3	Residential	52.80	26.77	50.70%	10,000.00	267,700,000.00
BINUGAO	MF	> 1 meter	3	Parks and Recreational	1.34	1.34	100.00%	15,000.00	20,100,000.00
BINUGAO	HF	> 1 meter	3	Industrial	63.36	48.27	76.18%	15,000.00	724,050,000.00
BINUGAO	HF	> 1 meter	3	Commercial	3.44	1.44	41.86%	15,000.00	21,600,000.00
BINUGAO	HF	> 1 meter	3	Agri-Industrial	13.50	0.15	1.11%	15,000.00	2,250,000.00
CATIGAN	HF	> 1 meter	3	Residential	6.31	0.24	3.80%	10,000.00	2,400,000.00
DALIAO	MF	> 1 meter	3	Tourism	1.79	1.46	81.56%	15,000.00	21,900,000.00
DALIAO	MF	> 1 meter	3	Residential	107.79	23.42	21.73%	15,000.00	351,300,000.00
DALIAO	MF	> 1 meter	3	Parks and Recreational	0.16	0.07	43.75%	15,000.00	1,050,000.00
DALIAO	MF	> 1 meter	3	Industrial	14.75	7.84	53.15%	15,000.00	117,600,000.00
EDEN	HF	> 1 meter	3	Tourism	98.41	9.12	9.27%	15,000.00	136,800,000.00
EDEN	HF	> 1 meter	3	Residential	51.49	2.35	4.56%	10,000.00	23,500,000.00
KILATE	HF	> 1 meter	3	Residential	2.61	0.11	4.21%	10,000.00	1,100,000.00
LIZADA	MF	> 1 meter	5	Agri-Industrial	5.18	2.10	40.54%	15,000.00	31,500,000.00
LIZADA	HF	> 1 meter	5	Residential	100.96	19.82	19.63%	10,000.00	198,200,000.00
LIZADA	MF	> 1 meter	5	Industrial	13.44	1.42	10.57%	15,000.00	21,300,000.00
LUBOGAN	HF	> 1 meter	4	Residential	90.18	32.08	35.57%	15,000.00	481,200,000.00
LUBOGAN	HF	> 1 meter	4	Parks and Recreational	1.10	0.07	6.36%	15,000.00	1,050,000.00
LUBOGAN	HF	> 1 meter	4	Cemetery	5.67	0.09	1.59%	15,000.00	1,350,000.00

Table U-31. Urban Use Areas Exposure to Flood, Davao City

HAZARD				EXPOSURE					
Barangay	Flood Susceptibility	Expected Flood Depth	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
MARAPANGI	HF	> 1 meter	6	Tourism	0.02	0.02	100.00%	15,000.00	300,000.00
MARAPANGI	HF	> 1 meter	6	Agri-Industrial	9.85	8.44	85.69%	15,000.00	126,600,000.00
MARAPANGI	HF	> 1 meter	6	Residential	76.92	12.97	16.86%	10,000.00	129,700,000.00
ANGALAN	HF	> 1 meter	5	Agri-Industrial	12.30	12.30	100.00%	15,000.00	184,500,000.00
ANGALAN	HF	> 1 meter	3	Residential	11.73	11.73	100.00%	10,000.00	117,300,000.00
ANGALAN	HF	> 1 meter	3	Parks and Recreational	0.06	0.06	100.00%	15,000.00	900,000.00
BAGO OSHIRO	MF	> 1 meter	3	Residential	138.55	2.96	2.14%	10,000.00	29,600,000.00
BALENGAENG	HF	> 1 meter	5	Agri-Industrial	35.49	35.49	100.00%	15,000.00	532,350,000.00
BALENGAENG	MF	> 1 meter	3	Parks and Recreational	0.05	0.05	100.00%	15,000.00	750,000.00
BIAO ESCUELA	MF	> 1 meter	3	Parks and Recreational	0.04	0.04	100.00%	15,000.00	600,000.00
BIAO ESCUELA	HF	> 1 meter	3	Agri-Industrial	36.45	16.81	46.12%	15,000.00	252,150,000.00
BIAO ESCUELA	HF	> 1 meter	3	Residential	8.59	1.62	18.86%	10,000.00	16,200,000.00
BIAO GUIANGA	MF	> 1 meter	5	Agri-Industrial	6.20	6.20	100.00%	15,000.00	93,000,000.00
BIAO GUIANGA	MF	> 1 meter	3	Residential	3.83	1.69	44.13%	10,000.00	16,900,000.00
LOS AMIGOS	VHF	> 1 meter	5	Tourism	0.63	0.63	100.00%	15,000.00	9,450,000.00
LOS AMIGOS	VHF	> 1 meter	5	Residential	39.99	38.62	96.57%	10,000.00	386,200,000.00

Table U-31. Urban Use Areas Exposure to Flood, Davao City

HAZARD				EXPOSURE					
Barangay	Flood Susceptibility	Expected Flood Depth	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
LOS AMIGOS	VHF	> 1 meter	5	Industrial	3.31	3.31	100.00%	15,000.00	49,650,000.00
LOS AMIGOS	VHF	> 1 meter	5	Commercial	1.03	1.03	100.00%	15,000.00	15,450,000.00
MANAMBULAN	HF	> 1 meter	3	Residential	9.65	9.10	94.30%	10,000.00	91,000,000.00
MANUEL GUIANGA	HF	> 1 meter	3	Agri-Industrial	4.52	1.69	37.39%	15,000.00	25,350,000.00
MANUEL GUIANGA	MF	> 1 meter	3	Residential	7.31	0.17	2.33%	10,000.00	1,700,000.00

LANDSLIDE

In considering exposure to hazard, likelihood of occurrence is taken into consideration. This is measured through the following scores: 6 – frequent, which happens every 1 to 3 years; 5 – moderate, occurs every 3 to 10 years; 4 – occasional, happens every 10 to 30 years; 3 – improbable, every 30-100 years; 2 – rare event, every 100-200 years; and 1- very rare event which happens every 200 years.

Barangays Tapak, Matina Crossing, and Matina Pangí are the top three in terms of having the highest likelihood of occurrence of landslide with a score of six (6). For barangay Tapak the exposed area is used as residential while those of barangay Matina Crossing are for industrial, residential, and commercial use; and for barangay Matina Pangí, the areas are utilized for commercial, parks and recreation, tourism, residential, and industrial use.

Table U-32. Urban Use Areas Exposure to Landslide, Davao City

Barangay	HAZARD			EXPOSURE			
	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
19-B	4	Commercial	28.23	1.86	6.59%	15,000.00	279,000,000.00
19-B	4	Residential	179.82	1.32	0.73%	10,000.00	132,000,000.00
CARMEN	5	Residential	1.49	1.26	84.56%	10,000.00	126,000,000.00
GUMALANG	3	Agri-Industrial	21.27	2.68	12.60%	15,000.00	402,000,000.00
GUMALANG	3	Residential	4.56	0.38	8.33%	10,000.00	38,000,000.00
MALAGOS	3	Agri-Industrial	7.18	0.43	5.99%	15,000.00	64,500,000.00
MALAGOS	3	Tourism	13.48	0.12	0.89%	15,000.00	18,000,000.00
TAMBOBONG	5	Residential	4.49	4.49	100.00%	10,000.00	449,000,000.00
TAWAN-TAWAN	3	Residential	2.60	0.04	1.54%	10,000.00	4,000,000.00
ACACIA	3	Residential	15.14	15.14	100.00%	10,000.00	1,514,000,000.00
ACACIA	3	Parks and Recreational	0.04	0.04	95.24%	15,000.00	6,000,000.00
BUHANGIN	5	Cemetery	8.84	7.54	85.29%	15,000.00	1,131,000,000.00
BUHANGIN	5	Industrial	4.40	2.45	55.68%	15,000.00	367,500,000.00
BUHANGIN	5	Parks and Recreational	0.96	0.26	27.08%	15,000.00	39,000,000.00
BUHANGIN	5	Residential	335.29	36.71	10.95%	10,000.00	3,671,000,000.00
BUHANGIN	5	Commercial	52.90	0.54	1.02%	15,000.00	81,000,000.00
CABANTIAN	3	Cemetery	0.28	0.28	100.00%	15,000.00	42,000,000.00

Table U-32. Urban Use Areas Exposure to Landslide, Davao City

HAZARD				EXPOSURE			
Barangay	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
CABANTIAN	3	Residential	304.36	83.13	27.31%	10,000.00	8,313,000,000.00
CABANTIAN	3	Commercial	23.10	3.71	16.06%	15,000.00	556,500,000.00
CABANTIAN	3	Industrial	26.46	1.69	6.39%	15,000.00	253,500,000.00
CALLAWA	4	Residential	7.90	0.68	8.61%	10,000.00	68,000,000.00
COMMUNAL	3	Tourism	20.15	12.51	62.08%	15,000.00	1,876,500,000.00
COMMUNAL	3	Residential	161.79	67.72	41.86%	10,000.00	6,772,000,000.00
COMMUNAL	3	Commercial	11.99	1.26	10.51%	15,000.00	189,000,000.00
COMMUNAL	3	Industrial	4.48	0.43	9.60%	15,000.00	64,500,000.00
INDANGAN	3	Tourism	0.01	0.01	100.00%	15,000.00	1,500,000.00
INDANGAN	3	Commercial	1.70	1.58	92.94%	15,000.00	237,000,000.00
INDANGAN	3	Parks and Recreational	56.26	33.27	59.14%	15,000.00	4,990,500,000.00
INDANGAN	3	Industrial	11.16	1.86	16.67%	15,000.00	279,000,000.00
INDANGAN	3	Residential	247.61	23.10	9.33%	10,000.00	2,310,000,000.00
MANDUG	3	Parks and Recreational	32.36	20.19	62.39%	15,000.00	3,028,500,000.00
MANDUG	3	Residential	168.39	20.17	11.98%	10,000.00	2,017,000,000.00
MANDUG	3	Agri-Industrial	6.55	0.32	4.89%	15,000.00	48,000,000.00
MANDUG	3	Industrial	19.99	0.90	4.50%	15,000.00	135,000,000.00
SASA	3	Residential	223.79	1.14	0.51%	10,000.00	114,000,000.00
TIGATTO	5	Industrial	13.02	7.17	55.07%	15,000.00	1,075,500,000.00
TIGATTO	5	Residential	256.29	39.43	15.38%	10,000.00	3,943,000,000.00
WAAN	3	Cemetery	3.83	3.83	100.00%	15,000.00	574,500,000.00
WAAN	3	Residential	38.48	7.17	18.63%	10,000.00	717,000,000.00
A. ANGLIONGTO	3	Residential	155.67	0.72	0.46%	10,000.00	72,000,000.00
A. ANGLIONGTO	3	Industrial	17.15	0.01	0.06%	15,000.00	1,500,000.00
BUNAWAN	4	Industrial	115.60	11.07	9.58%	15,000.00	1,660,500,000.00
BUNAWAN	4	Residential	123.76	7.75	6.26%	10,000.00	775,000,000.00
GATUNGAN	3	Agri-Industrial	2.17	2.17	100.00%	15,000.00	325,500,000.00
GATUNGAN	3	Industrial	0.38	0.38	100.00%	15,000.00	57,000,000.00
GATUNGAN	3	Parks and Recreational	0.01	0.01	100.00%	15,000.00	1,200,000.00

Table U-32. Urban Use Areas Exposure to Landslide, Davao City

HAZARD				EXPOSURE			
Barangay	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
GATUNGAN	3	Residential	1.98	1.70	85.86%	10,000.00	170,000,000.00
ILANG	3	Residential	125.67	16.66	13.26%	10,000.00	1,666,000,000.00
ILANG	3	Industrial	90.12	0.07	0.08%	15,000.00	10,500,000.00
MAHAYAG	3	Agri-Industrial	26.18	6.41	24.48%	15,000.00	961,500,000.00
MAHAYAG	3	Industrial	70.08	15.68	22.37%	15,000.00	2,352,000,000.00
MAHAYAG	3	Residential	57.77	7.19	12.45%	10,000.00	719,000,000.00
MAHAYAG	3	Commercial	8.62	0.39	4.52%	15,000.00	58,500,000.00
MUDIANG	3	Residential	67.96	38.15	56.14%	10,000.00	3,815,000,000.00
MUDIANG	3	Industrial	6.42	3.09	48.13%	15,000.00	463,500,000.00
MUDIANG	3	Agri-Industrial	1.88	0.42	22.34%	15,000.00	63,000,000.00
PANACAN	4	Residential	256.99	67.73	26.36%	10,000.00	6,773,000,000.00
PANACAN	4	Industrial	120.37	21.00	17.45%	15,000.00	3,150,000,000.00
SAN ISIDRO	4	Residential	26.46	3.40	12.85%	10,000.00	340,000,000.00
SAN ISIDRO	4	Industrial	4.21	0.01	0.24%	15,000.00	1,500,000.00
TIBUNGCO	3	Agri-Industrial	4.17	0.99	23.74%	15,000.00	148,500,000.00
TIBUNGCO	3	Industrial	41.73	8.15	19.53%	15,000.00	1,222,500,000.00
TIBUNGCO	3	Residential	131.99	18.18	13.77%	10,000.00	1,818,000,000.00
BIAO JOAQUIN	3	Residential	3.19	0.82	25.71%	10,000.00	82,000,000.00
BIAO JOAQUIN	3	Agri-Industrial	20.15	4.09	20.30%	15,000.00	613,500,000.00
CALINAN	3	Residential	107.30	0.02	0.02%	10,000.00	2,000,000.00
DACUDAO	3	Agri-Industrial	37.72	2.24	5.94%	15,000.00	336,000,000.00
DALAGDAG	3	Residential	2.54	1.14	44.88%	10,000.00	114,000,000.00
DOMINGA	3	Residential	1.76	0.11	6.25%	10,000.00	11,000,000.00
INAYANGAN	5	Residential	3.02	1.89	62.58%	10,000.00	189,000,000.00
LACSON	3	Agri-Industrial	11.02	6.44	58.44%	15,000.00	966,000,000.00
LACSON	3	Residential	5.16	0.07	1.36%	10,000.00	7,000,000.00
LAMANAN	3	Residential	4.53	4.47	98.68%	10,000.00	447,000,000.00
LAMPIANA O	3	Residential	2.13	1.85	86.85%	10,000.00	185,000,000.00
MEGKAWAYAN	5	Residential	5.51	5.51	100.00%	10,000.00	551,000,000.00
MEGKAWAYAN	5	Tourism	1.93	1.93	100.00%	15,000.00	289,500,000.00
PANGYAN	3	Residential	5.09	1.33	26.13%	10,000.00	133,000,000.00
SALOY	3	Residential	1.78	1.77	99.44%	10,000.00	177,000,000.00

Table U-32. Urban Use Areas Exposure to Landslide, Davao City

HAZARD				EXPOSURE			
Barangay	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
SIRIB	3	Residential	7.56	0.90	11.90%	10,000.00	90,000,000.00
TALOMO RIVER	3	Agri-Industrial	18.30	1.18	6.45%	15,000.00	177,000,000.00
TALOMO RIVER	3	Residential	21.81	0.10	0.46%	10,000.00	10,000,000.00
TAMAYONG	3	Residential	4.57	2.67	58.42%	10,000.00	267,000,000.00
BAGANIHAN	5	Tourism	3.95	0.47	11.90%	15,000.00	70,500,000.00
BAGANIHAN	5	Residential	3.08	0.16	5.19%	10,000.00	16,000,000.00
BANTOL	3	Residential	2.61	2.61	100.00%	10,000.00	261,000,000.00
BUDA	5	Residential	19.63	4.07	20.73%	10,000.00	407,000,000.00
DALAG LUMOT	3	Residential	9.86	9.86	100.00%	10,000.00	986,000,000.00
DATU SALUMAY	3	Residential	21.30	4.94	23.19%	10,000.00	494,000,000.00
DATU SALUMAY	3	Tourism	8.83	0.29	3.28%	15,000.00	43,500,000.00
GUMITAN	5	Residential	8.82	6.63	75.17%	10,000.00	663,000,000.00
MAGSAYSAY	4	Residential	8.68	8.68	100.00%	10,000.00	868,000,000.00
MAGSAYSAY	4	Tourism	0.99	0.99	100.00%	15,000.00	148,500,000.00
MALAMBA	3	Residential	13.13	10.09	76.85%	10,000.00	1,009,000,000.00
MARILOG	5	Residential	92.60	91.12	98.40%	10,000.00	9,112,000,000.00
MARILOG	5	Tourism	29.99	26.29	87.66%	15,000.00	3,943,500,000.00
SALAYSAY	5	Residential	10.06	10.00	99.40%	10,000.00	1,000,000,000.00
SUAWAN	5	Residential	7.31	7.31	100.00%	10,000.00	731,000,000.00
SUAWAN	5	Agri-Industrial	19.10	1.77	9.27%	15,000.00	265,500,000.00
COLOSAS	3	Residential	9.67	9.65	99.79%	10,000.00	965,000,000.00
FATIMA	4	Residential	9.80	7.61	77.65%	15,000.00	1,141,500,000.00
LUMIAD	3	Residential	8.61	8.61	100.00%	10,000.00	861,000,000.00
MABUHAY	3	Residential	7.35	0.68	9.25%	10,000.00	68,000,000.00
MALABOG	3	Residential	18.21	18.21	100.00%	10,000.00	1,821,000,000.00
MALABOG	3	Tourism	4.34	4.34	100.00%	15,000.00	651,000,000.00
MAPULA	3	Residential	14.69	14.69	100.00%	10,000.00	1,469,000,000.00
PANDAITAN	3	Residential	9.35	9.34	99.89%	10,000.00	934,000,000.00
PAÑALUM	3	Residential	2.07	2.07	100.00%	10,000.00	207,000,000.00
PAQUIBATO	3	Residential	12.53	12.53	100.00%	10,000.00	1,253,000,000.00
PAQUIBATO	3	Tourism	0.99	0.99	100.00%	15,000.00	148,500,000.00
PARADISE EMBAC	3	Residential	1.90	1.90	100.00%	10,000.00	190,000,000.00

Table U-32. Urban Use Areas Exposure to Landslide, Davao City

HAZARD				EXPOSURE			
Barangay	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
SALAPAWAN	3	Residential	3.04	3.03	99.67%	10,000.00	303,000,000.00
SUMIMAO	4	Residential	1.77	1.77	100.00%	10,000.00	177,000,000.00
TAPAK	6	Residential	18.67	18.46	98.88%	10,000.00	1,846,000,000.00
CATALUNAN GRANDE	4	Residential	301.75	5.07	1.68%	10,000.00	507,000,000.00
CATALUNAN GRANDE	4	Parks and Recreational	5.79	0.02	0.35%	15,000.00	3,000,000.00
LANGUB	3	Parks and Recreational	2.13	2.13	100.00%	15,000.00	319,500,000.00
LANGUB	3	Tourism	0.32	0.32	100.00%	15,000.00	48,000,000.00
LANGUB	3	Commercial	0.01	0.01	100.00%	15,000.00	1,500,000.00
LANGUB	3	Residential	13.61	13.48	99.04%	10,000.00	1,348,000,000.00
MA-A	4	Tourism	16.55	6.86	41.45%	15,000.00	1,029,000,000.00
MA-A	4	Parks and Recreational	12.99	4.05	31.18%	15,000.00	607,500,000.00
MA-A	4	Residential	428.26	101.76	23.76%	10,000.00	10,176,000,000.00
MA-A	4	Commercial	90.16	10.05	11.15%	15,000.00	1,507,500,000.00
MA-A	4	Cemetery	25.41	2.15	8.46%	15,000.00	322,500,000.00
MA-A	4	Industrial	22.53	0.09	0.40%	15,000.00	13,500,000.00
MAGTUOD	3	Parks and Recreational	10.48	10.43	99.52%	15,000.00	1,564,500,000.00
MAGTUOD	3	Cemetery	91.87	84.30	91.76%	15,000.00	12,645,000,000.00
MAGTUOD	3	Residential	53.99	46.37	85.89%	10,000.00	4,637,000,000.00
MAGTUOD	3	Commercial	0.77	0.11	14.29%	15,000.00	16,500,000.00
MATINA CROSSING	6	Industrial	5.72	4.06	70.98%	15,000.00	609,000,000.00
MATINA CROSSING	6	Residential	250.40	29.25	11.68%	10,000.00	2,925,000,000.00
MATINA CROSSING	6	Commercial	50.80	0.21	0.41%	15,000.00	31,500,000.00
MATINA PANGI	6	Commercial	4.88	4.88	100.00%	15,000.00	732,000,000.00
MATINA PANGI	6	Parks and Recreational	0.53	0.40	75.47%	15,000.00	60,000,000.00
MATINA PANGI	6	Tourism	0.55	0.31	56.36%	15,000.00	46,500,000.00
MATINA PANGI	6	Residential	152.49	64.73	42.45%	15,000.00	9,709,500,000.00
MATINA PANGI	6	Industrial	0.03	0.01	33.33%	15,000.00	1,500,000.00

Table U-32. Urban Use Areas Exposure to Landslide, Davao City

HAZARD				EXPOSURE			
Barangay	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
TALOMO	5	Industrial	15.84	2.61	16.48%	15,000.00	391,500,000.00
TALOMO	5	Commercial	20.65	0.82	3.97%	15,000.00	123,000,000.00
TALOMO	5	Residential	297.55	10.51	3.53%	10,000.00	1,051,000,000.00
ALAMBRE	3	Residential	7.80	0.09	1.15%	10,000.00	9,000,000.00
ATAN-AWE	3	Residential	0.88	0.88	100.00%	10,000.00	88,000,000.00
BARACATAN	3	Residential	4.30	1.55	36.05%	10,000.00	155,000,000.00
BATO	3	Residential	44.80	1.00	2.23%	10,000.00	100,000,000.00
BAYABAS	3	Tourism	0.08	0.08	100.00%	15,000.00	12,000,000.00
BAYABAS	3	Residential	3.34	2.05	61.38%	10,000.00	205,000,000.00
BINUGAO	3	Agri-Industrial	13.50	10.65	78.89%	15,000.00	1,597,500,000.00
BINUGAO	3	Residential	52.79	24.70	46.79%	10,000.00	2,470,000,000.00
BINUGAO	3	Industrial	63.36	9.79	15.45%	15,000.00	1,468,500,000.00
BINUGAO	3	Commercial	3.43	0.04	1.17%	15,000.00	6,000,000.00
CAMANSI	3	Residential	2.44	1.73	70.90%	10,000.00	173,000,000.00
CATIGAN	3	Residential	6.30	2.21	35.08%	10,000.00	221,000,000.00
DALIAON PLANTATION	3	Residential	5.55	2.17	39.10%	10,000.00	217,000,000.00
EDEN	3	Residential	51.48	51.48	100.00%	10,000.00	5,148,000,000.00
EDEN	3	Agri-Industrial	1.27	1.27	100.00%	15,000.00	190,500,000.00
EDEN	3	Parks and Recreational	0.55	0.55	100.00%	15,000.00	82,500,000.00
EDEN	3	Commercial	0.08	0.08	100.00%	15,000.00	12,000,000.00
EDEN	3	Tourism	98.40	94.89	96.43%	15,000.00	14,233,500,000.00
KILATE	3	Residential	2.60	0.19	7.31%	10,000.00	19,000,000.00
MARAPANGI	3	Tourism	0.19	0.07	36.84%	15,000.00	10,500,000.00
MARAPANGI	3	Residential	76.91	1.99	2.59%	10,000.00	199,000,000.00
SIBULAN	3	Residential	2.13	2.13	100.00%	10,000.00	213,000,000.00
SIRAWAN	3	Agri-Industrial	85.27	14.86	17.43%	15,000.00	2,229,000,000.00
SIRAWAN	3	Residential	83.94	7.50	8.93%	10,000.00	750,000,000.00
TAGURANO	3	Residential	1.66	0.60	36.14%	10,000.00	60,000,000.00
TIBULOY	3	Agri-Industrial	7.75	7.75	100.00%	15,000.00	1,162,500,000.00
TIBULOY	3	Residential	3.76	3.57	94.95%	10,000.00	357,000,000.00
TUNGKALAN	3	Residential	3.84	1.09	28.39%	10,000.00	109,000,000.00

Table U-32. Urban Use Areas Exposure to Landslide, Davao City

HAZARD				EXPOSURE			
Barangay	Likelihood of Occurrence Score	Land Use Category (Specific Use)	Area per Land use description in Hectares	Exposed Area in Hectares	% Exposure	Replacement Cost per sq. meter (PHP)	Exposed Value (PHP)
MATINA BIAO	3	Agri-Industrial	6.89	0.82	11.90%	15,000.00	123,000,000.00
MATINA BIAO	3	Residential	2.76	0.05	1.81%	10,000.00	5,000,000.00
MANAMBULAN	3	Residential	9.65	0.12	1.24%	10,000.00	12,000,000.00
NEW CARMEN	3	Parks and Recreational	0.09	0.09	100.00%	15,000.00	13,500,000.00
NEW CARMEN	3	Residential	15.64	2.26	14.45%	10,000.00	226,000,000.00
NEW VALENCIA	3	Residential	4.93	1.00	20.28%	10,000.00	100,000,000.00
TALANDANG	3	Agri-Industrial	24.65	8.55	34.69%	15,000.00	1,282,500,000.00

CONSEQUENCE ESTIMATION

FLOOD

Severity of consequence is measured as follows: very high (VH), 4, means >40% non-residential structures are severely damaged or 20% of residential structures are severely damaged; high (H), 3, is when >20 to 40% non-residential based structures area severely damaged or 10 to 20% residential structures are severely damaged; moderate (M), 2, is when 10 to 20% of non-residential structures are severely damaged or 5 to 10% of dwelling units are severely damaged; and low (L), 1, is when production based structures are < 10% or < 5% of dwelling units are severely damaged.

Out of the 76 barangays affected by flood in the residential area, 57 barangays are assessed to have the highest severity of consequence when flood-induced damages incur in the area. These identified barangays have a total area of 3,940.11 hectares with a portion of 29.7% as an area wherein has most severe damage to residential structures.

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
1-A	HF	3	> 1 meter	6.95	10,000	6.94	694,000,000.00	99.86%	Very High	Very High	Moderate	Very High	3
1-A	VHF	3	> 1 meter	0.08	15,000	0.08	12,000,000.00	100.00%	Low	Low	High	Very High	3
1-A	HF	3	> 1 meter	1.41	15,000	1.02	153,000,000.00	72.34%	Low	Low	High	Very High	3

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
2-A	HF	4	> 1 meter	1.62	10,000	1.23	123,000,000.00	75.93%	Low	Low	Moderate	Very High	3
2-A	HF	4	> 1 meter	11.32	15,000	1.53	229,500,000.00	13.52%	Low	Low	High	Very High	2
5-A	VHF	3	> 1 meter	20.41	10,000	14.12	1,412,000,000.00	69.18%	Very High	Very High	Moderate	Very High	3
5-A	VHF	3	> 1 meter	0.01	15,000	0.01	1,500,000.00	100.00%	Low	Low	High	Very High	3
5-A	VHF	3	> 1 meter	4.34	15,000	0.14	21,000,000.00	3.23%	Low	Low	High	Very High	1
8-A	VHF	4	> 1 meter	82.83	10,000	47.94	4,794,000,000.00	57.88%	High	High	High	Very High	3
8-A	VHF	4	> 1 meter	3.84	15,000	3.84	576,000,000.00	100.00%	Low	Low	High	Very High	3
8-A	VHF	4	> 1 meter	5.65	15,000	4.29	643,500,000.00	75.93%	Low	Low	High	Very High	3
8-A	VHF	4	> 1 meter	18.90	15,000	3.17	475,500,000.00	16.77%	Low	Low	High	Very High	2
8-A	VHF	4	> 1 meter	1.17	15,000	0.04	6,000,000.00	3.42%	Low	Low	High	Very High	1
15-B	MF	3	> 1 meter	1.46	10,000	0.22	22,000,000.00	15.07%	Very High	Very High	Moderate	Very High	2
15-B	MF	3	> 1 meter	24.46	15,000	1.2	180,000,000.00	4.91%	Low	Low	High	Very High	1

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
19-B	HF	6	> 1 meter	179.82	10,000	40.47	4,047,000,000.00	22.51%	Moderate	Moderate	Moderate	Very High	3
19-B	VHF	6	> 1 meter	0.36	15,000	0.1	15,000,000.00	27.78%	Low	Low	High	Very High	2
19-B	VHF	6	> 1 meter	28.23	15,000	4.9	735,000,000.00	17.36%	Low	Low	High	Very High	2
19-B	VHF	6	> 1 meter	2.48	15,000	0.16	24,000,000.00	6.45%	Low	Low	High	Very High	1
21-C	HF	3	> 1 meter	5.18	10,000	1.32	132,000,000.00	25.48%	High	High	Moderate	Very High	3
22-C	HF	3	> 1 meter	4.78	10,000	3.53	353,000,000.00	73.85%	High	High	Moderate	Very High	3
22-C	HF	3	> 1 meter	0.05	15,000	0.001	150,000.00	2.00%	Low	Low	Moderate	Very High	1
23-C	HF	3	> 1 meter	12.79	10,000	11.18	1,118,000,000.00	87.41%	Very High	Very High	Moderate	Very High	3
23-C	HF	3	> 1 meter	0.72	15,000	0.43	64,500,000.00	59.72%	Low	Low	High	Very High	3
27-C	HF	4	> 1 meter	0.04	15,000	0.04	6,000,000.00	100.00%	Low	Low	High	Very High	3
27-C	HF	3	> 1 meter	4.10	15,000	3.01	451,500,000.00	73.41%	Low	Low	High	Very High	3
31-D	VHF	3	> 1 meter	13.56	10,000	7.74	774,000,000.00	57.08%	High	High	Moderate	Very High	3

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
31-D	HF	3	> 1 meter	0.13	15,000	0.11	16,500,000.00	84.62%	Low	Low	High	Very High	3
37-D	VHF	3	> 1 meter	3.55	10,000	0.76	76,000,000.00	21.41%	High	High	Moderate	Very High	3
39-D	VHF	3	> 1 meter	2.93	10,000	2.53	253,000,000.00	86.35%	Low	Low	Moderate	Very High	3
39-D	HF	3	> 1 meter	5.35	15,000	3.03	454,500,000.00	56.64%	Low	Low	High	Very High	3
39-D	HF	3	> 1 meter	0.89	15,000	0.16	24,000,000.00	17.98%	Low	Low	High	Very High	2
40-D	VHF	3	> 1 meter	1.34	10,000	1.30	130,000,000.00	97.01%	Very High	Very High	Moderate	Very High	3
40-D	VHF	3	> 1 meter	6.05	15,000	6.04	906,000,000.00	99.83%	Low	Low	High	Very High	3
AGDAO PROPER	MF	3	> 1 meter	7.62	10,000	7.62	762,000,000.00	100.00%	Very High	Very High	Moderate	Very High	3
AGDAO PROPER	MF	3	> 1 meter	0.01	15,000	0.01	1,500,000.00	100.00%	Low	Low	High	Very High	3
AGDAO PROPER	MF	3	> 1 meter	1.29	15,000	1.29	193,500,000.00	100.00%	Low	Low	High	Very High	3
AGDAO PROPER	MF	3	> 1 meter	22.65	15,000	19.23	2,884,500,000.00	84.90%	Low	Low	High	Very High	3
CENTRO	HF	3	> 1 meter	22.72	10,000	18.39	1,839,000,000.00	80.94%	Low	Low	Moderate	Very High	3

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
CENTRO	MF	3	> 1 meter	0.04	15,000	0.04	6,000,000.00	100.00%	Low	Low	High	Very High	3
CENTRO	HF	3	> 1 meter	10.73	15,000	8.83	1,324,500,000.00	82.29%	Low	Low	High	Very High	3
CENTRO	HF	3	> 1 meter	1.14	15,000	0.26	39,000,000.00	22.81%	Low	Low	High	Very High	2
GOV. VICENTE DUTERTE	HF	3	> 1 meter	20.34	10,000	14.16	1,416,000,000.00	69.62%	Very High	Very High	Moderate	Very High	3
GOV. VICENTE DUTERTE	MF	3	> 1 meter	4.95	15,000	2.49	373,500,000.00	50.30%	Low	Low	High	Very High	3
GOV. VICENTE DUTERTE	MF	3	> 1 meter	12.57	15,000	3.99	598,500,000.00	31.74%	Low	Low	High	Very High	2
LEON GARCIA SR.	HF	3	> 1 meter	12.04	10,000	10.85	1,085,000,000.00	90.12%	Residual	Residual	High	Very High	3
LEON GARCIA SR.	HF	3	> 1 meter	0.08	15,000	0.08	12,000,000.00	100.00%	Low	Low	High	Very High	3
LEON GARCIA SR.	HF	3	> 1 meter	0.29	15,000	0.29	43,500,000.00	100.00%	Low	Low	High	Very High	3
LEON GARCIA SR.	MF	3	> 1 meter	1.06	15,000	0.82	123,000,000.00	77.36%	Low	Low	High	Very High	3

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
LAPU - LAPU	HF	3	> 1 meter	23.68	10,000	17.27	1,727,000,000.00	72.93%	Moderate	Moderate	Moderate	Very High	3
LAPU - LAPU	MF	3	> 1 meter	0.04	15,000	0.04	6,000,000.00	100.00%	Low	Low	High	Very High	3
LAPU - LAPU	HF	3	> 1 meter	1.61	15,000	0.89	133,500,000.00	55.28%	Low	Low	High	Very High	3
LAPU - LAPU	HF	3	> 1 meter	22.95	15,000	5.97	895,500,000.00	26.01%	Low	Low	High	Very High	2
BAGUIO	MF	3	> 1 meter	12.03	10,000	8.10	810,000,000.00	67.33%	High	High	Moderate	Very High	3
BAGUIO	MF	3	> 1 meter	6.17	15,000	3.03	454,500,000.00	49.11%	Low	Low	High	Very High	3
GUMALANG	MF	4	> 1 meter	0.05	15,000	0.05	7,500,000.00	100.00%	Low	Low	High	Very High	3
GUMALANG	MF	4	> 1 meter	21.28	15,000	0.30	45,000,000.00	1.41%	Low	Low	High	Very High	1
MALAGOS	HF	4	> 1 meter	18.01	10,000	4.89	489,000,000.00	27.15%	High	High	High	Very High	3
MALAGOS	MF	4	> 1 meter	3.05	15,000	0.79	118,500,000.00	25.90%	Low	Low	High	Very High	2
MALAGOS	VHF	4	> 1 meter	13.49	15,000	0.95	142,500,000.00	7.04%	Low	Low	High	Very High	1
MALAGOS	HF	4	> 1 meter	7.82	15,000	0.17	25,500,000.00	2.17%	Low	Low	High	Very High	1

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
BUHANGIN	HF	5	> 1 meter	4.40	15,000	0.46	69,000,000.00	10.45%	Low	Low	High	Very High	2
BUHANGIN	HF	5	> 1 meter	335.40	10,000	9.41	941,000,000.00	2.81%	Moderate	Moderate	Moderate	Very High	1
BUHANGIN	HF	5	> 1 meter	52.91	15,000	0.16	24,000,000.00	0.30%	Low	Low	High	Very High	1
BUHANGIN	HF	5	> 1 meter	8.84	15,000	0.25	37,500,000.00	2.83%	Low	Low	High	Very High	1
CABANTI-AN	HF	3	> 1 meter	305.58	10,000	5.47	547,000,000.00	1.79%	Low	Low	Moderate	Very High	1
CABANTI-AN	HF	3	> 1 meter	26.47	15,000	0.04	6,000,000.00	0.15%	Low	Low	High	Very High	1
CABANTI-AN	HF	3	> 1 meter	23.17	15,000	0.07	10,500,000.00	0.30%	Low	Low	High	Very High	1
CALLAWA	VHF	3	> 1 meter	7.91	10,000	0.11	11,000,000.00	1.39%	High	High	Moderate	Very High	1
COMMUNAL	HF	4	> 1 meter	20.16	15,000	0.70	105,000,000.00	3.47%	Low	Low	High	Very High	1
COMMUNAL	HF	4	> 1 meter	162.84	10,000	7.08	708,000,000.00	4.35%	Residual	Residual	Moderate	Very High	1
COMMUNAL	HF	4	> 1 meter	11.99	15,000	0.02	3,000,000.00	0.17%	Low	Low	High	Very High	1
INDANGAN	HF	3	> 1 meter	1.71	15,000	0.45	67,500,000.00	26.32%	Low	Low	High	Very High	2

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
INDANGAN	HF	3	> 1 meter	247.61	10,000	0.40	40,000,000.00	0.16%	Residual	Residual	Moderate	Very High	1
MANDUG	VHF	6	> 1 meter	6.55	15,000	6.54	981,000,000.00	99.85%	Low	Low	High	Very High	3
MANDUG	VHF	6	> 1 meter	168.40	10,000	20.99	2,099,000,000.00	12.46%	Moderate	Moderate	High	Very High	2
A. ANGLI-ONGTO	VHF	3	> 1 meter	155.73	10,000	6.30	630,000,000.00	4.05%	Low	Low	Moderate	Very High	1
A. ANGLI-ONGTO	HF	3	> 1 meter	38.75	15,000	0.51	76,500,000.00	1.32%	Low	Low	High	Very High	1
BUNAWAN	HF	6	> 1 meter	124.56	10,000	35.10	3,510,000,000.00	28.18%	Very High	Very High	Moderate	Very High	3
BUNAWAN	MF	6	> 1 meter	0.24	15,000	0.11	16,500,000.00	45.83%	Low	Low	High	Very High	3
BUNAWAN	HF	6	> 1 meter	11.86	15,000	5.74	861,000,000.00	48.40%	Low	Low	High	Very High	3
BUNAWAN	HF	6	> 1 meter	115.63	15,000	25.79	3,868,500,000.00	22.30%	Low	Low	High	Very High	2
BUNAWAN	HF	6	> 1 meter	1.86	15,000	0.10	15,000,000.00	5.38%	Low	Low	High	Very High	1
GATUNGAN	HF	3	> 1 meter	0.01	15,000	0.01	1,500,000.00	100.00%	Low	Low	High	Very High	3
GATUNGAN	HF	3	> 1 meter	1.99	10,000	0.04	4,000,000.00	2.01%	High	High	Moderate	Very High	1

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
ILANG	VHF	3	> 1 meter	125.68	10,000	7.03	703,000,000.00	5.59%	High	High	Moderate	Very High	2
ILANG	VHF	3	> 1 meter	90.12	15,000	7.34	1,101,000,000.00	8.14%	Low	Low	High	Very High	1
LASANG	HF	6	> 1 meter	50.73	10,000	20.65	2,065,000,000.00	40.71%	Very High	Very High	High	Very High	3
LASANG	MF	6	> 1 meter	0.07	15,000	0.07	10,500,000.00	100.00%	Low	Low	High	Very High	3
LASANG	HF	6	> 1 meter	9.39	15,000	4.10	615,000,000.00	43.66%	Low	Low	High	Very High	3
LASANG	HF	6	> 1 meter	38.20	15,000	6.57	985,500,000.00	17.20%	Low	Low	High	Very High	2
LASANG	HF	6	> 1 meter	2.13	15,000	0.13	19,500,000.00	6.10%	Low	Low	High	Very High	1
MAHAYAG	HF	4	> 1 meter	57.77	10,000	0.74	74,000,000.00	1.28%	High	High	High	Very High	1
MAHAYAG	HF	4	> 1 meter	26.18	15,000	1.17	175,500,000.00	4.47%	Low	Low	High	Very High	1
BIAO JOAQUIN	MF	3	> 1 meter	3.20	10,000	2.38	238,000,000.00	74.38%	High	High	Moderate	Very High	3
BIAO JOAQUIN	MF	3	> 1 meter	20.15	15,000	16.06	2,409,000,000.00	79.70%	Low	Low	High	Very High	3
CALINAN	HF	5	> 1 meter	107.32	10,000	107.19	10,719,000,000.00	99.88%	Moderate	Moderate	Moderate	Very High	3

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
CALINAN	HF	5	> 1 meter	0.75	15,000	0.75	112,500,000.00	100.00%	Low	Low	High	Very High	3
CALINAN	HF	5	> 1 meter	2.17	15,000	2.17	325,500,000.00	100.00%	Low	Low	High	Very High	3
CALINAN	HF	5	> 1 meter	19.53	15,000	19.53	2,929,500,000.00	100.00%	Low	Low	High	Very High	3
CALINAN	HF	5	> 1 meter	5.97	15,000	5.97	895,500,000.00	100.00%	Low	Low	High	Very High	3
CALINAN	HF	5	> 1 meter	3.12	15,000	3.12	468,000,000.00	100.00%	Low	Low	High	Very High	3
CAWAYAN	HF	3	> 1 meter	1.84	10,000	0.30	30,000,000.00	16.30%	High	High	Moderate	Very High	2
DACUDAO	MF	3	> 1 meter	37.73	15,000	6.60	990,000,000.00	17.49%	Low	Low	High	Very High	2
DACUDAO	HF	3	> 1 meter	7.13	10,000	0.29	29,000,000.00	4.07%	Very High	Very High	Moderate	Very High	1
DALAG-DAG	HF	3	> 1 meter	2.54	10,000	1.18	118,000,000.00	46.46%	Very High	Very High	Moderate	Very High	3
DOMINGA	HF	3	> 1 meter	1.77	10,000	1.73	173,000,000.00	97.74%	Very High	Very High	Moderate	Very High	3
INAYANGAN	HF	3	> 1 meter	30.20	10,000	0.01	1,000,000.00	0.03%	Very High	Very High	Moderate	Very High	1
LACSON	HF	3	> 1 meter	5.16	10,000	1.30	130,000,000.00	25.19%	High	High	Moderate	Very High	3

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
LACSON	HF	3	> 1 meter	11.02	15,000	1.06	159,000,000.00	9.62%	Low	Low	High	Very High	1
LAMANAN	VHF	3	> 1 meter	4.54	10,000	0.06	6,000,000.00	1.32%	Very High	Very High	Moderate	Very High	1
LAM-PIANAO	MF	3	> 1 meter	2.14	10,000	0.29	29,000,000.00	13.55%	Very High	Very High	Moderate	Very High	2
TALOMO RIVER		3	< 1 meter	0.67	15,000	0.67	100,500,000.00	100.00%	Low	Low	High	Very High	3
TALOMO RIVER		3	< 1 meter	0.30	15,000	0.30	45,000,000.00	100.00%	Low	Low	High	Very High	3
TALOMO RIVER		3	< 1 meter	18.34	15,000	7.49	1,123,500,000.00	40.84%	Low	Low	High	Very High	3
WANGAN		4	< 1 meter	3.33	10,000	1.34	134,000,000.00	40.24%	High	High	High	Very High	3
WANGAN		4	< 1 meter	0.71	15,000	0.71	106,500,000.00	100.00%	Low	Low	High	Very High	3
GUMITAN	HF	6	> 1 meter	8.23	10,000	0.03	3,000,000.00	0.36%	Residual	Residual	Moderate	Very High	1

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
MALAMBA	VHF	5	> 1 meter	13.12	10,000	1.40	140,000,000.00	10.67%	Very High	Very High	High	Very High	2
MARILOG	HF	5	> 1 meter	92.61	10,000	0.10	10,000,000.00	0.11%	Residual	Residual	High	Very High	1
MALABOG	HF	3	> 1 meter	18.22	10,000	0.03	3,000,000.00	0.16%	Residual	Residual	High	Very High	1
BAGO APLAYA	HF	5	> 1 meter	95.45	10,000	28.28	2,828,000,000.00	29.63%	Residual	Residual	Moderate	Very High	3
BAGO APLAYA	HF	5	> 1 meter	16.24	15,000	5.86	879,000,000.00	36.08%	Low	Low	High	Very High	2
BAGO APLAYA	HF	5	> 1 meter	12.91	15,000	4.13	619,500,000.00	31.99%	Low	Low	High	Very High	2
BAGO APLAYA	MF	5	> 1 meter	5.45	15,000	0.40	60,000,000.00	7.34%	Low	Low	High	Very High	1
BAGO GAL-LERA	HF	4	> 1 meter	129.96	10,000	49.25	4,925,000,000.00	37.90%	Moderate	Moderate	Moderate	Very High	3
BAGO GAL-LERA	MF	4	> 1 meter	0.12	15,000	0.11	16,500,000.00	91.67%	Low	Low	High	Very High	3
BAGO GAL-LERA	MF	4	> 1 meter	0.65	15,000	0.28	42,000,000.00	43.08%	Low	Low	High	Very High	3
BALIOK	MF	3	> 1 meter	77.41	10,000	14.12	1,412,000,000.00	18.24%	Residual	Residual	Moderate	Very High	2
BALIOK	MF	3	> 1 meter	0.35	15,000	0.09	13,500,000.00	25.71%	Low	Low	High	Very High	2

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Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
BUCANA	HF	4	> 1 meter	0.67	15,000	0.30	45,000,000.00	44.78%	Low	Low	High	Very High	3
BUCANA	VHF	4	> 1 meter	216.99	10,000	86.42	8,642,000,000.00	39.83%	Very High	Very High	Moderate	Very High	3
BUCANA	HF	4	> 1 meter	1.92	15,000	0.22	33,000,000.00	11.46%	Low	Low	High	Very High	2
BUCANA	HF	4	> 1 meter	63.45	15,000	6.95	1,042,500,000.00	10.95%	Low	Low	High	Very High	2
CATALUNAN GRANDE	VHF	3	> 1 meter	301.77	10,000	69.62	6,962,000,000.00	23.07%	High	High	Moderate	Very High	3
CATALUNAN GRANDE	HF	3	> 1 meter	21.25	15,000	9.74	1,461,000,000.00	45.84%	Low	Low	High	Very High	3
CATALUNAN GRANDE	HF	3	> 1 meter	5.80	15,000	1.82	273,000,000.00	31.38%	Low	Low	High	Very High	2
CATALUNAN GRANDE	HF	3	> 1 meter	6.03	15,000	0.88	132,000,000.00	14.59%	Low	Low	High	Very High	2
CATALUNAN PEQUEÑO	MF	3	> 1 meter	1.32	15,000	0.22	33,000,000.00	16.67%	Low	Low	High	Very High	2

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Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
CATALUNAN PEQUEÑO	HF	3	> 1 meter	197.40	10,000	26.64	2,664,000,000.00	13.50%	Moderate	Moderate	Moderate	Very High	2
CATALUNAN PEQUEÑO	MF	3	> 1 meter	3.55	15,000	0.30	45,000,000.00	8.45%	Low	Low	High	Very High	1
CATALUNAN PEQUEÑO	MF	3	> 1 meter	13.65	15,000	0.74	111,000,000.00	5.42%	Low	Low	High	Very High	1
DUMOY	HF	4	> 1 meter	5.83	15,000	4.00	600,000,000.00	68.61%	Low	Low	High	Very High	3
DUMOY	HF	4	> 1 meter	8.33	15,000	5.15	772,500,000.00	61.82%	Low	Low	High	Very High	3
DUMOY	HF	4	> 1 meter	162.79	10,000	28.49	2,849,000,000.00	17.50%	Residual	Residual	Moderate	Very High	2
DUMOY	MF	4	> 1 meter	32.56	15,000	0.25	37,500,000.00	0.77%	Low	Low	High	Very High	1
LANGUB	HF	3	> 1 meter	13.62	10,000	0.01	1,000,000.00	0.07%	High	High	Moderate	Very High	1
MA-A	VHF	6	> 1 meter	428.30	10,000	136.31	13,631,000,000.00	31.83%	High	High	High	Very High	3
MA-A	VHF	6	> 1 meter	12.99	15,000	5.36	804,000,000.00	41.26%	Low	Low	High	Very High	3

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
MA-A	VHF	6	> 1 meter	22.55	15,000	18.04	2,706,000,000.00	80.00%	Low	Low	High	Very High	3
MA-A	VHF	6	> 1 meter	16.56	15,000	5.60	840,000,000.00	33.82%	Low	Low	High	Very High	2
MA-A	VHF	6	> 1 meter	90.17	15,000	27.80	4,170,000,000.00	30.83%	Low	Low	High	Very High	2
MAGTUOD	HF	3	> 1 meter	53.99	10,000	10.06	1,006,000,000.00	18.63%	Very High	Very High	High	Very High	2
MAGTUOD	HF	3	> 1 meter	10.49	15,000	0.41	61,500,000.00	3.91%	Low	Low	High	Very High	1
MATINA APLAYA	VHF	6	> 1 meter	155.55	10,000	72.79	7,279,000,000.00	46.80%	High	High	High	Very High	3
MATINA APLAYA	VHF	6	> 1 meter	20.48	15,000	13.87	2,080,500,000.00	67.72%	Low	Low	High	Very High	3
MATINA APLAYA	MF	6	> 1 meter	2.35	15,000	0.47	70,500,000.00	20.00%	Low	Low	High	Very High	2
TALOMO		6	< 1meter	5.46	15,000	1.72	258,000,000.00	31.50%	Low	Low	High	Very High	2
ALAMBRE	HF	3	> 1 meter	7.87	10,000	0.09	9,000,000.00	1.14%	High	High	Moderate	Very High	1
ALAMBRE		3	< 1meter	12.70	15,000	0.0003	45,000.00	0.0024%	Low	Low	Moderate	Very High	1

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
BANKAS HEIGHTS	HF	3	> 1 meter	29.39	10,000	18.61	1,861,000,000.00	63.32%	Residual	Residual	Moderate	Very High	3
BANKAS HEIGHTS	HF	3	> 1 meter	1.67	15,000	0.18	27,000,000.00	10.78%	Low	Low	High	Very High	2
BATO	HF	3	> 1 meter	0.47	15,000	0.33	49,500,000.00	70.21%	Low	Low	High	Very High	3
BATO	HF	3	> 1 meter	44.81	10,000	2.08	208,000,000.00	4.64%	Residual	Residual	Moderate	Very High	1
CROSSING BAYABAS	HF	5	> 1 meter	92.31	10,000	21.61	2,161,000,000.00	23.41%	High	High	Moderate	Very High	3
BINUGAO	HF	3	> 1 meter	52.80	10,000	26.77	2,677,000,000.00	50.70%	High	High	Moderate	Very High	3
BINUGAO	MF	3	> 1 meter	1.34	15,000	1.34	201,000,000.00	100.00%	Low	Low	High	Very High	3
BINUGAO	HF	3	> 1 meter	63.36	15,000	48.27	7,240,500,000.00	76.18%	Low	Low	High	Very High	3
BINUGAO	HF	3	> 1 meter	3.44	15,000	1.44	216,000,000.00	41.86%	Low	Low	High	Very High	3
BINUGAO	HF	3	> 1 meter	13.50	15,000	0.15	22,500,000.00	1.11%	Low	Low	High	Very High	1
CATIGAN	HF	3	> 1 meter	6.31	10,000	0.24	24,000,000.00	3.80%	Very High	Very High	Moderate	Very High	1
DALIAO	MF	3	> 1 meter	1.79	15,000	1.46	219,000,000.00	81.56%	Low	Low	High	Very High	3

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
DALIAO	MF	3	> 1 meter	107.79	15,000	23.42	3,513,000,000.00	21.73%	Moderate	Moderate	Moderate	Very High	3
DALIAO	MF	3	> 1 meter	0.16	15,000	0.07	10,500,000.00	43.75%	Low	Low	High	Very High	3
DALIAO	MF	3	> 1 meter	14.75	15,000	7.84	1,176,000,000.00	53.15%	Low	Low	High	Very High	3
EDEN	HF	3	> 1 meter	98.41	15,000	9.12	1,368,000,000.00	9.27%	Low	Low	High	Very High	1
EDEN	HF	3	> 1 meter	51.49	10,000	2.35	235,000,000.00	4.56%	Very High	Very High	Moderate	Very High	1
KILATE	HF	3	> 1 meter	2.61	10,000	0.11	11,000,000.00	4.21%	Very High	Very High	Moderate	Very High	1
LIZADA	MF	5	> 1 meter	5.18	15,000	2.10	315,000,000.00	40.54%	Low	Low	High	Very High	3
LIZADA	HF	5	> 1 meter	100.96	10,000	19.82	1,982,000,000.00	19.63%	High	High	High	Very High	2
LIZADA	MF	5	> 1 meter	13.44	15,000	1.42	213,000,000.00	10.57%	Low	Low	High	Very High	2
LUBOGAN	HF	4	> 1 meter	90.18	15,000	32.08	4,812,000,000.00	35.57%	Residual	Residual	High	Very High	3
LUBOGAN	HF	4	> 1 meter	1.10	15,000	0.07	10,500,000.00	6.36%	Low	Low	High	Very High	1
LUBOGAN	HF	4	> 1 meter	5.67	15,000	0.09	13,500,000.00	1.59%	Low	Low	High	Very High	1

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
MARAPAN GI	HF	6	> 1 meter	0.02	15,000	0.02	3,000,000.00	100.00%	Low	Low	High	Very High	3
MARAPAN GI	HF	6	> 1 meter	9.85	15,000	8.44	1,266,000,000.00	85.69%	Low	Low	High	Very High	3
MARAPAN GI	HF	6	> 1 meter	76.92	10,000	12.97	1,297,000,000.00	16.86%	High	High	High	Very High	2
ANGALAN	HF	5	> 1 meter	12.30	15,000	12.30	1,845,000,000.00	100.00%	Low	Low	High	Very High	3
ANGALAN	HF	3	> 1 meter	11.73	10,000	11.73	1,173,000,000.00	100.00%	High	High	Moderate	Very High	3
ANGALAN	HF	3	> 1 meter	0.06	15,000	0.06	9,000,000.00	100.00%	Low	Low	High	Very High	3
BAGO OSHIRO	MF	3	> 1 meter	138.55	10,000	2.96	296,000,000.00	2.14%	Very High	Very High	Moderate	Very High	1
BALENGAENG	HF	5	> 1 meter	35.49	15,000	35.49	5,323,500,000.00	100.00%	Low	Low	High	Very High	3
BALENGAENG	MF	3	> 1 meter	0.05	15,000	0.05	7,500,000.00	100.00%	Low	Low	High	Very High	3
BIAO ESCUELA	MF	3	> 1 meter	0.04	15,000	0.04	6,000,000.00	100.00%	Low	Low	High	Very High	3
BIAO ESCUELA	HF	3	> 1 meter	36.45	15,000	16.81	2,521,500,000.00	46.12%	Low	Low	High	Very High	3
BIAO ESCUELA	HF	3	> 1 meter	8.59	10,000	1.62	162,000,000.00	18.86%	Very High	Very High	Moderate	Very High	2

Table U-33. Urban Use Area Severity of Consequence Estimation, Flood, Davao City

HAZARD				EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
							HxGx10000	H/F					= (P+Q+R)/n
BIAO GUI-ANGA	MF	5	> 1 meter	6.20	15,000	6.20	930,000,000.00	100.00%	Low	Low	High	Very High	3
BIAO GUI-ANGA	MF	3	> 1 meter	3.83	10,000	1.69	169,000,000.00	44.13%	Moderate	Moderate	Moderate	Very High	3
LOS AMI-GOS	VHF	5	> 1 meter	0.63	15,000	0.63	94,500,000.00	100.00%	Low	Low	High	Very High	3
LOS AMI-GOS	VHF	5	> 1 meter	39.99	10,000	38.62	3,862,000,000.00	96.57%	High	High	High	Very High	3
LOS AMI-GOS	VHF	5	> 1 meter	3.31	15,000	3.31	496,500,000.00	100.00%	Low	Low	High	Very High	3
LOS AMI-GOS	VHF	5	> 1 meter	1.03	15,000	1.03	154,500,000.00	100.00%	Low	Low	High	Very High	3
MANAMBULAN	HF	3	> 1 meter	9.65	10,000	9.10	910,000,000.00	94.30%	High	High	High	Very High	3
MANUEL GUIANGA	HF	3	> 1 meter	4.52	15,000	1.69	253,500,000.00	37.39%	Low	Low	High	Very High	2
MANUEL GUIANGA	MF	3	> 1 meter	7.31	10,000	0.17	17,000,000.00	2.33%	Very High	Very High	High	Very High	1

LANDSLIDE

Severity of consequence is measured as follows: very high (VH), 4, means >40% non-residential structures are severely damaged or 20% of residential structures are severely damaged; high (H), 3, is when >20 to 40% non-residential based structures area severely damaged or 10 to 20% residential structures are severely damaged; moderate (M), 2, is when 10 to 20% of non-residential structures are severely damaged or 5 to 10% of dwelling units are severely damaged; and low (L), 1, is when production based structures are < 10% or < 5% of dwelling units are severely damaged.

The 79 affected barangays in the residential area were found to have an average of 24.2% expected damaged residential structure brought about by landslide which is categorized as a high severity of consequence based from the severity of consequence score matrix (NDCC Memorandum Order No. 4, Series of 1998).

Table U-34. Urban Use Area Severity of Consequence Estimation, Landslide, Davao City

HAZARD		EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
					HxGx10000	H/F					= (P+Q+R)/n
19-B	4	28.23	15,000.00	1.86	279,000,000.00	6.59%	low	low	moderate	very high	3
19-B	4	179.82	10,000.00	1.32	132,000,000.00	0.73%	moderate	moderate	low	very high	3
CARMEN	5	1.49	10,000.00	1.26	126,000,000.00	84.56%	very high	very high	low	very high	3
GUMALANG	3	21.27	15,000.00	2.68	402,000,000.00	12.60%	moderate	moderate	moderate	very high	3
GUMALANG	3	4.56	10,000.00	0.38	38,000,000.00	8.33%	very high	very high	low	very high	2
MALAGOS	3	7.18	15,000.00	0.43	64,500,000.00	5.99%	moderate	moderate	moderate	very high	3
MALAGOS	3	13.48	15,000.00	0.12	18,000,000.00	0.89%	moderate	moderate	low	very high	2
TAMBOBONG	5	4.49	10,000.00	4.49	449,000,000.00	100.00%	very high	very high	low	very high	3
TAWAN-TAWAN	3	2.60	10,000.00	0.04	4,000,000.00	1.54%	very high	very high	low	very high	2
ACACIA	3	15.14	10,000.00	15.14	1,514,000,000.00	100.00%	high	high	low	very high	3
ACACIA	3	0.04	15,000.00	0.04	6,000,000.00	95.24%	low	low	low	very high	2
BUHANGIN	5	8.84	15,000.00	7.54	1,131,000,000.00	85.29%	moderate	moderate	low	very high	3

Table U-34. Urban Use Area Severity of Consequence Estimation, Landslide, Davao City

HAZARD		EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
					HxGx10000	H/F					= (P+Q+R)/n
BUHANGIN	5	4.40	15,000.00	2.45	367,500,000.00	55.68%	low	low	moderate	very high	3
BUHANGIN	5	0.96	15,000.00	0.26	39,000,000.00	27.08%	moderate	moderate	moderate	very high	2
BUHANGIN	5	335.29	10,000.00	36.71	3,671,000,000.00	10.95%	moderate	moderate	moderate	very high	3
BUHANGIN	5	52.90	15,000.00	0.54	81,000,000.00	1.02%	low	low	moderate	very high	3
CABANTIAN	3	0.28	15,000.00	0.28	42,000,000.00	100.00%	moderate	moderate	low	very high	2
CABANTIAN	3	304.36	10,000.00	83.13	8,313,000,000.00	27.31%	low	low	low	very high	3
CABANTIAN	3	23.10	15,000.00	3.71	556,500,000.00	16.06%	low	low	moderate	very high	3
CABANTIAN	3	26.46	15,000.00	1.69	253,500,000.00	6.39%	low	low	moderate	very high	3
CALLAWA	4	7.90	10,000.00	0.68	68,000,000.00	8.61%	high	high	low	very high	3
COMMUNAL	3	20.15	15,000.00	12.51	1,876,500,000.00	62.08%	moderate	moderate	moderate	very high	3
COMMUNAL	3	161.79	10,000.00	67.72	6,772,000,000.00	41.86%	low	low	low	very high	3
COMMUNAL	3	11.99	15,000.00	1.26	189,000,000.00	10.51%	moderate	moderate	moderate	very high	3
COMMUNAL	3	4.48	15,000.00	0.43	64,500,000.00	9.60%	low	low	moderate	very high	3
INDANGAN	3	0.01	15,000.00	0.01	1,500,000.00	100.00%	moderate	moderate	low	very high	2
INDANGAN	3	1.70	15,000.00	1.58	237,000,000.00	92.94%	moderate	moderate	moderate	very high	3
INDANGAN	3	56.26	15,000.00	33.27	4,990,500,000.00	59.14%	moderate	moderate	low	very high	3
INDANGAN	3	11.16	15,000.00	1.86	279,000,000.00	16.67%	moderate	moderate	moderate	very high	3
INDANGAN	3	247.61	10,000.00	23.10	2,310,000,000.00	9.33%	residual	residual	low	very high	3
MANDUG	3	32.36	15,000.00	20.19	3,028,500,000.00	62.39%	moderate	moderate	low	very high	3
MANDUG	3	168.39	10,000.00	20.17	2,017,000,000.00	11.98%	moderate	moderate	low	very high	3
MANDUG	3	6.55	15,000.00	0.32	48,000,000.00	4.89%	moderate	moderate	moderate	very high	2
MANDUG	3	19.99	15,000.00	0.90	135,000,000.00	4.50%	low	low	moderate	very high	3
SASA	3	223.79	10,000.00	1.14	114,000,000.00	0.51%	moderate	moderate	low	very high	3
TIGATTO	5	13.02	15,000.00	7.17	1,075,500,000.00	55.07%	very high	very high	low	very high	3

Table U-34. Urban Use Area Severity of Consequence Estimation, Landslide, Davao City

HAZARD		EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
					HxGx10000	H/F					= (P+Q+R)/n
TIGATTO	5	256.29	10,000.00	39.43	3,943,000,000.00	15.38%	low	low	moderate	very high	3
WAAN	3	3.83	15,000.00	3.83	574,500,000.00	100.00%	residual	residual	low	very high	3
WAAN	3	38.48	10,000.00	7.17	717,000,000.00	18.63%	high	high	low	very high	3
A. ANGLIONGTO	3	155.67	10,000.00	0.72	72,000,000.00	0.46%	low	low	moderate	very high	3
A. ANGLIONGTO	3	17.15	15,000.00	0.01	1,500,000.00	0.06%	low	low	moderate	very high	2
BUNAWAN	4	115.60	15,000.00	11.07	1,660,500,000.00	9.58%	low	low	moderate	very high	3
BUNAWAN	4	123.76	10,000.00	7.75	775,000,000.00	6.26%	very high	very high	low	very high	3
GATUNGAN	3	2.17	15,000.00	2.17	325,500,000.00	100.00%	moderate	moderate	moderate	very high	3
GATUNGAN	3	0.38	15,000.00	0.38	57,000,000.00	100.00%	low	low	moderate	very high	3
GATUNGAN	3	0.01	15,000.00	0.01	1,200,000.00	100.00%	moderate	moderate	moderate	very high	2
GATUNGAN	3	1.98	10,000.00	1.70	170,000,000.00	85.86%	high	high	low	very high	3
ILANG	3	125.67	10,000.00	16.66	1,666,000,000.00	13.26%	high	high	low	very high	3
ILANG	3	90.12	15,000.00	0.07	10,500,000.00	0.08%	low	low	moderate	very high	2
MAHAYAG	3	26.18	15,000.00	6.41	961,500,000.00	24.48%	low	low	moderate	very high	3
MAHAYAG	3	70.08	15,000.00	15.68	2,352,000,000.00	22.37%	low	low	moderate	very high	3
MAHAYAG	3	57.77	10,000.00	7.19	719,000,000.00	12.45%	high	high	low	very high	3
MAHAYAG	3	8.62	15,000.00	0.39	58,500,000.00	4.52%	moderate	moderate	moderate	very high	3
MUDIANG	3	67.96	10,000.00	38.15	3,815,000,000.00	56.14%	high	high	moderate	very high	3
MUDIANG	3	6.42	15,000.00	3.09	463,500,000.00	48.13%	moderate	moderate	moderate	very high	3
MUDIANG	3	1.88	15,000.00	0.42	63,000,000.00	22.34%				very high	3
PANACAN	4	256.99	10,000.00	67.73	6,773,000,000.00	26.36%	high	high	moderate	very high	3
PANACAN	4	120.37	15,000.00	21.00	3,150,000,000.00	17.45%	low	low	low	very high	3
SAN ISIDRO	4	26.46	10,000.00	3.40	340,000,000.00	12.85%	moderate	moderate	moderate	very high	3
SAN ISIDRO	4	4.21	15,000.00	0.01	1,500,000.00	0.24%	very high	very high	low	very high	2

Table U-34. Urban Use Area Severity of Consequence Estimation, Landslide, Davao City

HAZARD		EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
					HxGx10000	H/F					= (P+Q+R)/n
TIBUNGCO	3	4.17	15,000.00	0.99	148,500,000.00	23.74%	very high	very high	low	very high	3
TIBUNGCO	3	41.73	15,000.00	8.15	1,222,500,000.00	19.53%	low	low	moderate	very high	3
TIBUNGCO	3	131.99	10,000.00	18.18	1,818,000,000.00	13.77%	low	low	moderate	very high	3
BIAO JOAQUIN	3	3.19	10,000.00	0.82	82,000,000.00	25.71%	high	high	low	very high	3
BIAO JOAQUIN	3	20.15	15,000.00	4.09	613,500,000.00	20.30%	moderate	moderate	moderate	very high	3
CALINAN	3	107.30	10,000.00	0.02	2,000,000.00	0.02%	moderate	moderate	low	very high	2
DACUDAO	3	37.72	15,000.00	2.24	336,000,000.00	5.94%	moderate	moderate	moderate	very high	3
DALAGDAG	3	2.54	10,000.00	1.14	114,000,000.00	44.88%	very high	very high	low	very high	3
DOMINGA	3	1.76	10,000.00	0.11	11,000,000.00	6.25%	very high	very high	low	very high	2
INAYANGAN	5	3.02	10,000.00	1.89	189,000,000.00	62.58%	very high	very high	low	very high	3
LACSON	3	11.02	15,000.00	6.44	966,000,000.00	58.44%	moderate	moderate	moderate	very high	3
LACSON	3	5.16	10,000.00	0.07	7,000,000.00	1.36%	high	high	low	very high	2
LAMANAN	3	4.53	10,000.00	4.47	447,000,000.00	98.68%	very high	very high	low	very high	3
LAMPIANAO	3	2.13	10,000.00	1.85	185,000,000.00	86.85%	very high	very high	low	very high	3
MEGKAWAYAN	5	5.51	10,000.00	5.51	551,000,000.00	100.00%	very high	very high	low	very high	3
MEGKAWAYAN	5	1.93	15,000.00	1.93	289,500,000.00	100.00%	moderate	moderate	low	very high	3
PANGYAN	3	5.09	10,000.00	1.33	133,000,000.00	26.13%	very high	very high	low	very high	3
SALOY	3	1.78	10,000.00	1.77	177,000,000.00	99.44%	residual	residual	low	very high	3
SIRIB	3	7.56	10,000.00	0.90	90,000,000.00	11.90%	high	high	low	very high	3
TALOMO RIVER	3	18.30	15,000.00	1.18	177,000,000.00	6.45%	high	high	low	very high	3
TALOMO RIVER	3	21.81	10,000.00	0.10	10,000,000.00	0.46%	moderate	moderate	moderate	very high	2
TAMAYONG	3	4.57	10,000.00	2.67	267,000,000.00	58.42%	moderate	moderate	low	very high	3
BAGANIHAN	5	3.95	15,000.00	0.47	70,500,000.00	11.90%	moderate	moderate	moderate	very high	3
BAGANIHAN	5	3.08	10,000.00	0.16	16,000,000.00	5.19%	very high	very high	low	very high	2

Table U-34. Urban Use Area Severity of Consequence Estimation, Landslide, Davao City

HAZARD		EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
					HxGx10000	H/F					= (P+Q+R)/n
BANTOL	3	2.61	10,000.00	2.61	261,000,000.00	100.00%	very high	very high	low	very high	3
BUDA	5	19.63	10,000.00	4.07	407,000,000.00	20.73%	very high	very high	low	very high	3
DALAG LUMOT	3	9.86	10,000.00	9.86	986,000,000.00	100.00%	very high	very high	low	very high	3
DATU SALUMAY	3	21.30	10,000.00	4.94	494,000,000.00	23.19%	very high	very high	low	very high	3
DATU SALUMAY	3	8.83	15,000.00	0.29	43,500,000.00	3.28%	moderate	moderate	moderate	very high	2
GUMITAN	5	8.82	10,000.00	6.63	663,000,000.00	75.17%	very high	very high	low	very high	3
MAGSAYSAY	4	8.68	10,000.00	8.68	868,000,000.00	100.00%	very high	very high	low	very high	3
MAGSAYSAY	4	0.99	15,000.00	0.99	148,500,000.00	100.00%	moderate	moderate	low	very high	3
MALAMBA	3	13.13	10,000.00	10.09	1,009,000,000.00	76.85%	very high	very high	low	very high	3
MARILOG	5	92.60	10,000.00	91.12	9,112,000,000.00	98.40%	residual	residual	low	very high	3
MARILOG	5	29.99	15,000.00	26.29	3,943,500,000.00	87.66%	moderate	moderate	low	very high	3
SALAYSAY	5	10.06	10,000.00	10.00	1,000,000,000.00	99.40%	residual	residual	low	very high	3
SUAWAN	5	7.31	10,000.00	7.31	731,000,000.00	100.00%	moderate	moderate	moderate	very high	3
SUAWAN	5	19.10	15,000.00	1.77	265,500,000.00	9.27%	very high	very high	low	very high	3
COLOSAS	3	9.67	10,000.00	9.65	965,000,000.00	99.79%	very high	very high	low	very high	3
FATIMA	4	9.80	15,000.00	7.61	1,141,500,000.00	77.65%	very high	very high	low	very high	3
LUMIAD	3	8.61	10,000.00	8.61	861,000,000.00	100.00%	very high	very high	low	very high	3
MABUHAY	3	7.35	10,000.00	0.68	68,000,000.00	9.25%	very high	very high	low	very high	3
MALABOG	3	18.21	10,000.00	18.21	1,821,000,000.00	100.00%	residual	residual	low	very high	3
MALABOG	3	4.34	15,000.00	4.34	651,000,000.00	100.00%	moderate	moderate	low	very high	3
MAPULA	3	14.69	10,000.00	14.69	1,469,000,000.00	100.00%	residual	residual	low	very high	3
PANDAITAN	3	9.35	10,000.00	9.34	934,000,000.00	99.89%	moderate	moderate	moderate	very high	3
PAÑALUM	3	2.07	10,000.00	2.07	207,000,000.00	100.00%	very high	very high	low	very high	3
PAQUIBATO	3	12.53	10,000.00	12.53	1,253,000,000.00	100.00%	high	high	low	very high	3
PAQUIBATO	3	0.99	15,000.00	0.99	148,500,000.00	100.00%	very high	very high	low	very high	3

Table U-34. Urban Use Area Severity of Consequence Estimation, Landslide, Davao City

HAZARD		EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
					HxGx10000	H/F					= (P+Q+R)/n
PARADISE EMBAC	3	1.90	10,000.00	1.90	190,000,000.00	100.00%	high	high	low	very high	3
SALAPAWAN	3	3.04	10,000.00	3.03	303,000,000.00	99.67%	very high	very high	low	very high	3
SUMIMAO	4	1.77	10,000.00	1.77	177,000,000.00	100.00%	very high	very high	low	very high	3
TAPAK	6	18.67	10,000.00	18.46	1,846,000,000.00	98.88%	residual	residual	low	very high	3
CATALUNAN GRANDE	4	301.75	10,000.00	5.07	507,000,000.00	1.68%	high	high	low	very high	3
CATALUNAN GRANDE	4	5.79	15,000.00	0.02	3,000,000.00	0.35%	moderate	moderate	low	very high	2
LANGUB	3	2.13	15,000.00	2.13	319,500,000.00	100.00%	moderate	moderate	low	very high	3
LANGUB	3	0.32	15,000.00	0.32	48,000,000.00	100.00%	moderate	moderate	moderate	very high	2
LANGUB	3	0.01	15,000.00	0.01	1,500,000.00	100.00%	moderate	moderate	moderate	very high	2
LANGUB	3	13.61	10,000.00	13.48	1,348,000,000.00	99.04%	high	high	low	very high	3
MA-A	4	16.55	15,000.00	6.86	1,029,000,000.00	41.45%	moderate	moderate	low	very high	3
MA-A	4	12.99	15,000.00	4.05	607,500,000.00	31.18%	moderate	moderate	low	very high	3
MA-A	4	428.26	10,000.00	101.76	10,176,000,000.00	23.76%	high	high	low	very high	3
MA-A	4	90.16	15,000.00	10.05	1,507,500,000.00	11.15%	low	low	moderate	very high	3
MA-A	4	25.41	15,000.00	2.15	322,500,000.00	8.46%	moderate	moderate	low	very high	3
MA-A	4	22.53	15,000.00	0.09	13,500,000.00	0.40%	low	low	moderate	very high	2
MAGTUOD	3	10.48	15,000.00	10.43	1,564,500,000.00	99.52%	moderate	moderate	low	very high	3
MAGTUOD	3	91.87	15,000.00	84.30	12,645,000,000.00	91.76%	moderate	moderate	low	very high	3
MAGTUOD	3	53.99	10,000.00	46.37	4,637,000,000.00	85.89%	very high	very high	low	very high	3
MAGTUOD	3	0.77	15,000.00	0.11	16,500,000.00	14.29%	moderate	moderate	moderate	very high	2
MATINA CROSS-ING	6	5.72	15,000.00	4.06	609,000,000.00	70.98%	low	low	low	very high	3
MATINA CROSS-ING	6	250.40	10,000.00	29.25	2,925,000,000.00	11.68%	low	low	low	very high	3

Table U-34. Urban Use Area Severity of Consequence Estimation, Landslide, Davao City

HAZARD		EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
					HxGx10000	H/F					= (P+Q+R)/n
MATINA CROSS-ING	6	50.80	15,000.00	0.21	31,500,000.00	0.41%	low	low	low	very high	2
MATINA PANGI	6	4.88	15,000.00	4.88	732,000,000.00	100.00%	low	low	moderate	very high	3
MATINA PANGI	6	0.53	15,000.00	0.40	60,000,000.00	75.47%	moderate	moderate	low	very high	3
MATINA PANGI	6	0.55	15,000.00	0.31	46,500,000.00	56.36%	moderate	moderate	low	very high	2
MATINA PANGI	6	152.49	15,000.00	64.73	9,709,500,000.00	42.45%	very high	very high	low	very high	3
MATINA PANGI	6	0.03	15,000.00	0.01	1,500,000.00	33.33%	low	low	moderate	very high	2
TALOMO	5	15.84	15,000.00	2.61	391,500,000.00	16.48%	low	low	moderate	very high	3
TALOMO	5	20.65	15,000.00	0.82	123,000,000.00	3.97%	moderate	moderate	low	very high	3
TALOMO	5	297.55	10,000.00	10.51	1,051,000,000.00	3.53%	low	low	moderate	very high	3
ALAMBRE	3	7.80	10,000.00	0.09	9,000,000.00	1.15%	high	high	low	very high	2
ATAN-AWE	3	0.88	10,000.00	0.88	88,000,000.00	100.00%	very high	very high	low	very high	3
BARACATAN	3	4.30	10,000.00	1.55	155,000,000.00	36.05%	very high	very high	low	very high	3
BATO	3	44.80	10,000.00	1.00	100,000,000.00	2.23%	low	low	low	very high	3
BAYABAS	3	0.08	15,000.00	0.08	12,000,000.00	100.00%	moderate	moderate	low	very high	2
BAYABAS	3	3.34	10,000.00	2.05	205,000,000.00	61.38%	very high	very high	low	very high	3
BINUGAO	3	13.50	15,000.00	10.65	1,597,500,000.00	78.89%	moderate	moderate	moderate	very high	3
BINUGAO	3	52.79	10,000.00	24.70	2,470,000,000.00	46.79%	high	high	low	very high	3
BINUGAO	3	63.36	15,000.00	9.79	1,468,500,000.00	15.45%	low	low	moderate	very high	3
BINUGAO	3	3.43	15,000.00	0.04	6,000,000.00	1.17%	low	low	moderate	very high	2
CAMANSI	3	2.44	10,000.00	1.73	173,000,000.00	70.90%	high	high	low	very high	3
CATIGAN	3	6.30	10,000.00	2.21	221,000,000.00	35.08%	very high	very high	low	very high	3
DALIAON PLANTATION	3	5.55	10,000.00	2.17	217,000,000.00	39.10%	very high	very high	low	very high	3
EDEN	3	51.48	10,000.00	51.48	5,148,000,000.00	100.00%	very high	very high	low	very high	3
EDEN	3	1.27	15,000.00	1.27	190,500,000.00	100.00%	moderate	moderate	moderate	very high	3

Table U-34. Urban Use Area Severity of Consequence Estimation, Landslide, Davao City

HAZARD		EXPOSURE					VULNERABILITY				SEVERITY OF CONSEQUENCE
Barangay	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures	Severity of Consequence Score Average
					HxGx10000	H/F					= (P+Q+R)/n
EDEN	3	0.55	15,000.00	0.55	82,500,000.00	100.00%	moderate	moderate	moderate	very high	3
EDEN	3	0.08	15,000.00	0.08	12,000,000.00	100.00%	low	low	low	very high	2
EDEN	3	98.40	15,000.00	94.89	14,233,500,000.00	96.43%	moderate	moderate	low	very high	3
KILATE	3	2.60	10,000.00	0.19	19,000,000.00	7.31%	very high	very high	low	very high	2
MARAPANGI	3	0.19	15,000.00	0.07	10,500,000.00	36.84%	moderate	moderate	low	very high	2
MARAPANGI	3	76.91	10,000.00	1.99	199,000,000.00	2.59%	high	high	low	very high	3
SIBULAN	3	2.13	10,000.00	2.13	213,000,000.00	100.00%	moderate	moderate	low	very high	3
SIRAWAN	3	85.27	15,000.00	14.86	2,229,000,000.00	17.43%	residual	residual	low	very high	3
SIRAWAN	3	83.94	10,000.00	7.50	750,000,000.00	8.93%	low	low	moderate	very high	3
TAGURANO	3	1.66	10,000.00	0.60	60,000,000.00	36.14%	very high	very high	low	very high	3
TIBULOY	3	7.75	15,000.00	7.75	1,162,500,000.00	100.00%	high	high	low	very high	3
TIBULOY	3	3.76	10,000.00	3.57	357,000,000.00	94.95%	moderate	moderate	moderate	very high	3
TUNGKALAN	3	3.84	10,000.00	1.09	109,000,000.00	28.39%	moderate	moderate	low	very high	3
MATINA BIAO	3	6.89	15,000.00	0.82	123,000,000.00	11.90%	moderate	moderate	moderate	very high	3
MATINA BIAO	3	2.76	10,000.00	0.05	5,000,000.00	1.81%	moderate	high	low	very high	2
MANAMBULAN	3	9.65	10,000.00	0.12	12,000,000.00	1.24%	high	high	low	very high	2
NEW CARMEN	3	0.09	15,000.00	0.09	13,500,000.00	100.00%	moderate	moderate	low	very high	2
NEW CARMEN	3	15.64	10,000.00	2.26	226,000,000.00	14.45%	moderate	moderate	low	very high	3
NEW VALENCIA	3	4.93	10,000.00	1.00	100,000,000.00	20.28%	very high	very high	low	very high	3
TALANDANG	3	24.65	15,000.00	8.55	1,282,500,000.00	34.69%	very high	very high	low	very high	3

RISK ESTIMATION

FLOOD

Risk estimation is determined by multiplying the likelihood of occurrence and severity of consequence scores as shown in the previous tables and discussions.

Based on the above figure, the 41 exposed barangays to flood in the residential area were assessed to accumulate an area of 2,513.17 hectares in which 40.43% of it is, as per severity of consequence matrix, categorized at the high level. The former statement further supported the idea as results found that the area has lowest adaptive capacity, highest degree of impact, and highest vulnerability to flood among the urban use areas. The table below shows urban use areas with low to high flood risk.

Table U-35. Urban Use Areas Risk to Flood, Davao City

Barangay	Land Use Category	HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
		Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	Structures No access/ area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
							HxGx10000	H/F						=SxD		
1-A	Residential	HF	3	> 1 meter	6.95	10,000	6.94	694,000,000.00	99.86%	Very High	Very High	Moderate	Very High	3	9	MODERATE
1-A	Parks and Recreational	VHF	3	> 1 meter	0.08	15,000	0.08	12,000,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
1-A	Commercial	HF	3	> 1 meter	1.41	15,000	1.02	153,000,000.00	72.34%	Low	Low	High	Very High	3	9	MODERATE
2-A	Residential	HF	4	> 1 meter	1.62	10,000	1.23	123,000,000.00	75.93%	Low	Low	Moderate	Very High	3	12	HIGH
2-A	Commercial	HF	4	> 1 meter	11.32	15,000	1.53	229,500,000.00	13.52%	Low	Low	High	Very High	2	8	MODERATE
5-A	Residential	VHF	3	> 1 meter	20.41	10,000	14.12	1,412,000,000.00	69.18%	Very High	Very High	Moderate	Very High	3	9	MODERATE

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	Structures No access/ area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F					=SxD		
5-A	Parks and Recreational	VHF	3	> 1 meter	0.01	15,000	0.01	1,500,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
5-A	Commercial	VHF	3	> 1 meter	4.34	15,000	0.14	21,000,000.00	3.23%	Low	Low	High	Very High	1	3	LOW
8-A	Residential	VHF	4	> 1 meter	82.83	10,000	47.94	4,794,000,000.00	57.88%	High	High	High	Very High	3	12	HIGH
8-A	Industrial	VHF	4	> 1 meter	3.84	15,000	3.84	576,000,000.00	100.00%	Low	Low	High	Very High	3	12	HIGH
8-A	Commercial	VHF	4	> 1 meter	5.65	15,000	4.29	643,500,000.00	75.93%	Low	Low	High	Very High	3	12	HIGH
8-A	Cemetery	VHF	4	> 1 meter	18.90	15,000	3.17	475,500,000.00	16.77%	Low	Low	High	Very High	2	8	MODERATE
8-A	Parks and Recreational	VHF	4	> 1 meter	1.17	15,000	0.04	6,000,000.00	3.42%	Low	Low	High	Very High	1	4	LOW
15-B	Residential	MF	3	> 1 meter	1.46	10,000	0.22	22,000,000.00	15.07%	Very High	Very High	Moderate	Very High	2	6	MODERATE
15-B	Commercial	MF	3	> 1 meter	24.46	15,000	1.2	180,000,000.00	4.91%	Low	Low	High	Very High	1	3	LOW
19-B	Residential	HF	6	> 1 meter	179.82	10,000	40.47	4,047,000,000.00	22.51%	Moderate	Moderate	Moderate	Very High	3	18	HIGH
19-B	Parks and Recreational	VHF	6	> 1 meter	0.36	15,000	0.1	15,000,000.00	27.78%	Low	Low	High	Very High	2	12	HIGH
19-B	Commercial	VHF	6	> 1 meter	28.23	15,000	4.9	735,000,000.00	17.36%	Low	Low	High	Very High	2	12	HIGH
19-B	Industrial	VHF	6	> 1 meter	2.48	15,000	0.16	24,000,000.00	6.45%	Low	Low	High	Very High	1	6	MODERATE
21-C	Residential	HF	3	> 1 meter	5.18	10,000	1.32	132,000,000.00	25.48%	High	High	Moderate	Very High	3	9	MODERATE

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	Structures No access/ area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F					=SxD		
22-C	Residential	HF	3	> 1 meter	4.78	10,000	3.53	353,000,000.00	73.85%	High	High	Moderate	Very High	3	9	MODERATE
22-C	Parks and Recreational	HF	3	> 1 meter	0.05	15,000	0.001	150,000.00	2.00%	Low	Low	Moderate	Very High	1	3	LOW
23-C	Residential	HF	3	> 1 meter	12.79	10,000	11.18	1,118,000,000.00	87.41%	Very High	Very High	Moderate	Very High	3	9	MODERATE
23-C	Parks and Recreational	HF	3	> 1 meter	0.72	15,000	0.43	64,500,000.00	59.72%	Low	Low	High	Very High	3	9	MODERATE
27-C	Tourism	HF	4	> 1 meter	0.04	15,000	0.04	6,000,000.00	100.00%	Low	Low	High	Very High	3	12	HIGH
27-C	Parks and Recreational	HF	3	> 1 meter	4.10	15,000	3.01	451,500,000.00	73.41%	Low	Low	High	Very High	3	9	MODERATE
31-D	Residential	VHF	3	> 1 meter	13.56	10,000	7.74	774,000,000.00	57.08%	High	High	Moderate	Very High	3	9	MODERATE
31-D	Parks and Recreational	HF	3	> 1 meter	0.13	15,000	0.11	16,500,000.00	84.62%	Low	Low	High	Very High	3	9	MODERATE
37-D	Residential	VHF	3	> 1 meter	3.55	10,000	0.76	76,000,000.00	21.41%	High	High	Moderate	Very High	3	9	MODERATE
39-D	Residential	VHF	3	> 1 meter	2.93	10,000	2.53	253,000,000.00	86.35%	Low	Low	Moderate	Very High	3	9	MODERATE
39-D	Commercial	HF	3	> 1 meter	5.35	15,000	3.03	454,500,000.00	56.64%	Low	Low	High	Very High	3	9	MODERATE
39-D	Parks and Recreational	HF	3	> 1 meter	0.89	15,000	0.16	24,000,000.00	17.98%	Low	Low	High	Very High	2	6	MODERATE
40-D	Residential	VHF	3	> 1 meter	1.34	10,000	1.30	130,000,000.00	97.01%	Very High	Very High	Moderate	Very High	3	9	MODERATE
40-D	Commercial	VHF	3	> 1 meter	6.05	15,000	6.04	906,000,000.00	99.83%	Low	Low	High	Very High	3	9	MODERATE

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	Structures No access/ area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F						=SxD	
AGDAO PROPER	Residential	MF	3	> 1 meter	7.62	10,000	7.62	762,000,000.00	100.00%	Very High	Very High	Moderate	Very High	3	9	MODERATE
AGDAO PROPER	Parks and Recreational	MF	3	> 1 meter	0.01	15,000	0.01	1,500,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
AGDAO PROPER	Industrial	MF	3	> 1 meter	1.29	15,000	1.29	193,500,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
AGDAO PROPER	Commercial	MF	3	> 1 meter	22.65	15,000	19.23	2,884,500,000.00	84.90%	Low	Low	High	Very High	3	9	MODERATE
CENTRO	Residential	HF	3	> 1 meter	22.72	10,000	18.39	1,839,000,000.00	80.94%	Low	Low	Moderate	Very High	3	9	MODERATE
CENTRO	Parks and Recreational	MF	3	> 1 meter	0.04	15,000	0.04	6,000,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
CENTRO	Industrial	HF	3	> 1 meter	10.73	15,000	8.83	1,324,500,000.00	82.29%	Low	Low	High	Very High	3	9	MODERATE
CENTRO	Commercial	HF	3	> 1 meter	1.14	15,000	0.26	39,000,000.00	22.81%	Low	Low	High	Very High	2	6	MODERATE
GOV. VICENTE DUTERTE	Residential	HF	3	> 1 meter	20.34	10,000	14.16	1,416,000,000.00	69.62%	Very High	Very High	Moderate	Very High	3	9	MODERATE
GOV. VICENTE DUTERTE	Commercial	MF	3	> 1 meter	4.95	15,000	2.49	373,500,000.00	50.30%	Low	Low	High	Very High	3	9	MODERATE
GOV. VICENTE DUTERTE	Industrial	MF	3	> 1 meter	12.57	15,000	3.99	598,500,000.00	31.74%	Low	Low	High	Very High	2	6	MODERATE
LEON GARCIA SR.	Residential	HF	3	> 1 meter	12.04	10,000	10.85	1,085,000,000.00	90.12%	Residual	Residual	High	Very High	3	9	MODERATE
LEON GARCIA SR.	Parks and Recreational	HF	3	> 1 meter	0.08	15,000	0.08	12,000,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
LEON GARCIA SR.	Industrial	HF	3	> 1 meter	0.29	15,000	0.29	437,500,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	Structures No access/ area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F					=SxD		
AGDAO PROPER	Residential	MF	3	> 1 meter	7.62	10,000	7.62	762,000,000.00	100.00%	Very High	Very High	Moderate	Very High	3	9	MODERATE
AGDAO PROPER	Parks and Recreational	MF	3	> 1 meter	0.01	15,000	0.01	1,500,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
AGDAO PROPER	Industrial	MF	3	> 1 meter	1.29	15,000	1.29	193,500,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
AGDAO PROPER	Commercial	MF	3	> 1 meter	22.65	15,000	19.23	2,884,500,000.00	84.90%	Low	Low	High	Very High	3	9	MODERATE
CENTRO	Residential	HF	3	> 1 meter	22.72	10,000	18.39	1,839,000,000.00	80.94%	Low	Low	Moderate	Very High	3	9	MODERATE
CENTRO	Parks and Recreational	MF	3	> 1 meter	0.04	15,000	0.04	6,000,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
CENTRO	Industrial	HF	3	> 1 meter	10.73	15,000	8.83	1,324,500,000.00	82.29%	Low	Low	High	Very High	3	9	MODERATE
CENTRO	Commercial	HF	3	> 1 meter	1.14	15,000	0.26	39,000,000.00	22.81%	Low	Low	High	Very High	2	6	MODERATE
GOV. VICENTE DUTERTE	Residential	HF	3	> 1 meter	20.34	10,000	14.16	1,416,000,000.00	69.62%	Very High	Very High	Moderate	Very High	3	9	MODERATE
GOV. VICENTE DUTERTE	Commercial	MF	3	> 1 meter	4.95	15,000	2.49	373,500,000.00	50.30%	Low	Low	High	Very High	3	9	MODERATE
GOV. VICENTE DUTERTE	Industrial	MF	3	> 1 meter	12.57	15,000	3.99	598,500,000.00	31.74%	Low	Low	High	Very High	2	6	MODERATE
LEON GARCIA SR.	Residential	HF	3	> 1 meter	12.04	10,000	10.85	1,085,000,000.00	90.12%	Residual	Residual	High	Very High	3	9	MODERATE

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F						=SxD	
LEON GARCIA SR.	Parks and Recreational	HF	3	> 1 meter	0.08	15,000	0.08	12,000,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
LEON GARCIA SR.	Industrial	HF	3	> 1 meter	0.29	15,000	0.29	43,500,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
LEON GARCIA SR.	Commercial	MF	3	> 1 meter	1.06	15,000	0.82	123,000,000.00	77.36%	Low	Low	High	Very High	3	9	MODERATE
LAPU - LAPU	Residential	HF	3	> 1 meter	23.68	10,000	17.27	1,727,000,000.00	72.93%	Moderate	Moderate	Moderate	Very High	3	9	MODERATE
LAPU - LAPU	Parks and Recreational	MF	3	> 1 meter	0.04	15,000	0.04	6,000,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
LAPU - LAPU	Commercial	HF	3	> 1 meter	1.61	15,000	0.89	133,500,000.00	55.28%	Low	Low	High	Very High	3	9	MODERATE
LAPU - LAPU	Industrial	HF	3	> 1 meter	22.95	15,000	5.97	895,500,000.00	26.01%	Low	Low	High	Very High	2	6	MODERATE
BAGUIO	Residential	MF	3	> 1 meter	12.03	10,000	8.10	810,000,000.00	67.33%	High	High	Moderate	Very High	3	9	MODERATE
BAGUIO	Agri-Industrial	MF	3	> 1 meter	6.17	15,000	3.03	454,500,000.00	49.11%	Low	Low	High	Very High	3	9	MODERATE
GUMA-LANG	Parks and Recreational	MF	4	> 1 meter	0.05	15,000	0.05	7,500,000.00	100.00%	Low	Low	High	Very High	3	12	HIGH
GUMA-LANG	Agri-Industrial	MF	4	> 1 meter	21.28	15,000	0.30	45,000,000.00	1.41%	Low	Low	High	Very High	1	4	LOW
MALAGOS	Residential	HF	4	> 1 meter	18.01	10,000	4.89	489,000,000.00	27.15%	High	High	High	Very High	3	12	HIGH

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	Structures No access/ area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F					=SxD		
MALAGOS	Industrial	MF	4	> 1 meter	3.05	15,000	0.79	118,500,000.00	25.90%	Low	Low	High	Very High	2	8	MODERATE
MALAGOS	Tourism	VHF	4	> 1 meter	13.49	15,000	0.95	142,500,000.00	7.04%	Low	Low	High	Very High	1	4	LOW
MALAGOS	Agri-Industrial	HF	4	> 1 meter	7.82	15,000	0.17	25,500,000.00	2.17%	Low	Low	High	Very High	1	4	LOW
BUHANGI N	Industrial	HF	5	> 1 meter	4.40	15,000	0.46	69,000,000.00	10.45%	Low	Low	High	Very High	2	10	MODERATE
BUHANGI N	Residential	HF	5	> 1 meter	335.40	10,000	9.41	941,000,000.00	2.81%	Moderate	Moderate	Moderate	Very High	1	5	MODERATE
BUHANGI N	Commercial	HF	5	> 1 meter	52.91	15,000	0.16	24,000,000.00	0.30%	Low	Low	High	Very High	1	5	MODERATE
BUHANGI N	Cemetery	HF	5	> 1 meter	8.84	15,000	0.25	37,500,000.00	2.83%	Low	Low	High	Very High	1	5	MODERATE
CABANTI-AN	Residential	HF	3	> 1 meter	305.58	10,000	5.47	547,000,000.00	1.79%	Low	Low	Moderate	Very High	1	3	LOW
CABANTI-AN	Industrial	HF	3	> 1 meter	26.47	15,000	0.04	6,000,000.00	0.15%	Low	Low	High	Very High	1	3	LOW
CABANTI-AN	Commercial	HF	3	> 1 meter	23.17	15,000	0.07	10,500,000.00	0.30%	Low	Low	High	Very High	1	3	LOW
CALLAWA	Residential	VHF	3	> 1 meter	7.91	10,000	0.11	11,000,000.00	1.39%	High	High	Moderate	Very High	1	3	LOW
COMMUNAL	Tourism	HF	4	> 1 meter	20.16	15,000	0.70	105,000,000.00	3.47%	Low	Low	High	Very High	1	4	LOW
COMMUNAL	Residential	HF	4	> 1 meter	162.84	10,000	7.08	708,000,000.00	4.35%	Residual	Residual	Moderate	Very High	1	4	LOW
COMMUNAL	Commercial	HF	4	> 1 meter	11.99	15,000	0.02	3,000,000.00	0.17%	Low	Low	High	Very High	1	4	LOW

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	Structures No access/ area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F					=SxD		
IN-DANGAN	Commercial	HF	3	> 1 meter	1.71	15,000	0.45	67,500,000.00	26.32%	Low	Low	High	Very High	2	6	MODERATE
IN-DANGAN	Residential	HF	3	> 1 meter	247.61	10,000	0.40	40,000,000.00	0.16%	Residual	Residual	Moderate	Very High	1	3	LOW
MANDUG	Agri-Industrial	VHF	6	> 1 meter	6.55	15,000	6.54	981,000,000.00	99.85%	Low	Low	High	Very High	3	18	HIGH
MANDUG	Residential	VHF	6	> 1 meter	168.40	10,000	20.99	2,099,000,000.00	12.46%	Moderate	Moderate	High	Very High	2	12	HIGH
A. ANGLI-ONGTO	Residential	VHF	3	> 1 meter	155.73	10,000	6.30	630,000,000.00	4.05%	Low	Low	Moderate	Very High	1	3	LOW
A. ANGLI-ONGTO	Commercial	HF	3	> 1 meter	38.75	15,000	0.51	76,500,000.00	1.32%	Low	Low	High	Very High	1	3	LOW
BUNAWAN	Residential	HF	6	> 1 meter	124.56	10,000	35.10	3,510,000,000.00	28.18%	Very High	Very High	Moderate	Very High	3	18	HIGH
BUNAWAN	Parks and Recreational	MF	6	> 1 meter	0.24	15,000	0.11	16,500,000.00	45.83%	Low	Low	High	Very High	3	18	HIGH
BUNAWAN	Commercial	HF	6	> 1 meter	11.86	15,000	5.74	861,000,000.00	48.40%	Low	Low	High	Very High	3	18	HIGH
BUNAWAN	Industrial	HF	6	> 1 meter	115.63	15,000	25.79	3,868,500,000.00	22.30%	Low	Low	High	Very High	2	12	HIGH
BUNAWAN	Agri-Industrial	HF	6	> 1 meter	1.86	15,000	0.10	15,000,000.00	5.38%	Low	Low	High	Very High	1	6	MODERATE
GATUNGAN	Parks and Recreational	HF	3	> 1 meter	0.01	15,000	0.01	1,500,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
GATUNGAN	Residential	HF	3	> 1 meter	1.99	10,000	0.04	4,000,000.00	2.01%	High	High	Moderate	Very High	1	3	LOW
ILANG	Residential	VHF	3	> 1 meter	125.68	10,000	7.03	703,000,000.00	5.59%	High	High	Moderate	Very High	2	6	MODERATE

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F					=SxD		
ILANG	Industrial	VHF	3	> 1 meter	90.12	15,000	7.34	1,101,000,000.00	8.14%	Low	Low	High	Very High	1	3	LOW
LASANG	Residential	HF	6	> 1 meter	50.73	10,000	20.65	2,065,000,000.00	40.71%	Very High	Very High	High	Very High	3	18	HIGH
LASANG	Parks and Recreational	MF	6	> 1 meter	0.07	15,000	0.07	10,500,000.00	100.00%	Low	Low	High	Very High	3	18	HIGH
LASANG	Agri-Industrial	HF	6	> 1 meter	9.39	15,000	4.10	615,000,000.00	43.66%	Low	Low	High	Very High	3	18	HIGH
LASANG	Industrial	HF	6	> 1 meter	38.20	15,000	6.57	985,500,000.00	17.20%	Low	Low	High	Very High	2	12	HIGH
LASANG	Commercial	HF	6	> 1 meter	2.13	15,000	0.13	19,500,000.00	6.10%	Low	Low	High	Very High	1	6	MODERATE
MAHA-YAG	Residential	HF	4	> 1 meter	57.77	10,000	0.74	74,000,000.00	1.28%	High	High	High	Very High	1	4	LOW
MAHA-YAG	Industrial	HF	4	> 1 meter	26.18	15,000	1.17	175,500,000.00	4.47%	Low	Low	High	Very High	1	4	LOW
BIAO JOAQUIN	Residential	MF	3	> 1 meter	3.20	10,000	2.38	238,000,000.00	74.38%	High	High	Moderate	Very High	3	9	MODERATE
BIAO JOAQUIN	Agri-Industrial	MF	3	> 1 meter	20.15	15,000	16.06	2,409,000,000.00	79.70%	Low	Low	High	Very High	3	9	MODERATE
CALINAN	Residential	HF	5	> 1 meter	107.32	10,000	107.19	10,719,000,000.00	99.88%	Moderate	Moderate	Moderate	Very High	3	15	HIGH
CALINAN	Parks and Recreational	HF	5	> 1 meter	0.75	15,000	0.75	112,500,000.00	100.00%	Low	Low	High	Very High	3	15	HIGH
CALINAN	Industrial	HF	5	> 1 meter	2.17	15,000	2.17	325,500,000.00	100.00%	Low	Low	High	Very High	3	15	HIGH
CALINAN	Commercial	HF	5	> 1 meter	19.53	15,000	19.53	2,929,500,000.00	100.00%	Low	Low	High	Very High	3	15	HIGH

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	Structures No access/ area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F					=SxD		
CALINAN	Cemetery	HF	5	> 1 meter	5.97	15,000	5.97	895,500,000.00	100.00%	Low	Low	High	Very High	3	15	HIGH
CALINAN	Agri-Industrial	HF	5	> 1 meter	3.12	15,000	3.12	468,000,000.00	100.00%	Low	Low	High	Very High	3	15	HIGH
CAWAYAN	Residential	HF	3	> 1 meter	1.84	10,000	0.30	30,000,000.00	16.30%	High	High	Moderate	Very High	2	6	MODERATE
DACUDAO	Agri-Industrial	MF	3	> 1 meter	37.73	15,000	6.60	990,000,000.00	17.49%	Low	Low	High	Very High	2	6	MODERATE
DACUDAO	Residential	HF	3	> 1 meter	7.13	10,000	0.29	29,000,000.00	4.07%	Very High	Very High	Moderate	Very High	1	3	LOW
DALAGDAG	Residential	HF	3	> 1 meter	2.54	10,000	1.18	118,000,000.00	46.46%	Very High	Very High	Moderate	Very High	3	9	MODERATE
DOMINGA	Residential	HF	3	> 1 meter	1.77	10,000	1.73	173,000,000.00	97.74%	Very High	Very High	Moderate	Very High	3	9	MODERATE
INAYANGAN	Residential	HF	3	> 1 meter	30.20	10,000	0.01	1,000,000.00	0.03%	Very High	Very High	Moderate	Very High	1	3	LOW
LACSON	Residential	HF	3	> 1 meter	5.16	10,000	1.30	130,000,000.00	25.19%	High	High	Moderate	Very High	3	9	MODERATE
LACSON	Agri-Industrial	HF	3	> 1 meter	11.02	15,000	1.06	159,000,000.00	9.62%	Low	Low	High	Very High	1	3	LOW
LAMANAN	Residential	VHF	3	> 1 meter	4.54	10,000	0.06	6,000,000.00	1.32%	Very High	Very High	Moderate	Very High	1	3	LOW
LAMPANAO	Residential	MF	3	> 1 meter	2.14	10,000	0.29	29,000,000.00	13.55%	Very High	Very High	Moderate	Very High	2	6	MODERATE
GUMITAN	Residential	HF	6	> 1 meter	8.23	10,000	0.03	3,000,000.00	0.36%	Residual	Residual	Moderate	Very High	1	6	MODERATE
MALAMBA	Residential	VHF	5	> 1 meter	13.12	10,000	1.40	140,000,000.00	10.67%	Very High	Very High	High	Very High	2	10	MODERATE

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F					=SxD		
MARILOG	Residential	HF	5	> 1 meter	92.61	10,000	0.10	10,000,000.00	0.11%	Residual	Residual	High	Very High	1	5	MODERATE
MA-LABOG	Residential	HF	3	> 1 meter	18.22	10,000	0.03	3,000,000.00	0.16%	Residual	Residual	High	Very High	1	3	LOW
BAGO APLAYA	Residential	HF	5	> 1 meter	95.45	10,000	28.28	2,828,000,000.00	29.63%	Residual	Residual	Moderate	Very High	3	15	HIGH
BAGO APLAYA	Industrial	HF	5	> 1 meter	16.24	15,000	5.86	879,000,000.00	36.08%	Low	Low	High	Very High	2	10	MODERATE
BAGO APLAYA	Commercial	HF	5	> 1 meter	12.91	15,000	4.13	619,500,000.00	31.99%	Low	Low	High	Very High	2	10	MODERATE
BAGO APLAYA	Parks and Recreational	MF	5	> 1 meter	5.45	15,000	0.40	60,000,000.00	7.34%	Low	Low	High	Very High	1	5	MODERATE
BAGO GALLERA	Residential	HF	4	> 1 meter	129.96	10,000	49.25	4,925,000,000.00	37.90%	Moderate	Moderate	Moderate	Very High	3	12	HIGH
BAGO GALLERA	Industrial	MF	4	> 1 meter	0.12	15,000	0.11	16,500,000.00	91.67%	Low	Low	High	Very High	3	12	HIGH
BAGO GALLERA	Commercial	MF	4	> 1 meter	0.65	15,000	0.28	42,000,000.00	43.08%	Low	Low	High	Very High	3	12	HIGH
BALIOK	Residential	MF	3	> 1 meter	77.41	10,000	14.12	1,412,000,000.00	18.24%	Residual	Residual	Moderate	Very High	2	6	MODERATE
BALIOK	Parks and Recreational	MF	3	> 1 meter	0.35	15,000	0.09	13,500,000.00	25.71%	Low	Low	High	Very High	2	6	MODERATE
BUCANA	Tourism	HF	4	> 1 meter	0.67	15,000	0.30	45,000,000.00	44.78%	Low	Low	High	Very High	3	12	HIGH
BUCANA	Residential	VHF	4	> 1 meter	216.99	10,000	86.42	8,642,000,000.00	39.83%	Very High	Very High	Moderate	Very High	3	12	HIGH
BUCANA	Parks and Recreational	HF	4	> 1 meter	1.92	15,000	0.22	33,000,000.00	11.46%	Low	Low	High	Very High	2	8	MODERATE

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	Structures No access/ area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F					=SxD		
BUCANA	Commercial	HF	4	> 1 meter	63.45	15,000	6.95	1,042,500,000.00	10.95%	Low	Low	High	Very High	2	8	MODERATE
CATALUNAN GRANDE	Residential	VHF	3	> 1 meter	301.77	10,000	69.62	6,962,000,000.00	23.07%	High	High	Moderate	Very High	3	9	MODERATE
CATALUNAN GRANDE	Agri-Industrial	HF	3	> 1 meter	21.25	15,000	9.74	1,461,000,000.00	45.84%	Low	Low	High	Very High	3	9	MODERATE
CATALUNAN GRANDE	Parks and Recreational	HF	3	> 1 meter	5.80	15,000	1.82	273,000,000.00	31.38%	Low	Low	High	Very High	2	6	MODERATE
CATALUNAN GRANDE	Commercial	HF	3	> 1 meter	6.03	15,000	0.88	132,000,000.00	14.59%	Low	Low	High	Very High	2	6	MODERATE
CATALUNAN PEQUEÑO	Tourism	MF	3	> 1 meter	1.32	15,000	0.22	33,000,000.00	16.67%	Low	Low	High	Very High	2	6	MODERATE
CATALUNAN PEQUEÑO	Residential	HF	3	> 1 meter	197.40	10,000	26.64	2,664,000,000.00	13.50%	Moderate	Moderate	Moderate	Very High	2	6	MODERATE
CATALUNAN PEQUEÑO	Commercial	MF	3	> 1 meter	3.55	15,000	0.30	45,000,000.00	8.45%	Low	Low	High	Very High	1	3	LOW
CATALUNAN PEQUEÑO	Agri-Industrial	MF	3	> 1 meter	13.65	15,000	0.74	111,000,000.00	5.42%	Low	Low	High	Very High	1	3	LOW
DUMOY	Tourism	HF	4	> 1 meter	5.83	15,000	4.00	600,000,000.00	68.61%	Low	Low	High	Very High	3	12	HIGH

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F					=SxD		
DUMOY	Parks and Recreational	HF	4	> 1 meter	8.33	15,000	5.15	772,500,000.00	61.82%	Low	Low	High	Very High	3	12	HIGH
DUMOY	Residential	HF	4	> 1 meter	162.79	10,000	28.49	2,849,000,000.00	17.50%	Residual	Residual	Moderate	Very High	2	8	MODERATE
DUMOY	Industrial	MF	4	> 1 meter	32.56	15,000	0.25	37,500,000.00	0.77%	Low	Low	High	Very High	1	4	LOW
LANGUB	Residential	HF	3	> 1 meter	13.62	10,000	0.01	1,000,000.00	0.07%	High	High	Moderate	Very High	1	3	LOW
MA-A	Residential	VHF	6	> 1 meter	428.30	10,000	136.31	13,631,000,000.00	31.83%	High	High	High	Very High	3	18	HIGH
MA-A	Parks and Recreational	VHF	6	> 1 meter	12.99	15,000	5.36	804,000,000.00	41.26%	Low	Low	High	Very High	3	18	HIGH
MA-A	Industrial	VHF	6	> 1 meter	22.55	15,000	18.04	2,706,000,000.00	80.00%	Low	Low	High	Very High	3	18	HIGH
MA-A	Tourism	VHF	6	> 1 meter	16.56	15,000	5.60	840,000,000.00	33.82%	Low	Low	High	Very High	2	12	HIGH
MA-A	Commercial	VHF	6	> 1 meter	90.17	15,000	27.80	4,170,000,000.00	30.83%	Low	Low	High	Very High	2	12	HIGH
MAG-TUOD	Residential	HF	3	> 1 meter	53.99	10,000	10.06	1,006,000,000.00	18.63%	Very High	Very High	High	Very High	2	6	MODERATE
MAG-TUOD	Parks and Recreational	HF	3	> 1 meter	10.49	15,000	0.41	61,500,000.00	3.91%	Low	Low	High	Very High	1	3	LOW
MATINA APLAYA	Residential	VHF	6	> 1 meter	155.55	10,000	72.79	7,279,000,000.00	46.80%	High	High	High	Very High	3	18	HIGH
MATINA APLAYA	Commercial	VHF	6	> 1 meter	20.48	15,000	13.87	2,080,500,000.00	67.72%	Low	Low	High	Very High	3	18	HIGH
MATINA APLAYA	Tourism	MF	6	> 1 meter	2.35	15,000	0.47	70,500,000.00	20.00%	Low	Low	High	Very High	2	12	HIGH

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F					=SxD		
ALAMBRE	Residential	HF	3	> 1 meter	7.87	10,000	0.09	9,000,000.00	1.14%	High	High	Moderate	Very High	1	3	LOW
ALAMBRE	Agri-Industrial		3	< 1meter	12.70	15,000	0.0003	45,000.00	0.0024%	Low	Low	Moderate	Very High	1	3	LOW
BANKAS HEIGHTS	Residential	HF	3	> 1 meter	29.39	10,000	18.61	1,861,000,000.00	63.32%	Residual	Residual	Moderate	Very High	3	9	MODERATE
BANKAS HEIGHTS	Agri-Industrial	HF	3	> 1 meter	1.67	15,000	0.18	27,000,000.00	10.78%	Low	Low	High	Very High	2	6	MODERATE
BATO	Commercial	HF	3	> 1 meter	0.47	15,000	0.33	49,500,000.00	70.21%	Low	Low	High	Very High	3	9	MODERATE
BATO	Residential	HF	3	> 1 meter	44.81	10,000	2.08	208,000,000.00	4.64%	Residual	Residual	Moderate	Very High	1	3	LOW
CROSSING BAYABAS	Residential	HF	5	> 1 meter	92.31	10,000	21.61	2,161,000,000.00	23.41%	High	High	Moderate	Very High	3	15	HIGH
BINUGAO	Residential	HF	3	> 1 meter	52.80	10,000	26.77	2,677,000,000.00	50.70%	High	High	Moderate	Very High	3	9	MODERATE
BINUGAO	Parks and Recreational	MF	3	> 1 meter	1.34	15,000	1.34	201,000,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
BINUGAO	Industrial	HF	3	> 1 meter	63.36	15,000	48.27	7,240,500,000.00	76.18%	Low	Low	High	Very High	3	9	MODERATE
BINUGAO	Commercial	HF	3	> 1 meter	3.44	15,000	1.44	216,000,000.00	41.86%	Low	Low	High	Very High	3	9	MODERATE
BINUGAO	Agri-Industrial	HF	3	> 1 meter	13.50	15,000	0.15	22,500,000.00	1.11%	Low	Low	High	Very High	1	3	LOW
CATIGAN	Residential	HF	3	> 1 meter	6.31	10,000	0.24	24,000,000.00	3.80%	Very High	Very High	Moderate	Very High	1	3	LOW

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	Structures No access/ area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F					=SxD		
DALIAO	Tourism	MF	3	> 1 meter	1.79	15,000	1.46	219,000,000.00	81.56%	Low	Low	High	Very High	3	9	MODERATE
DALIAO	Residential	MF	3	> 1 meter	107.79	15,000	23.42	3,513,000,000.00	21.73%	Moderate	Moderate	Moderate	Very High	3	9	MODERATE
DALIAO	Parks and Recreational	MF	3	> 1 meter	0.16	15,000	0.07	10,500,000.00	43.75%	Low	Low	High	Very High	3	9	MODERATE
DALIAO	Industrial	MF	3	> 1 meter	14.75	15,000	7.84	1,176,000,000.00	53.15%	Low	Low	High	Very High	3	9	MODERATE
EDEN	Tourism	HF	3	> 1 meter	98.41	15,000	9.12	1,368,000,000.00	9.27%	Low	Low	High	Very High	1	3	LOW
EDEN	Residential	HF	3	> 1 meter	51.49	10,000	2.35	235,000,000.00	4.56%	Very High	Very High	Moderate	Very High	1	3	LOW
KILATE	Residential	HF	3	> 1 meter	2.61	10,000	0.11	11,000,000.00	4.21%	Very High	Very High	Moderate	Very High	1	3	LOW
LIZADA	Agri-Industrial	MF	5	> 1 meter	5.18	15,000	2.10	315,000,000.00	40.54%	Low	Low	High	Very High	3	15	HIGH
LIZADA	Residential	HF	5	> 1 meter	100.96	10,000	19.82	1,982,000,000.00	19.63%	High	High	High	Very High	2	10	MODERATE
LIZADA	Industrial	MF	5	> 1 meter	13.44	15,000	1.42	213,000,000.00	10.57%	Low	Low	High	Very High	2	10	MODERATE
LUBOGAN	Residential	HF	4	> 1 meter	90.18	15,000	32.08	4,812,000,000.00	35.57%	Residual	Residual	High	Very High	3	12	HIGH
LUBOGAN	Parks and Recreational	HF	4	> 1 meter	1.10	15,000	0.07	10,500,000.00	6.36%	Low	Low	High	Very High	1	4	LOW
LUBOGAN	Cemetery	HF	4	> 1 meter	5.67	15,000	0.09	13,500,000.00	1.59%	Low	Low	High	Very High	1	4	LOW
MARAPANGI	Tourism	HF	6	> 1 meter	0.02	15,000	0.02	3,000,000.00	100.00%	Low	Low	High	Very High	3	18	HIGH

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F					=SxD		
MARAPANGI	Agri-Industrial	HF	6	> 1 meter	9.85	15,000	8.44	1,266,000,000.00	85.69%	Low	Low	High	Very High	3	18	HIGH
MARAPANGI	Residential	HF	6	> 1 meter	76.92	10,000	12.97	1,297,000,000.00	16.86%	High	High	High	Very High	2	12	HIGH
ANGALAN	Agri-Industrial	HF	5	> 1 meter	12.30	15,000	12.30	1,845,000,000.00	100.00%	Low	Low	High	Very High	3	15	HIGH
ANGALAN	Residential	HF	3	> 1 meter	11.73	10,000	11.73	1,173,000,000.00	100.00%	High	High	Moderate	Very High	3	9	MODERATE
ANGALAN	Parks and Recreational	HF	3	> 1 meter	0.06	15,000	0.06	9,000,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
BAGO OSHIRO	Residential	MF	3	> 1 meter	138.55	10,000	2.96	296,000,000.00	2.14%	Very High	Very High	Moderate	Very High	1	3	LOW
BALENGA ENG	Agri-Industrial	HF	5	> 1 meter	35.49	15,000	35.49	5,323,500,000.00	100.00%	Low	Low	High	Very High	3	15	HIGH
BALENGA ENG	Parks and Recreational	MF	3	> 1 meter	0.05	15,000	0.05	7,500,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
BIAO ESCUELA	Parks and Recreational	MF	3	> 1 meter	0.04	15,000	0.04	6,000,000.00	100.00%	Low	Low	High	Very High	3	9	MODERATE
BIAO ESCUELA	Agri-Industrial	HF	3	> 1 meter	36.45	15,000	16.81	2,521,500,000.00	46.12%	Low	Low	High	Very High	3	9	MODERATE
BIAO ESCUELA	Residential	HF	3	> 1 meter	8.59	10,000	1.62	162,000,000.00	18.86%	Very High	Very High	Moderate	Very High	2	6	MODERATE
BIAO GUIANGA	Agri-Industrial	MF	5	> 1 meter	6.20	15,000	6.20	930,000,000.00	100.00%	Low	Low	High	Very High	3	15	HIGH
BIAO GUIANGA	Residential	MF	3	> 1 meter	3.83	10,000	1.69	169,000,000.00	44.13%	Moderate	Moderate	Moderate	Very High	3	9	MODERATE
LOS AMIGOS	Tourism	VHF	5	> 1 meter	0.63	15,000	0.63	94,500,000.00	100.00%	Low	Low	High	Very High	3	15	HIGH

Table U-35. Urban Use Areas Risk to Flood, Davao City

		HAZARD			EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Flood Susceptibility	Likelihood of Occurrence Score	Expected Flood Depth	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	Structures No access/ area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
								HxGx10000	H/F					=SxD		
LOS AMIGOS	Residential	VHF	5	> 1 meter	39.99	10,000	38.62	3,862,000,000.00	96.57%	High	High	High	Very High	3	15	HIGH
LOS AMIGOS	Industrial	VHF	5	> 1 meter	3.31	15,000	3.31	496,500,000.00	100.00%	Low	Low	High	Very High	3	15	HIGH
LOS AMIGOS	Commercial	VHF	5	> 1 meter	1.03	15,000	1.03	154,500,000.00	100.00%	Low	Low	High	Very High	3	15	HIGH
MANAMBULAN	Residential	HF	3	> 1 meter	9.65	10,000	9.10	910,000,000.00	94.30%	High	High	High	Very High	3	9	MODERATE
MANUEL GUIANGA	Agri-Industrial	HF	3	> 1 meter	4.52	15,000	1.69	253,500,000.00	37.39%	Low	Low	High	Very High	2	6	MODERATE
MANUEL GUIANGA	Residential	MF	3	> 1 meter	7.31	10,000	0.17	17,000,000.00	2.33%	Very High	Very High	High	Very High	1	3	LOW

Decision areas for Flood

There is a total of 24 barangays which are highly recommended to have hazard mitigation measures in terms of flood. Out of these barangays Maa has the highest number of hectares at risk to flood. It has 193 ha of urban spaces are at high risk to flood, 71% is residential area, 14% is commercial, 9% industrial, 3% parks and recreation, and 3% tourism. Aside from Ma-a, Calinan should also be highly considered because 129.64 ha is at high flood risk, 83% is residential area, 15% commercial, 2% industrial, 1% parks and recreation. Barangays Matina-Aplaya, Bucana, 8-A, 19-B, Bunawan, Los Amigos and Bago Gallera are also among the areas with high number of hectares at risk to flood with 87.13 has, 86.72 has, 56.07 has, 45.47 has, 66.74 has, 43.59 has, and 49.64 has of high flood risk areas, respectively.

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
2-A	1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use :Residential; 4.Area per land use Category in Hectares:1.62; 5.Exposed Area in Hectares:1.23; 6.% Exposure:78% ; 7.Replacement Cost per Sq. Meter (PHP):10000; 8.Exposed Value PHP):12300000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: Moderate; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage: NO; 16.Available Alternative Site: YES; 17.Government Resources: YES; 18.Local government capacity to impose/implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH	Light, salvageable materials used in the construction of the houses of informal settlers may get washed away when there are heavy floods	For titled properties, strict implementation of the zoning ordinance for structures within flood prone zone i.e. construction of at least 2-storey structures only must be followed and the 30-meter buffer zone

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>8-A</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1meter; 3.Existing Land Use (Specific Use): Residential; 4.Area per land use Category in Hectares:82.83; 5.Exposed Area in Hectares:47.94; 6.% Exposure:59%; 7.Replacement Cost per Sq. Meter (PHP):10000; 8.Exposed Value (PHP):479400000; 9.Proportion of buildings with walls with light to salvageable materials: High; 10.Proportion of Buildings in dilapidated/ condemned Condition: High; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government resources: YES; 18.Local government capacity to impose/implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Potential deaths and injuries due to high proportion of buildings with light and salvageable materials</p>	<p>Implement mandatory evacuation/relocation policy on affected structures/dwellings</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>8-A</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1meter; 3.Existing Land Use(Specific Use):Industrial; 4.Area per land use Category in Hec- tares:3.84; 5.Exposed Area in Hectares:3.84; 6.% Exposure:1; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):57600000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Detrimental impacts to economy and proper- ty owners</p>	<p>Imposition of hazard resistant design standards/ regulations within flood susceptible areas; con- duct site specific flood hazard mapping as basis for the establishment of structural design regula- tion</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>8-A</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1meter; 3.Existing Land Use(Specific Use):Commercial; 4.Area per land use Category in Hectares:5.65; 5.Exposed Area in hectares:4.29; 6.% Exposure:0.75929203539823; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):64350000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Detrimental impacts to local economy and property owners</p>	<p>Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>19-B</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Residential; 4.Area per land use Category in Hectares:179.82; 5.Exposed Area in Hectares:40.47; 6.% Exposure: 0.225058391725058; 7.Replacement Cost per Sq. Meter (PHP):10000; 8.Exposed Value (PHP):404700000; 9.Proportion of buildings with walls with light to salvageable materials: Moderate; 10.Proportion of Buildings in dilapidated/ condemned Condition: Moderate; 11.Structure Employing Hazard Resistant/ Adaptation Design: Moderate; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:18; 24.RISK CATEGORY:HIGH</p>	<p>Increase frequency of extreme rainfall events may result to significant property damage</p>	<p>Mandatory retrofitting of existing structures</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>19-B</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Parks and Recreational; 4.Area per land use Category in Hectares:0.36; 5.Exposed Area in Hectares:0.1; 6.% Exposure::0.277777777777778; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):1500000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12. No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:2; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:2; 20.Vulnerability Index:4; 21.Vulnerabilty Category: MODERATE; 22.SEVERITY OF CONSEQUENCES SCORE:2; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Structures in the area might slowly corrode and/or rust</p>	<p>Plant more trees; maintain and monitor structure</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>19-B</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1 meter; 3.Existing Land Use(Specific Use):Commercial; 4.Area per land use Category in Hectares:28.23; 5.Exposed Area in Hectares:4.9; 6.% Exposure:0.173574211831385; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):73500000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:2; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Potential impacts to local economy will be severe due to economic disruption affecting commercial establishments</p>	<p>Mandatory retrofitting of existing structures</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>27-C</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1meter; 3.Existing Land Use (Specific Use): Tourism; 4.Area per land use Category in Hec- tares:0.04; 5.Exposed Area in Hectares:0.04; 6.% Exposure:1; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):600000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/Adaptation De- sign: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:2; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:2; 20.Vulnerability Index:4; 21.Vulnerabilty Category: MODERATE; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Damage and disruption of tourism related facilities</p>	<p>Imposition of hazard resistant design standards/ regulations within flood susceptible areas</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>GUMALANG</p>	<p>1.Flood Susceptibility: MF; 2.Flood Depth: 1meter; 3.Existing Land Use (Specific Use): Parks and Recreational; 4.Area per land use Category in Hectares:0.05; 5.Exposed Area in Hectares:0.05; 6.% Exposure:1; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):750000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:2; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/implement zoning regulations: YES; 19.Adaptive Capacity Score:2; 20.Vulnerability Index:4; 21.Vulnerability Category: MODERATE; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Structures in the area might slowly corrode and/or rust</p>	<p>Plant more trees; maintain and monitor structure</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>MALAGOS</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1meter; 3.Existing Land Use (Specific Use):Residential; 4.Area per land use Category in Hec- tares:18.01; 5.Exposed Area in Hectares:4.89; 6.% Exposure:0.271515824541921; 7.Replacement Cost per Sq. Meter (PHP):10000; 8.Exposed Value (PHP):48900000; 9.Proportion of buildings with walls with light to salvageable materials: High; 10.Proportion of Buildings in dilapidated/ condemned Condition: High; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage: NO; 16. Available Alternative Site:YES; 17. Government Resources:YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Potential deaths and injuries due to high pro- portion of buildings with light and salvagea- ble materials</p>	<p>Implement mandatory evacuation/relocation policy on affected structures/dwellings</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>MANDUG</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Agri-Industrial; 4.Area per land use Category in Hectares:6.55; 5.Exposed Area in Hectares:6.54; 6.% Exposure:0.998473282442748; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):98100000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:18; 24.RISK CATEGORY:HIGH</p>	<p>Detrimental impacts to local economy and property owners</p>	<p>Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>MANDUG</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Residential; 4.Area per land use Category in Hectares:168.4; 5.Exposed Area in Hectares:20.99; 6.% Exposure::0.124643705463183; 7.Replacement Cost per Sq. Meter (PHP):10000; 8.Exposed Value (PHP):209900000; 9.Proportion of buildings with walls with light to salvageable materials: Moderate; 10.Proportion of Buildings in dilapidated/condemned Condition: Moderate; 11.Structure Employing Hazard Resistant/Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government Resources: YES; 18.Local government capacity to impose/implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:2; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Increase frequency of extreme rainfall events may result to significant property damage</p>	<p>Mandatory retrofitting of existing structures</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>BUNAWAN</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Residential; 4.Area per land use Category in Hectares:124.56; 5.Exposed Area in Hectares:35.1; 6.% Exposure:0.281791907514451; 7.Replacement Cost per Sq. Meter (PHP)::10000; 8.Exposed Value (PHP):351000000; 9.Proportion of buildings with walls with light to salvageable materials: Very High; 10.Proportion of Buildings in dilapidated/ condemned Condition: Very High; 11.Structure Employing Hazard Resistant/ Adaptation Design: Moderate; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:18; 24.RISK CATEGORY:HIGH</p>	<p>Significant government resources allocated for relief operations</p>	<p>Formulation of Flood Contingency plans</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>BUNAWAN</p>	<p>1.Flood Susceptibility: MF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Parks and Recreational; 4.Area per land in Hectares:0.24; 5.Exposed Area in Hectares:0.11; 6.% Exposure:0.4583333333333333; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):1650000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:2; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources :YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:2; 20.Vulnerability Index:4; 21.Vulnerabilty Category: MODERATE; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:18; 24.RISK CATEGORY:HIGH</p>	<p>Structures in the area might slowly corrode and/or rust</p>	<p>Plant more trees; maintain and monitor structure</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>BUNAWAN</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Commer- cial; 4.Area per land use Category in Hec- tares:11.86; 5.Exposed Area in Hectares:5.74; 6. %Exposure:0.48397976391231; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):86100000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:18; 24.RISK CATEGORY:HIGH</p>	<p>Potential impacts to local economy will be sever due to economic disruption affecting commercial establishments</p>	<p>Mandatory retrofitting of existing structures</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>BUNAWAN</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Industrial; 4.Area per land use Category in Hec- tares:115.63; 5.Exposed Area in Hectares:25.79; 6.% Exposure:0.223039003718758; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):386850000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources :YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:2; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Potential impacts to local economy will be sever due to economic disruption affecting industrial establishments</p>	<p>Mandatory retrofitting of existing structures</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>LASANG</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use: Residential; 4.Area per land use Category in Hectares:50.73; 5.Exposed Area in Hectares:20.65; 6.% Exposure:0.407056968263355; 7.Replacement Cost per Sq. Meter (PHP):10000; 8.Exposed Value (PHP):206500000; 9.Proportion of buildings with walls with light to salvageable materials: Very High; 10.Proportion of Buildings in dilapidated/condemned Condition: Very High; 11.Structure Employing Hazard Resistant/Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage: NO; 16. Available Alternative Site:YES; 17. Government Resources: YES; 18.Local government capacity to impose/implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:18; 24.RISK CATEGORY:HIGH</p>	<p>Potential deaths and injuries due to high proportion of buildings with light and salvageable materials</p>	<p>Implement mandatory evacuation/relocation policy on affected structures/dwellings</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>LASANG</p>	<p>1.Flood Susceptibility: MF; 2.Flood Depth: 1 meter; 3.Existing Land Use:Parks and Recreational; 4.Area per land use Category in Hectares: 0.07; 5.Exposed Area in Hectares:0.07; 6.% Exposure::1; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):1050000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:2; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:2; 20.Vulnerability Index:4; 21.Vulnerabilty Category: MODERATE; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:18; 24.RISK CATEGORY:HIGH</p>	<p>Structures in the area might slowly corrode and/or rust</p>	<p>Plant more trees; maintain and monitor structure</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>LASANG</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Agri-Industrial; 4.Area per land use Category in Hectares: 9.39; 5.Exposed Area in Hectares: 4.1; 6.% Exposure:0.436634717784877; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value PHP):61500000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/condemned Condition: Low; 11.Structure Employing Hazard Resistant/Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16 Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:18; 24.RISK CATEGORY:HIGH</p>	<p>Detrimental impacts to local economy and property owners</p>	<p>Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>LASANG</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Industrial; 4.Area per land use Category in Hectares:38.2; 5.Exposed Area in Hectares:6.57; 6.% Exposure: 0.171989528795812; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP): 98550000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:2; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Potential impacts to local economy will be sever due to economic disruption affecting industrial establishments</p>	<p>Mandatory retrofitting of existing structures</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>CALINAN</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use: Residential; 4.Area per land use Category in Hec- tares:107.32; 5.Exposed Area in Hectares:107.19; 6.% Exposure:0.998788669399925; 7.Replacement Cost per Sq. Meter (PHP):10000; 8.Exposed Value (PHP):1071900000; 9.Proportion of buildings with walls with light to salvageable materials: Moderate; 10.Proportion of Buildings in dilapidated/ condemned Condition: Moderate; 11.Structure Employing Hazard Resistant/ Adaptation Design: Moderate; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>	<p>Increase frequency of extreme rainfall events may result to significant property damage</p>	<p>Mandatory retrofitting of existing structures</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>CALINAN</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use : Parks and Recreational; 4.Area per land use Category in Hec- tares:0.75; 5.Exposed Area in Hectares:0.75; 6.% Exposure:100%; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):11250000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation De- sign: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>	<p>Structures in the area might slowly corrode and/or rust</p>	<p>Plant more trees; maintain and monitor structure</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>CALINAN</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Industrial; 4.Area per land use Category in Hectares:2.17; 5.Exposed Area in Hectares:2.17; 6.% Exposure:100%; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):32550000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/condemned Condition: Low; 11.Structure Employing Hazard Resistant/Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>	<p>Detrimental impacts to economy and property owners</p>	<p>Imposition of hazard resistant design standards/regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>CALINAN</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Commercial; 4.Area per land use Category in Hectares:19.53; 5.Exposed Area in Hectares:19.53; 6.% Exposure:100%; 7.ReplacementCost per Sq. Meter (PHP):15000; 8.ExposedValue (PHP):292950000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/condemned Condition: Low; 11.Structure Employing Hazard Resistant/Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>	<p>Detrimental impacts to local economy and property owners</p>	<p>Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>CALINAN</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use : Cemetery; 4.Area per land use Category in Hec- tares:5.97; 5.Exposed Area in Hectares:5.97; 6.% Exposure:1; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):89550000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>	<p>lack of flood resistant design regulations may lead to increased risks</p>	<p>no additional development to cemetery area susceptible to flood</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>CALINAN</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth:1 meter; 3.Existing Land Use (Specific Use): Agri-Industrial; 4.Area per land use Category in Hectares:3.12; 5.Exposed Area in Hectares:3.12; 6.% Exposure:1; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):46800000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/condemned Condition: Low; 11.Structure Employing Hazard Resistant/Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>	<p>Detrimental impacts to local economy and property owners</p>	<p>Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>BAGO APLAYA</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Residential; 4.Area per land use Category in Hectares:95.45; 5.Exposed Area in Hectares:28.28; 6.% Exposure: 0.296280775275013; 7.Replacement Cost per Sq. Meter (PHP):10000; 8.ExposedValue (PHP):282800000; 9.Proportion of buildings with walls with light to salvageable materials: Residual; 10.Proportion of Buildings in dilapidated/condemned Condition: Residual; 11.Structure Employing Hazard Resistant/Adaptation Design: Moderate; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13. DEGREE OF IMPACT:3; 14. Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage :NO; 16. Available Alternative Site: YES; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>	<p>Significant government resources allocated for relief operations</p>	<p>Formulation of Flood Contingency plans</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>BAGO GALLERA</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1meter; 3.Existing Land Use (Specific Use): Residential; 4.Area per land use Category in Hectares:129.96; 5.Exposed Area in Hectares:49.25; 6.%Exposure::0.378962757771622; 7.Replacement Cost per Sq. Meter (PHP):10000; 8.ExposedValue (PHP):492500000; 9.Proportion of buildings with walls with light to salvageable materials: Moderate; 10.Proportion of Buildings in dilapidated/ condemned Condition: Moderate; 11. Structure Employing Hazard Resistant/ Adaptation Design: Moderate; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Increase frequency of extreme rainfall events may result to significant property damage</p>	<p>Mandatory retrofitting of existing structures</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>BAGO GALLERA</p>	<p>1.Flood Susceptibility: MF; 2.Flood Depth: 1meter; 3.Existing Land Use: Industrial; 4.Area per land use Category in Hectares:0.12; 5.Exposed Area in Hectares:0.11; 6.% Exposure:0.916666666666667; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):1650000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:2; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:2; 20.Vulnerability Index:4; 21.Vulnerabilty Category: MODERATE; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>detrimental impacts to economy and property owners</p>	<p>imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>BAGO GALLERA</p>	<p>1.Flood Susceptibility: MF; 2.Flood Depth: 1meter; 3.Existing Land Use: Commercial; 4.Area per land use Category in Hec- tares:0.65; 5.Exposed Area in Hectares:0.28; 6.%Exposure:0.430769230769231; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):4200000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:2; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurace Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:2; 20.Vulnerability Index:4; 21.Vulnerabilty Category: MODERATE; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>potential impacts to local economy will be sever due to economic disruption affecting commercial establishments</p>	<p>Mandatory retrofitting of existing structures</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>BUCANA</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1meter; 3.Existing Land Use: Tourism; 4.Area per land use Category in Hec- tares:0.67; 5.Exposed Area in Hectares:0.3; 6.%Exposure:0.447761194029851; 7.Replacement Cost per Sq .Meter (PHP):15000; 8.ExposedValue (PHP):4500000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:2; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurace Coverage: NO; 16. Available Alternative Site: YES; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:2; 20.Vulnerability Index:4; 21.Vulnerability Category: MODERATE; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>damage and disruption of tourism related facilities</p>	<p>Imposition of hazard resistant design standards/ regulations within flood susceptible areas</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>BUCANA</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1meter; 3.Existing Land Use: Residential; 4.Area per land use Category in Hec- tares:216.99; 5.ExposedArea in Hectares: 86.42; 6.%Exposure:0.398267201253514; 7.Replacement Cost per Sq. Meter (PHP):10000; 8.Exposed Value (PHP):864200000; 9.Proportion of buildings with walls with light to salvageable materials: Very High; 10.Proportion of Buildings in dilapidated/ condemned Condition: Very High; 11.Structure Employing Hazard Resistant/ Adaptation Design: Moderate; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Cat- egory: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Significant government resources allocated for relief operations</p>	<p>Formulation of Flood Contingency plans</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>DUMOY</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1meter; 3.Existing Land Use: Tourism; 4.Area per land use Category in Hec- tares:5.83; 5.ExposedArea inHectares:4; 6.%Exposure:0.686106346483705; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP): 60000000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurace Coverage: NO; 16. Available Alternative Site: YES; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index: 9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>damage and disruption of tourism related facilities</p>	<p>Imposition of hazard resistant design standards/ regulations within flood susceptible areas</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>DUMOY</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1meter; 3.Existing Land Use: Parks and Recreational; 4.Area per land use Category in Hectares: 8.33; 5.Exposed Area in Hectares:5.15; 6.% Exposure:0.618247298919568; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):77250000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Structures in the area might slowly corrode and/or rust</p>	<p>Plant more trees; maintain and monitor structure</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>MA-A</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1 meter; 3.Existing Land Use :Residential; 4.Area per land use Category in Hec- tares:428.3; 5.Exposed Area in Hectares:136.31; 6.% Exposure: 0.318258230212468; 7.Replacement Cost per Sq. Meter (PHP):10000; 8.Exposed Value (PHP):1363100000; 9.Proportion of buildings with walls with light to salvageable materials: High; 10.Proportion of Buildings in dilapidated/ condemned Condition: High; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurace Coverage: NO; 16. Available Alternative Site: YES; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:18; 24.RISK CATEGORY:HIGH</p>	<p>Potential deaths and injuries due to high pro- portion of buildings with light and salvagea- ble materials</p>	<p>Implement mandatory evacuation/relocation policy on affected structures/dwellings</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>MA-A</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Parks and Recreational; 4.Area per land use Category in Hectares:12.99; 5.Exposed Area in Hectares:5.36; 6.% Exposure:0.412625096227868; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):80400000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/condemned Condition: Low; 11.Structure Employing Hazard Resistant/Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:18; 24.RISK CATEGORY:HIGH</p>	<p>Structures in the area might slowly corrode and/or rust</p>	<p>Plant more trees; maintain and monitor structure</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>MA-A</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1 meter; 3.Existing Land Use: Industrial; 4.Area per land use Category in Hec- tares:22.55; 5.Exposed Area in Hec- tares:18.04; 6.% Exposure: 0.8; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):270600000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:18; 24.RISK CATEGORY:HIGH</p>	<p>detrimental impacts to economy and proper- ty owners</p>	<p>imposition of hazard resistant design standards/ regulations within flood susceptible areas; con- duct site specific flood hazard mapping as basis for the establishment of structural design regula- tion</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>MA-A</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1 meter; 3.Existing Land Use: Tourism; 4.Area per land use Category in Hec- tares:16.56; 5.Exposed Area in Hectares:5.6; 6.% Exposure: 0.338164251207729; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):84000000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government Resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:2; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>damage and disruption of tourism related facilities</p>	<p>Imposition of hazard resistant design standards/ regulations within flood susceptible areas</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>MA-A</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Commercial; 4.Area per land use Category in Hectares: 90.17; 5.Exposed Area in Hectares:27.8; 6.% Exposure:0.308306532106022; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):417000000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources:YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:2; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>potential impacts to local economy will be sever due to economic disruption affecting commercial establishments</p>	<p>Mandatory retrofitting of existing structures</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>MATINA APLAYA</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1 meter; 3.Existing Land Use: Residential; 4.Area per land use Category in Hectares:155.55; 5.Exposed Area in Hectares:72.79; 6.% Exposure:0.467952426872388; 7.Replacement Cost per Sq. Meter (PHP):10000; 8.Exposed Value (PHP):727900000; 9.Proportion of buildings with walls with light to salvageable materials: High; 10.Proportion of Buildings in dilapidated/condemned Condition: High; 11.Structure Employing Hazard Resistant/Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government Resources: YES; 18.Local government capacity to impose/implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:18; 24.RISK CATEGORY:HIGH</p>	<p>Potential deaths and injuries due to high proportion of buildings with light and salvageable materials</p>	<p>Implement mandatory evacuation/relocation policy on affected structures/dwellings</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>MATINA APLAYA</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Commercial; 4.Area per land use Category in Hectares:20.48; 5.Exposed Area in Hectares:13.87; 6.% Exposure:0.67724609375; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):208050000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/condemned Condition: Low; 11.Structure Employing Hazard Resistant/Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government Resources: YES; 18.Local government capacity to impose/implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:18; 24.RISK CATEGORY:HIGH</p>	<p>detrimental impacts to local economy and property owners</p>	<p>Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>MATINA APLAYA</p>	<p>1.Flood Susceptibility: MF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Tourism; 4.Area per land use Category in Hec- tares:2.35; 5.Exposed Area in Hectares:0.47; 6.% Exposure:0.2; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP): 7050000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government resources: YES; 18. Local government capacity to impose/ implement zoning regulations: YES; 19. Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:2; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>damage and disruption of tourism related facilities</p>	<p>Imposition of hazard resistant design standards/ regulations within flood susceptible areas</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>CROSSING BAYABAS</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use: Residential; 4.Area per land use Category in Hectares:92.31; 5.Exposed Area in Hectares:21.61; 6.% Exposure:0.234102480771314; 7.Replacement Cost per Sq. Meter (PHP):10000; 8.Exposed Value (PHP):216100000; 9.Proportion of buildings with walls with light to salvageable materials: High; 10.Proportion of Buildings in dilapidated/ condemned Condition: High; 11.Structure Employing Hazard Resistant/ Adaptation Design: Moderate; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>	<p>Significant government resources allocated for relief operations</p>	<p>Formulation of Flood Contingency plans</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>LIZADA</p>	<p>1.Flood Susceptibility: MF; 2.Flood Depth: 1 meter; 3.Existing Land Use: Agri-Industrial; 4.Area per land use Category in Hec- tares:5.18; 5.Exposed Area in Hectares:2.1; 6.% Exposure:0.405405405405405; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):31500000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11..Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>		

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>LUBOGAN</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1meter; 3.Existing Land Use: Residential; 4.Area per land use Category in Hectares: 90.18; 5.Exposed Area in Hectares:32.08; 6.%Exposure:0.355732978487469; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):481200000; 9.Proportion of buildings with walls with light to salvageable materials: Residual; 10.Proportion of Buildings in dilapidated/ condemned Condition: Residual; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Significant government resources allocated for relief operations</p>	<p>formulation of flood contingency plans</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>MARAPANGI</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use: Tourism; 4.Area per land use Category in Hectares:0.02; 5.Exposed Area in Hectares:0.02; 6.%Exposure:1; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.ExposedValue (PHP):300000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:1; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:1; 20.Vulnerability Index:1; 21.Vulnerability Category: LOW; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:18; 24.RISK CATEGORY:HIGH</p>	<p>damage and disruption of tourism related facilities</p>	<p>Imposition of hazard resistant design standards/ regulations within flood susceptible areas</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>MARAPANGI</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use):Agri-Industrial; 4.Area per land use Category in Hectares:9.85; 5.Exposed Area in Hectares:8.44; 6.%Exposure:0.856852791878173; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):126600000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/condemned Condition: Low; 11.Structure Employing Hazard Resistant/Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government resources: YES; 18.Local government capacity to impose/implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:18; 24.RISK CATEGORY:HIGH</p>	<p>detrimental impacts to local economy and property owners</p>	<p>Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>MARAPANGI</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use: Residential; 4.Area per land use Category in Hec- tares:76.92; 5.Exposed Area in Hec- tares:12.97; 6.% Exposure:0.168616744669787; 7.Replacement Cost per Sq. Meter (PHP):10000; 8.Exposed Value (PHP):129700000; 9.Proportion of buildings with walls with light to salvageable materials: High; 10.Proportion of Buildings in dilapidated/ condemned Condition: High; 11.Structure Employing Hazard Resistant/Adaptation De- sign: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:2; 23.RISK SCORE:12; 24.RISK CATEGORY:HIGH</p>	<p>Potential deaths and injuries due to high pro- portion of buildings with light and salvagea- ble materials</p>	<p>Implement mandatory evacuation/relocation policy on affected structures/dwellings</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>ANGALAN</p>	<p>1.Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use: Agri-Industrial; 4.Area per land use Category in Hectares:12.3; 5.Exposed Area in Hectares:12.3; 6.% Exposure:1; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):184500000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>	<p>detrimental impacts to local economy and property owners</p>	<p>Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>BALENGAENG</p>	<p>1. Flood Susceptibility: HF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Agri-Industrial; 4.Area per land use Category in Hectares:35.49; 5.Exposed Area in Hectares:35.49; 6.%Exposure:1; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.ExposedValue (PHP):532350000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/condemned Condition: Low; 11.Structure Employing Hazard Resistant/Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>	<p>detrimental impacts to local economy and property owners</p>	<p>Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>BIAO GUIANGA</p>	<p>1.Flood Susceptibility: MF; 2.Flood Depth: 1 meter; 3.Existing Land Use:Agri-Industrial; 4.Area per land use Category in Hectares:6.2; 5.Exposed Area in Hectares:6.2; 6.%Exposure:1; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):93000000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>	<p>detrimental impacts to local economy and property owners</p>	<p>Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>LOS AMIGOS</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use):Tourism; 4.Area per land use Category in Hec- tares:0.63; 5.Exposed Area inHectares:0.63; 6.%Exposure:1; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):9450000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/ Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurace Coverage: NO; 16. Available Alternative Site: YES; 17. Government resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>	<p>damage and disruption of tourism related facilities</p>	<p>Imposition of hazard resistant design standards/ regulations within flood susceptible areas</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>LOS AMIGOS</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use):Residential; 4.Area per land use Category in Hec- tares:39.99; 5.Exposed Area in Hec- tares:38.62; 6.% Exposure:0.96574143535884; 7.Replacement Cost per Sq. Meter (PHP):10000; 8.Exposed Value (PHP):386200000; 9.Proportion of buildings with walls with light to salvageable materials: High; 10.Proportion of Buildings in dilapidated/ condemned Condition: High; 11.Structure Employing Hazard Resistant/Adaptation De- sign: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: NO; 15.Insurance Coverage: NO; 16. Available Alternative Site: YES; 17. Government resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerabilty Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>	<p>Potential deaths and injuries due to high pro- portion of buildings with light and salvagea- ble materials</p>	<p>Implement mandatory evacuation/relocation policy on affected structures/dwellings</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>LOS AMIGOS</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth:> 1 meter; 3.Existing Land Use (Specific Use):Industrial; 4.Area per land use Category in Hectares:3.31; 5.Exposed Area in Hectares:3.31; 6.% Exposure:1; 7.Replacement Cost per Sq. Meter (PHP): 15000; 8.Exposed Value (PHP):49650000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of buildings in dilapidated/ condemned Condition: Low; 11.Structure Employing Hazard Resistant/Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>	<p>Detrimental impacts to economy and property owners</p>	<p>imposition of hazard resistant design standards/ regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation</p>

Table U-36. Urban Use Decision Areas Matrix for Flood, Davao City

Barangay	Technical Findings	Implications	Policy Interventions
<p>LOS AMIGOS</p>	<p>1.Flood Susceptibility: VHF; 2.Flood Depth: 1 meter; 3.Existing Land Use (Specific Use): Commercial; 4.Area per land use Category in Hectares:1.03; 5.Exposed Area in Hectares:1.03; 6.% Exposure:1; 7.Replacement Cost per Sq. Meter (PHP):15000; 8.Exposed Value (PHP):15450000; 9.Proportion of buildings with walls with light to salvageable materials: Low; 10.Proportion of Buildings in dilapidated/condemned Condition: Low; 11.Structure Employing Hazard Resistant/Adaptation Design: High; 12.No access/area coverage to infrastructure related hazard mitigation measures: Very High; 13.DEGREE OF IMPACT:3; 14.Capacity and willingness to retrofit or relocate or conform with new regulations: YES; 15.Insurance Coverage: YES; 16. Available Alternative Site: NO; 17. Government resources: YES; 18.Local government capacity to impose/ implement zoning regulations: YES; 19.Adaptive Capacity Score:3; 20.Vulnerability Index:9; 21.Vulnerability Category: HIGH; 22.SEVERITY OF CONSEQUENCES SCORE:3; 23.RISK SCORE:15; 24.RISK CATEGORY:HIGH</p>	<p>Detrimental impacts to local economy and property owners</p>	<p>Imposition of hazard resistant design standard regulations within flood susceptible areas; conduct site specific flood hazard mapping as basis for the establishment of structural design regulation</p>

LANDSLIDE

Based on the above figure, the 90 exposed barangays to landslide have a high severity of consequence with a moderate likelihood of occurrence to landslide and a low adaptive capacity, thus, concludes that the residential area exposed to landslide is a high risk area. Reflected in the table below are areas with moderate to high landslide risk.

Table U-37. Urban Use Areas Risk to Landslide, Davao City

		HAZARD	EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
						HxGx10000	H/F					=SxD		
19-B	Commercial	4	28.23	15,000.00	1.86	279,000,000.00	6.59%	low	low	moderate	very high	3	12	High
19-B	Residential	4	179.82	10,000.00	1.32	132,000,000.00	0.73%	moderate	moderate	low	very high	3	12	High
CARMEN	Residential	5	1.49	10,000.00	1.26	126,000,000.00	84.56%	very high	very high	low	very high	3	15	High
GUMA-LANG	Agri-Industrial	3	21.27	15,000.00	2.68	402,000,000.00	12.60%	moderate	moderate	moderate	very high	3	9	Moderate
GUMA-LANG	Residential	3	4.56	10,000.00	0.38	38,000,000.00	8.33%	very high	very high	low	very high	2	6	Moderate
MALAGOS	Agri-Industrial	3	7.18	15,000.00	0.43	64,500,000.00	5.99%	moderate	moderate	moderate	very high	3	9	Moderate
MALAGOS	Tourism	3	13.48	15,000.00	0.12	18,000,000.00	0.89%	moderate	moderate	low	very high	2	6	Moderate
TAM-BOBONG	Residential	5	4.49	10,000.00	4.49	449,000,000.00	100.00%	very high	very high	low	very high	3	15	High
TAWAN-TAWAN	Residential	3	2.60	10,000.00	0.04	4,000,000.00	1.54%	very high	very high	low	very high	2	6	Moderate
ACACIA	Residential	3	15.14	10,000.00	15.14	1,514,000,000.00	100.00%	high	high	low	very high	3	9	Moderate
ACACIA	Parks and Recreational	3	0.04	15,000.00	0.04	6,000,000.00	95.24%	low	low	low	very high	2	6	Moderate
BUHANGI N	Cemetery	5	8.84	15,000.00	7.54	1,131,000,000.00	85.29%	moderate	moderate	low	very high	3	15	High
BUHANGI N	Industrial	5	4.40	15,000.00	2.45	367,500,000.00	55.68%	low	low	moderate	very high	3	15	High

Table U-37. Urban Use Areas Risk to Landslide, Davao City

		HAZARD	EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
						HxGx10000	H/F					=SxD		
BUHANGI N	Parks and Recreational	5	0.96	15,000.00	0.26	39,000,000.00	27.08%	moderate	moderate	moderate	very high	2	10	Moderate
BUHANGI N	Residential	5	335.29	10,000.00	36.71	3,671,000,000.00	10.95%	moderate	moderate	moderate	very high	3	15	High
BUHANGI N	Commercial	5	52.90	15,000.00	0.54	81,000,000.00	1.02%	low	low	moderate	very high	3	15	High
CABANTI-AN	Cemetery	3	0.28	15,000.00	0.28	42,000,000.00	100.00%	moderate	moderate	low	very high	2	6	Moderate
CABANTI-AN	Residential	3	304.36	10,000.00	83.13	8,313,000,000.00	27.31%	low	low	low	very high	3	9	Moderate
CABANTI-AN	Commercial	3	23.10	15,000.00	3.71	556,500,000.00	16.06%	low	low	moderate	very high	3	9	Moderate
CABANTI-AN	Industrial	3	26.46	15,000.00	1.69	253,500,000.00	6.39%	low	low	moderate	very high	3	9	Moderate
CALLAWA COMMUNAL	Residential	4	7.90	10,000.00	0.68	68,000,000.00	8.61%	high	high	low	very high	3	12	High
COMMUNAL	Tourism	3	20.15	15,000.00	12.51	1,876,500,000.00	62.08%	moderate	moderate	moderate	very high	3	9	Moderate
COMMUNAL	Residential	3	161.79	10,000.00	67.72	6,772,000,000.00	41.86%	low	low	low	very high	3	9	Moderate
COMMUNAL	Commercial	3	11.99	15,000.00	1.26	189,000,000.00	10.51%	moderate	moderate	moderate	very high	3	9	Moderate
COMMUNAL	Industrial	3	4.48	15,000.00	0.43	64,500,000.00	9.60%	low	low	moderate	very high	3	9	Moderate
IN-DANGAN	Tourism	3	0.01	15,000.00	0.01	1,500,000.00	100.00%	moderate	moderate	low	very high	2	6	Moderate
IN-DANGAN	Commercial	3	1.70	15,000.00	1.58	237,000,000.00	92.94%	moderate	moderate	moderate	very high	3	9	Moderate
IN-DANGAN	Parks and Recreational	3	56.26	15,000.00	33.27	4,990,500,000.00	59.14%	moderate	moderate	low	very high	3	9	Moderate
IN-DANGAN	Industrial	3	11.16	15,000.00	1.86	279,000,000.00	16.67%	moderate	moderate	moderate	very high	3	9	Moderate

Table U-37. Urban Use Areas Risk to Landslide, Davao City

		HAZARD	EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
						HxGx10000	H/F					=SxD		
IN-DANGAN	Residential	3	247.61	10,000.00	23.10	2,310,000,000.00	9.33%	residual	residual	low	very high	3	9	Moderate
MANDUG	Parks and Recreational	3	32.36	15,000.00	20.19	3,028,500,000.00	62.39%	moderate	moderate	low	very high	3	9	Moderate
MANDUG	Residential	3	168.39	10,000.00	20.17	2,017,000,000.00	11.98%	moderate	moderate	low	very high	3	9	Moderate
MANDUG	Agri-Industrial	3	6.55	15,000.00	0.32	48,000,000.00	4.89%	moderate	moderate	moderate	very high	2	6	Moderate
MANDUG	Industrial	3	19.99	15,000.00	0.90	135,000,000.00	4.50%	low	low	moderate	very high	3	9	Moderate
SASA	Residential	3	223.79	10,000.00	1.14	114,000,000.00	0.51%	moderate	moderate	low	very high	3	9	Moderate
TIGATTO	Industrial	5	13.02	15,000.00	7.17	1,075,500,000.00	55.07%	very high	very high	low	very high	3	15	High
TIGATTO	Residential	5	256.29	10,000.00	39.43	3,943,000,000.00	15.38%	low	low	moderate	very high	3	15	High
WAAN	Cemetery	3	3.83	15,000.00	3.83	574,500,000.00	100.00%	residual	residual	low	very high	3	9	Moderate
WAAN	Residential	3	38.48	10,000.00	7.17	717,000,000.00	18.63%	high	high	low	very high	3	9	Moderate
A. ANGLI-ONGTO	Residential	3	155.67	10,000.00	0.72	72,000,000.00	0.46%	low	low	moderate	very high	3	9	Moderate
A. ANGLI-ONGTO	Industrial	3	17.15	15,000.00	0.01	1,500,000.00	0.06%	low	low	moderate	very high	2	6	Moderate
BUNA-WAN	Industrial	4	115.60	15,000.00	11.07	1,660,500,000.00	9.58%	low	low	moderate	very high	3	12	High
BUNA-WAN	Residential	4	123.76	10,000.00	7.75	775,000,000.00	6.26%	very high	very high	low	very high	3	12	High
GATUNGAN	Agri-Industrial	3	2.17	15,000.00	2.17	325,500,000.00	100.00%	moderate	moderate	moderate	very high	3	9	Moderate
GATUNGAN	Industrial	3	0.38	15,000.00	0.38	57,000,000.00	100.00%	low	low	moderate	very high	3	9	Moderate
GATUNGAN	Parks and Recreational	3	0.01	15,000.00	0.01	1,200,000.00	100.00%	moderate	moderate	moderate	very high	2	6	Moderate
GATUNGAN	Residential	3	1.98	10,000.00	1.70	170,000,000.00	85.86%	high	high	low	very high	3	9	Moderate
ILANG	Residential	3	125.67	10,000.00	16.66	1,666,000,000.00	13.26%	high	high	low	very high	3	9	Moderate

Table U-37. Urban Use Areas Risk to Landslide, Davao City

		HAZARD	EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/ condemned Condition	Structure Employing Hazard Resistant/ Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
						HxGx10000	H/F					=SxD		
ILANG	Industrial	3	90.12	15,000.00	0.07	10,500,000.00	0.08%	low	low	moderate	very high	2	6	Moderate
MAHA-YAG	Agri-Industrial	3	26.18	15,000.00	6.41	961,500,000.00	24.48%	low	low	moderate	very high	3	9	Moderate
MAHA-YAG	Industrial	3	70.08	15,000.00	15.68	2,352,000,000.00	22.37%	low	low	moderate	very high	3	9	Moderate
MAHA-YAG	Residential	3	57.77	10,000.00	7.19	719,000,000.00	12.45%	high	high	low	very high	3	9	Moderate
MAHA-YAG	Commercial	3	8.62	15,000.00	0.39	58,500,000.00	4.52%	moderate	moderate	moderate	very high	3	9	Moderate
MUDIANG	Residential	3	67.96	10,000.00	38.15	3,815,000,000.00	56.14%	high	high	moderate	very high	3	9	Moderate
MUDIANG	Industrial	3	6.42	15,000.00	3.09	463,500,000.00	48.13%	moderate	moderate	moderate	very high	3	9	Moderate
MUDIANG	Agri-Industrial	3	1.88	15,000.00	0.42	63,000,000.00	22.34%				very high	3	9	Moderate
PANACAN	Residential	4	256.99	10,000.00	67.73	6,773,000,000.00	26.36%	high	high	moderate	very high	3	12	High
PANACAN	Industrial	4	120.37	15,000.00	21.00	3,150,000,000.00	17.45%	low	low	low	very high	3	12	High
SAN ISI-DRO	Residential	4	26.46	10,000.00	3.40	340,000,000.00	12.85%	moderate	moderate	moderate	very high	3	12	High
SAN ISI-DRO	Industrial	4	4.21	15,000.00	0.01	1,500,000.00	0.24%	very high	very high	low	very high	2	8	Moderate
TI-BUNGCO	Agri-Industrial	3	4.17	15,000.00	0.99	148,500,000.00	23.74%	very high	very high	low	very high	3	9	Moderate
TI-BUNGCO	Industrial	3	41.73	15,000.00	8.15	1,222,500,000.00	19.53%	low	low	moderate	very high	3	9	Moderate
TI-BUNGCO	Residential	3	131.99	10,000.00	18.18	1,818,000,000.00	13.77%	low	low	moderate	very high	3	9	Moderate
BIAO JOAQUIN	Residential	3	3.19	10,000.00	0.82	82,000,000.00	25.71%	high	high	low	very high	3	9	Moderate
BIAO JOAQUIN	Agri-Industrial	3	20.15	15,000.00	4.09	613,500,000.00	20.30%	moderate	moderate	moderate	very high	3	9	Moderate
CALINAN	Residential	3	107.30	10,000.00	0.02	2,000,000.00	0.02%	moderate	moderate	low	very high	2	6	Moderate

Table U-37. Urban Use Areas Risk to Landslide, Davao City

		HAZARD	EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
						HxGx10000	H/F					=SxD		
DACUDAO	Agri-Industrial	3	37.72	15,000.00	2.24	336,000,000.00	5.94%	moderate	moderate	moderate	very high	3	9	Moderate
DALAG-DAG	Residential	3	2.54	10,000.00	1.14	114,000,000.00	44.88%	very high	very high	low	very high	3	9	Moderate
DOMINGA	Residential	3	1.76	10,000.00	0.11	11,000,000.00	6.25%	very high	very high	low	very high	2	6	Moderate
INAYAN-GAN	Residential	5	3.02	10,000.00	1.89	189,000,000.00	62.58%	very high	very high	low	very high	3	15	High
LACSON	Agri-Industrial	3	11.02	15,000.00	6.44	966,000,000.00	58.44%	moderate	moderate	moderate	very high	3	9	Moderate
LACSON	Residential	3	5.16	10,000.00	0.07	7,000,000.00	1.36%	high	high	low	very high	2	6	Moderate
LAMANAN	Residential	3	4.53	10,000.00	4.47	447,000,000.00	98.68%	very high	very high	low	very high	3	9	Moderate
LAM-PIANAO	Residential	3	2.13	10,000.00	1.85	185,000,000.00	86.85%	very high	very high	low	very high	3	9	Moderate
MEGKA-WAYAN	Residential	5	5.51	10,000.00	5.51	551,000,000.00	100.00%	very high	very high	low	very high	3	15	High
MEGKA-WAYAN	Tourism	5	1.93	15,000.00	1.93	289,500,000.00	100.00%	moderate	moderate	low	very high	3	15	High
PANGYAN	Residential	3	5.09	10,000.00	1.33	133,000,000.00	26.13%	very high	very high	low	very high	3	9	Moderate
SALOY	Residential	3	1.78	10,000.00	1.77	177,000,000.00	99.44%	residual	residual	low	very high	3	9	Moderate
SIRIB	Residential	3	7.56	10,000.00	0.90	90,000,000.00	11.90%	high	high	low	very high	3	9	Moderate
TALOMO RIVER	Agri-Industrial	3	18.30	15,000.00	1.18	177,000,000.00	6.45%	high	high	low	very high	3	9	Moderate
TALOMO RIVER	Residential	3	21.81	10,000.00	0.10	10,000,000.00	0.46%	moderate	moderate	moderate	very high	2	6	Moderate
TAMA-YONG	Residential	3	4.57	10,000.00	2.67	267,000,000.00	58.42%	moderate	moderate	low	very high	3	9	Moderate
BAGANI-HAN	Tourism	5	3.95	15,000.00	0.47	70,500,000.00	11.90%	moderate	moderate	moderate	very high	3	15	High
BAGANI-HAN	Residential	5	3.08	10,000.00	0.16	16,000,000.00	5.19%	very high	very high	low	very high	2	10	Moderate

Table U-37. Urban Use Areas Risk to Landslide, Davao City

		HAZARD	EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
						HxGx10000	H/F					=SxD		
BANTOL	Residential	3	2.61	10,000.00	2.61	261,000,000.00	100.00%	very high	very high	low	very high	3	9	Moderate
BUDA	Residential	5	19.63	10,000.00	4.07	407,000,000.00	20.73%	very high	very high	low	very high	3	15	High
DALAG LUMOT	Residential	3	9.86	10,000.00	9.86	986,000,000.00	100.00%	very high	very high	low	very high	3	9	Moderate
DATU SALUMAY	Residential	3	21.30	10,000.00	4.94	494,000,000.00	23.19%	very high	very high	low	very high	3	9	Moderate
DATU SALUMAY	Tourism	3	8.83	15,000.00	0.29	43,500,000.00	3.28%	moderate	moderate	moderate	very high	2	6	Moderate
GUMITAN	Residential	5	8.82	10,000.00	6.63	663,000,000.00	75.17%	very high	very high	low	very high	3	15	High
MAG-SAYSAY	Residential	4	8.68	10,000.00	8.68	868,000,000.00	100.00%	very high	very high	low	very high	3	12	High
MAG-SAYSAY	Tourism	4	0.99	15,000.00	0.99	148,500,000.00	100.00%	moderate	moderate	low	very high	3	12	High
MALAM-BA	Residential	3	13.13	10,000.00	10.09	1,009,000,000.00	76.85%	very high	very high	low	very high	3	9	Moderate
MARILOG	Residential	5	92.60	10,000.00	91.12	9,112,000,000.00	98.40%	residual	residual	low	very high	3	15	High
MARILOG	Tourism	5	29.99	15,000.00	26.29	3,943,500,000.00	87.66%	moderate	moderate	low	very high	3	15	High
SALAYSAY	Residential	5	10.06	10,000.00	10.00	1,000,000,000.00	99.40%	residual	residual	low	very high	3	15	High
SUAWAN	Residential	5	7.31	10,000.00	7.31	731,000,000.00	100.00%	moderate	moderate	moderate	very high	3	15	High
SUAWAN	Agri-Industrial	5	19.10	15,000.00	1.77	265,500,000.00	9.27%	very high	very high	low	very high	3	15	High
COLOSAS	Residential	3	9.67	10,000.00	9.65	965,000,000.00	99.79%	very high	very high	low	very high	3	9	Moderate
FATIMA	Residential	4	9.80	15,000.00	7.61	1,141,500,000.00	77.65%	very high	very high	low	very high	3	12	High
LUMIAD	Residential	3	8.61	10,000.00	8.61	861,000,000.00	100.00%	very high	very high	low	very high	3	9	Moderate
MABUHAY	Residential	3	7.35	10,000.00	0.68	68,000,000.00	9.25%	very high	very high	low	very high	3	9	Moderate
MALABOG	Residential	3	18.21	10,000.00	18.21	1,821,000,000.00	100.00%	residual	residual	low	very high	3	9	Moderate
MALABOG	Tourism	3	4.34	15,000.00	4.34	651,000,000.00	100.00%	moderate	moderate	low	very high	3	9	Moderate
MAPULA	Residential	3	14.69	10,000.00	14.69	1,469,000,000.00	100.00%	residual	residual	low	very high	3	9	Moderate

Table U-37. Urban Use Areas Risk to Landslide, Davao City

		HAZARD	EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
						HxGx10000	H/F					=SxD		
PAN-DAITAN	Residential	3	9.35	10,000.00	9.34	934,000,000.00	99.89%	moderate	moderate	moderate	very high	3	9	Moderate
PAÑALUM	Residential	3	2.07	10,000.00	2.07	207,000,000.00	100.00%	very high	very high	low	very high	3	9	Moderate
PAQUIBATO	Residential	3	12.53	10,000.00	12.53	1,253,000,000.00	100.0000%	high	high	low	very high	3	9	Moderate
PAQUIBATO	Tourism	3	0.99	15,000.00	0.99	148,500,000.00	100.00%	very high	very high	low	very high	3	9	Moderate
PARADISE EMBAC	Residential	3	1.90	10,000.00	1.90	190,000,000.00	100.00%	high	high	low	very high	3	9	Moderate
SALA-PAWAN	Residential	3	3.04	10,000.00	3.03	303,000,000.00	99.67%	very high	very high	low	very high	3	9	Moderate
SUMIMAO	Residential	4	1.77	10,000.00	1.77	177,000,000.00	100.00%	very high	very high	low	very high	3	12	High
TAPAK	Residential	6	18.67	10,000.00	18.46	1,846,000,000.00	98.88%	residual	residual	low	very high	3	18	High
CATALUNAN GRANDE	Residential	4	301.75	10,000.00	5.07	507,000,000.00	1.68%	high	high	low	very high	3	12	High
CATALUNAN GRANDE	Parks and Recreational	4	5.79	15,000.00	0.02	3,000,000.00	0.35%	moderate	moderate	low	very high	2	8	Moderate
LANGUB	Parks and Recreational	3	2.13	15,000.00	2.13	319,500,000.00	100.00%	moderate	moderate	low	very high	3	9	Moderate
LANGUB	Tourism	3	0.32	15,000.00	0.32	48,000,000.00	100.00%	moderate	moderate	moderate	very high	2	6	Moderate
LANGUB	Commercial	3	0.01	15,000.00	0.01	1,500,000.00	100.00%	moderate	moderate	moderate	very high	2	6	Moderate
LANGUB	Residential	3	13.61	10,000.00	13.48	1,348,000,000.00	99.04%	high	high	low	very high	3	9	Moderate
MA-A	Tourism	4	16.55	15,000.00	6.86	1,029,000,000.00	41.45%	moderate	moderate	low	very high	3	12	High
MA-A	Parks and Recreational	4	12.99	15,000.00	4.05	607,500,000.00	31.18%	moderate	moderate	low	very high	3	12	High
MA-A	Residential	4	428.26	10,000.00	101.76	10,176,000,000.00	23.76%	high	high	low	very high	3	12	High
MA-A	Commercial	4	90.16	15,000.00	10.05	1,507,500,000.00	11.15%	low	low	moderate	very high	3	12	High

Table U-37. Urban Use Areas Risk to Landslide, Davao City

		HAZARD	EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
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MA-A	Cemetery	4	25.41	15,000.00	2.15	322,500,000.00	8.46%	moderate	moderate	low	very high	3	12	High
MA-A	Industrial	4	22.53	15,000.00	0.09	13,500,000.00	0.40%	low	low	moderate	very high	2	8	Moderate
MAG-TUOD	Parks and Recreational	3	10.48	15,000.00	10.43	1,564,500,000.00	99.52%	moderate	moderate	low	very high	3	9	Moderate
MAG-TUOD	Cemetery	3	91.87	15,000.00	84.30	12,645,000,000.00	91.76%	moderate	moderate	low	very high	3	9	Moderate
MAG-TUOD	Residential	3	53.99	10,000.00	46.37	4,637,000,000.00	85.89%	very high	very high	low	very high	3	9	Moderate
MAG-TUOD	Commercial	3	0.77	15,000.00	0.11	16,500,000.00	14.29%	moderate	moderate	moderate	very high	2	6	Moderate
MATINA CROSSING	Industrial	6	5.72	15,000.00	4.06	609,000,000.00	70.98%	low	low	low	very high	3	18	High
MATINA CROSSING	Residential	6	250.40	10,000.00	29.25	2,925,000,000.00	11.68%	low	low	low	very high	3	18	High
MATINA CROSSING	Commercial	6	50.80	15,000.00	0.21	31,500,000.00	0.41%	low	low	low	very high	2	12	High
MATINA PANGI	Commercial	6	4.88	15,000.00	4.88	732,000,000.00	100.00%	low	low	moderate	very high	3	18	High
MATINA PANGI	Parks and Recreational	6	0.53	15,000.00	0.40	60,000,000.00	75.47%	moderate	moderate	low	very high	3	18	High
MATINA PANGI	Tourism	6	0.55	15,000.00	0.31	46,500,000.00	56.36%	moderate	moderate	low	very high	2	12	High
MATINA PANGI	Residential	6	152.49	15,000.00	64.73	9,709,500,000.00	42.45%	very high	very high	low	very high	3	18	High
MATINA PANGI	Industrial	6	0.03	15,000.00	0.01	1,500,000.00	33.33%	low	low	moderate	very high	2	12	High
TALOMO	Industrial	5	15.84	15,000.00	2.61	391,500,000.00	16.48%	low	low	moderate	very high	3	15	High
TALOMO	Commercial	5	20.65	15,000.00	0.82	123,000,000.00	3.97%	moderate	moderate	low	very high	3	15	High
TALOMO	Residential	5	297.55	10,000.00	10.51	1,051,000,000.00	3.53%	low	low	moderate	very high	3	15	High
ALAMBRE	Residential	3	7.80	10,000.00	0.09	9,000,000.00	1.15%	high	high	low	very high	2	6	Moderate

Table U-37. Urban Use Areas Risk to Landslide, Davao City

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						HxGx10000	H/F					=SxD		
ATAN-AWE	Residential	3	0.88	10,000.00	0.88	88,000,000.00	100.00%	very high	very high	low	very high	3	9	Moderate
BARACATAN	Residential	3	4.30	10,000.00	1.55	155,000,000.00	36.05%	very high	very high	low	very high	3	9	Moderate
BATO	Residential	3	44.80	10,000.00	1.00	100,000,000.00	2.23%	low	low	low	very high	3	9	Moderate
BAYABAS	Tourism	3	0.08	15,000.00	0.08	12,000,000.00	100.00%	moderate	moderate	low	very high	2	6	Moderate
BAYABAS	Residential	3	3.34	10,000.00	2.05	205,000,000.00	61.38%	very high	very high	low	very high	3	9	Moderate
BINUGAO	Agri-Industrial	3	13.50	15,000.00	10.65	1,597,500,000.00	78.89%	moderate	moderate	moderate	very high	3	9	Moderate
BINUGAO	Residential	3	52.79	10,000.00	24.70	2,470,000,000.00	46.79%	high	high	low	very high	3	9	Moderate
BINUGAO	Industrial	3	63.36	15,000.00	9.79	1,468,500,000.00	15.45%	low	low	moderate	very high	3	9	Moderate
BINUGAO	Commercial	3	3.43	15,000.00	0.04	6,000,000.00	1.17%	low	low	moderate	very high	2	6	Moderate
CAMANSI	Residential	3	2.44	10,000.00	1.73	173,000,000.00	70.90%	high	high	low	very high	3	9	Moderate
CATIGAN	Residential	3	6.30	10,000.00	2.21	221,000,000.00	35.08%	very high	very high	low	very high	3	9	Moderate
DALIAON PLANTATION	Residential	3	5.55	10,000.00	2.17	217,000,000.00	39.10%	very high	very high	low	very high	3	9	Moderate
EDEN	Residential	3	51.48	10,000.00	51.48	5,148,000,000.00	100.00%	very high	very high	low	very high	3	9	Moderate
EDEN	Agri-Industrial	3	1.27	15,000.00	1.27	190,500,000.00	100.00%	moderate	moderate	moderate	very high	3	9	Moderate
EDEN	Parks and Recreational	3	0.55	15,000.00	0.55	82,500,000.00	100.00%	moderate	moderate	moderate	very high	3	9	Moderate
EDEN	Commercial	3	0.08	15,000.00	0.08	12,000,000.00	100.00%	low	low	low	very high	2	6	Moderate
EDEN	Tourism	3	98.40	15,000.00	94.89	14,233,500,000.00	96.43%	moderate	moderate	low	very high	3	9	Moderate
KILATE	Residential	3	2.60	10,000.00	0.19	19,000,000.00	7.31%	very high	very high	low	very high	2	6	Moderate
MARAPAN GI	Tourism	3	0.19	15,000.00	0.07	10,500,000.00	36.84%	moderate	moderate	low	very high	2	6	Moderate
MARAPAN GI	Residential	3	76.91	10,000.00	1.99	199,000,000.00	2.59%	high	high	low	very high	3	9	Moderate

Table U-37. Urban Use Areas Risk to Landslide, Davao City

		HAZARD	EXPOSURE					VULNERABILITY				Severity of Consequence	RISK	
Barangay	Land Use Category	Likelihood of Occurrence Score	Total Brgy. Area Allocation in Hectares	Replacement Cost per sq. meter (PHP)	Affected Area in Hectares (GIS Derived)	Affected Value (PHP)	% Exposure	Proportion of buildings with walls with light to salvageable materials	Proportion of Buildings in dilapidated/condemned Condition	Structure Employing Hazard Resistant/Adaptation Design	Structures No access/area coverage to infrastructure related hazard mitigation measures		Risk Score	Risk Category
						HxGx10000	H/F					=SxD		
SIBULAN	Residential	3	2.13	10,000.00	2.13	213,000,000.00	100.00%	moderate	moderate	low	very high	3	9	Moderate
SIRAWAN	Agri-Industrial	3	85.27	15,000.00	14.86	2,229,000,000.00	17.43%	residual	residual	low	very high	3	9	Moderate
SIRAWAN	Residential	3	83.94	10,000.00	7.50	750,000,000.00	8.93%	low	low	moderate	very high	3	9	Moderate
TA-GURANO	Residential	3	1.66	10,000.00	0.60	60,000,000.00	36.14%	very high	very high	low	very high	3	9	Moderate
TIBULOY	Agri-Industrial	3	7.75	15,000.00	7.75	1,162,500,000.00	100.00%	high	high	low	very high	3	9	Moderate
TIBULOY	Residential	3	3.76	10,000.00	3.57	357,000,000.00	94.95%	moderate	moderate	moderate	very high	3	9	Moderate
TUNGKALAN	Residential	3	3.84	10,000.00	1.09	109,000,000.00	28.39%	moderate	moderate	low	very high	3	9	Moderate
MATINA BIAO	Agri-Industrial	3	6.89	15,000.00	0.82	123,000,000.00	11.90%	moderate	moderate	moderate	very high	3	9	Moderate
MATINA BIAO	Residential	3	2.76	10,000.00	0.05	5,000,000.00	1.81%	moderate	high	low	very high	2	6	Moderate
MANAMBULAN	Residential	3	9.65	10,000.00	0.12	12,000,000.00	1.24%	high	high	low	very high	2	6	Moderate
NEW CARMEN	Parks and Recreational	3	0.09	15,000.00	0.09	13,500,000.00	100.00%	moderate	moderate	low	very high	2	6	Moderate
NEW CARMEN	Residential	3	15.64	10,000.00	2.26	226,000,000.00	14.45%	moderate	moderate	low	very high	3	9	Moderate
NEW VALENCIA	Residential	3	4.93	10,000.00	1.00	100,000,000.00	20.28%	very high	very high	low	very high	3	9	Moderate
TALANDANG	Agri-Industrial	3	24.65	15,000.00	8.55	1,282,500,000.00	34.69%	very high	very high	low	very high	3	9	Moderate

Decision Areas for Landslide Risk

A total of barangays of the city have urban use areas at risk to landslide. Out of these barangays ten (10) are identified to have considerable total number of hectares of urban uses at risk to landslide. These barangays include Ma-a, Panacan, Marilog, Buhangin, Tigatto, Matina Pangi, Salaysay, Tapak, Matina Crossing and Talomo.

Table U-38 Urban Use Risk Assessment for Landslide Summary Matrix, Davao City

Barangay	Existing Land Use	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
19-B	Residential	1. Area is 179.82 has; 2. Exposed Area is 1.32 3. Percentage of Exposure 0.73 % 4. Replacement Cost is 10,000 5. Exposed Value is 132,000,000.00	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
19-B	Commercial	1. Area is 28.23 has; 2. Exposed Area is 1.86 ha 3. Percentage of Exposure 6.59% 4. Replacement Cost is 15,000 5. Exposed Value is 279,000,000.00	Damaged structures entails financial instability of the businesses of small entrepreneurs; Discourages future investors.	Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; Encourage structure owners to secure building insurances.
CARMEN	Residential	1. Area is 1.49 has; 2. Exposed Area is 1.26 ha 3. Percentage of Exposure 84.56% 4. Replacement Cost is 10,000 5. Exposed Value is 126,000,000.00	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of most houses made of light salvageable materials.	LGU to prepare comprehensive guidelines especially on groundwater & surface water management during heavy rainfall w/c will be needed to protect people from massive landslide on any slope.
TAMBOBONG	Residential	1. Area is 4.49 has; 2. Exposed Area is 4.49 ha 3. Percentage of Exposure 100% 4. Replacement Cost is 10,000 5. Exposed Value is 449,000,000.00	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to conduct census tagging along landslide prone areas at the earliest possible time and relocate qualified beneficiaries;
BUHANGIN	Residential	1. Area is 335.29 has; 2. Exposed Area is 36.71 ha 3. Percentage of Exposure 10.95% 4. Replacement Cost is 10,000 5. Exposed Value is 3,671,000,000.00	Poor housing infrastructures in the damaged slopes are always at risk for further sliding; Displacement of most houses made of light salvageable materials.	LGU to conduct census tagging along landslide prone areas at the earliest possible time and relocate qualified beneficiaries to their safe dwellings;

Table U-38 Urban Use Risk Assessment for Landslide Summary Matrix, Davao City

Barangay	Existing Land Use	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
BUHANGIN	Cemetery	1. Area is 8.84 has; 2. Exposed Area is 7.54 ha 3. Percentage of Exposure 85.29% 4. Replacement Cost is 15,000.00 5. Exposed Value is 1,131,000,000.00	Loss of public memorial park. Burden to the public who can not afford high end private memorial parks.	Rehabilitation support through immediate replacement of lost or damaged land and facilities.
BUHANGIN	Industrial	1. Area is 4.4 has; 2. Exposed Area is 2.45 ha 3. Percentage of Exposure 55.68% 4. Replacement Cost is 15,000.00 5. Exposed Value is 367,500,000.00	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/ structures at the affected areas.
BUHANGIN	Parks and Recreational	1. Area is 0.96 has; 2. Exposed Area is 4.49 ha 3. Percentage of Exposure 100% 4. Replacement Cost is 10,000 5. Exposed Value is 449,000,000.00	Loss of public spaces for parks and recreation which are usually not enough for the surrounding communities.	Rehabilitation support through immediate replacement of lost or damaged land and facilities.
CALLAWA	Residential	1. Area is 7.9 has; 2. Exposed Area is 0.68 ha 3. Percentage of Exposure 8.61% 4. Replacement Cost is 10,000 5. Exposed Value is 68,000,000.00	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
TIGATTO	Residential	1. Area is 256.29 has; 2. Exposed Area is 39.43 ha 3. Percentage of Exposure 15.38% 4. Replacement Cost is 10,000 5. Exposed Value is 3,943,000,000.00	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
TIGATTO	Industrial	1. Area is 13.02 has; 2. Exposed Area is 7.17 ha 3. Percentage of Exposure 55.07% 4. Replacement Cost is 10,000 5. Exposed Value is 1,075,500,000.00	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/ structures at the affected areas.

Table U-38 Urban Use Risk Assessment for Landslide Summary Matrix, Davao City

Barangay	Existing Land Use	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
BUNAWAN	Industrial	1. Area is 115.6 has; 2. Exposed Area is 11.07ha 3. Percentage of Exposure 9.58%% 4. Replacement Cost is 15,000.00 . 5. Exposed Value is 1,660,500,000.00	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/ structures at the affected areas.
BUNAWAN	Residential	1. Area is 123.76 has; 2. Exposed Area is 7.75ha 3. Percentage of Exposure 6.26%% 4. Replacement Cost is 10,000.00 5. Exposed Value is 775,000,000.00	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
PANACAN	Residential	1. Area is 256.99 has; 2. Exposed Area is 67.73 has; 3. Percentage of Exposure is 0.263551110938169; 4. Replacement Cost is 10000; 5. Exposed Value is 6773000000	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
PANACAN	Industrial	1. Area is 120.37 has; 2. Exposed Area is 21 has; 3. Percentage of Exposure is 0.174462075267924; 4. Replacement Cost is 15000; 5. Exposed Value is 3150000000	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/ structures at the affected areas.
SAN ISIDRO	Residential	1. Area is 26.46 has; 2. Exposed Area is 3.4 has; 3. Percentage of Exposure is 0.128495842781557; 4. Replacement Cost is 10000; 5. Exposed Value is 340000000	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
SAN ISIDRO	Industrial	1. Area is 4.21 has; 2. Exposed Area is 0.01 has; 3. Percentage of Exposure is 0.00237529691211401; 4. Replacement Cost is 15000; 5. Exposed Value is 1500000	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/ structures at the affected areas.

Table U-38 Urban Use Risk Assessment for Landslide Summary Matrix, Davao City

Barangay	Existing Land Use	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
INAYANGAN	Residential	1. Area is 3.02 has; 2. Exposed Area is 1.89 has; 3. Percentage of Exposure is 0.625827814569536; 4. Replacement Cost is 10000; 5. Exposed Value is 189000000	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
MEGKAWAYAN	Residential	1. Area is 5.51 has; 2. Exposed Area is 5.51 has; 3. Percentage of Exposure is 1; 4. Replacement Cost is 10000; 5. Exposed Value is 551000000	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
MEGKAWAYAN	Tourism	1. Area is 1.93 has; 2. Exposed Area is 1.93 has; 3. Percentage of Exposure is 1; 4. Replacement Cost is 15000; 5. Exposed Value is 289500000	Damage to land, facilities and interruption of transportation system may cause or reduce tourist revenues.	Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.
BAGANIHAN	Tourism	1. Area is 3.95 has; 2. Exposed Area is 0.47 has; 3. Percentage of Exposure is 0.118987341772152; 4. Replacement Cost is 15000; 5. Exposed Value is 70500000	Damage to land, facilities and interruption of transportation system may cause or reduce tourist revenues.	Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.
BAGANIHAN	Residential	1. Area is 3.08 has; 2. Exposed Area is 0.16 has; 3. Percentage of Exposure is 0.0519480519480519; 4. Replacement Cost is 10000; 5. Exposed Value is 16000000	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
BUDA	Residential	1. Area is 19.63 has; 2. Exposed Area is 4.07 has; 3. Percentage of Exposure is 0.207335710646969; 4. Replacement Cost is 10000; 5. Exposed Value is 407000000	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

Table U-38 Urban Use Risk Assessment for Landslide Summary Matrix, Davao City

Barangay	Existing Land Use	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
GUMITAN	Residential	1. Area is 8.82 has; 2. Exposed Area is 6.63 has; 3. Percentage of Exposure is 0.751700680272109; 4. Replacement Cost is 10000; 5. Exposed Value is 663000000	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
MAGSAYSAY	Residential	1. Area is 8.68 has; 2. Exposed Area is 8.68 has; 3. Percentage of Exposure is 1; 4. Replacement Cost is 10000; 5. Exposed Value is 868000000	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
MAGSAYSAY	Tourism	1. Area is 0.99 has; 2. Exposed Area is 0.99 has; 3. Percentage of Exposure is 1; 4. Replacement Cost is 15000; 5. Exposed Value is 148500000	Damage to land, facilities and interruption of transportation system may cause or reduce tourist revenues.	Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.
MARILOG	Residential	1. Area is 92.6 has; 2. Exposed Area is 91.12 has; 3. Percentage of Exposure is 0.984017278617711; 4. Replacement Cost is 10000; 5. Exposed Value is 9112000000	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
MARILOG	Tourism	1. Area is 29.99 has; 2. Exposed Area is 26.29 has; 3. Percentage of Exposure is 0.876625541847282; 4. Replacement Cost is 15000; 5. Exposed Value is 3943500000	Damage to land, facilities and interruption of transportation system may cause or reduce tourist revenues.	Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.
SALAYSAY	Residential	1. Area is 10.06 has; 2. Exposed Area is 10 has; 3. Percentage of Exposure is 0.99403578528827; 4. Replacement Cost is 10000; 5. Exposed Value is 1000000000	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

Table U-38 Urban Use Risk Assessment for Landslide Summary Matrix, Davao City

Barangay	Existing Land Use	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
SUAWAN	Residential	1. Area is 7.31 has; 2. Exposed Area is 7.31 has; 3. Percentage of Exposure is 1; 4. Replacement Cost is 10000; 5. Exposed Value is 731000000	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
SUAWAN	Agri-Industrial	1. Area is 19.1 has; 2. Exposed Area is 1.77 has; 3. Percentage of Exposure is 0.0926701570680628; 4. Replacement Cost is 15000; 5. Exposed Value is 265500000	Damaged access roads affect agri-industrial operation (economic loss); Environmental problem-deforestation & soil erosion on steep slopes.	Concerned gov't. agency to always allocate for immediate rehabilitation of roads affected by landslides; Promote reforestation on steep slopes.
FATIMA	Residential	1. Area is 9.8 has; 2. Exposed Area is 7.61 has; 3. Percentage of Exposure is 0.776530612244898; 4. Replacement Cost is 15000; 5. Exposed Value is 1141500000	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
SUMIMAO	Residential	1. Area is 1.77 has; 2. Exposed Area is 1.77has; 3. Percentage of Exposure is 100.00%; 4. Replacement Cost is 10,000.00; 5. Exposed Value is 177,000,000.00	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
TAPAK	Residential	1. Area is 18.67 has; 2. Exposed Area is 18.46 has; 3. Percentage of Exposure is 98.88%; 4. Replacement Cost is 10,000.00; 5. Exposed Value is 1,846,000,000.00	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
CATALUNAN GRANDE	Residential	1. Area is 301.75 has; 2. Exposed Area is 5.07has; 3. Percentage of Exposure is 1.68%; 4. Replacement Cost is 10,000.00; 5. Exposed Value is 507,000,000.00	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

Table U-37 Urban Use Risk Assessment for Landslide Summary Matrix, Davao City

Barangay	Existing Land Use	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
CATALUNAN GRANDE	Parks and Recreational	1. Area is 5.79 has; 2. Exposed Area is 5.07has; 3. Percentage of Exposure is 1.68%; 4. Replacement Cost is 10,000.00; 5. Exposed Value is 507,000,000.00	Loss of public spaces for parks and recreation which are usually not enough for the surrounding communities.	Rehabilitation support through immediate replacement of lost or damaged land and facilities.
MA-A	Residential	1. Area is 428.26 has; 2. Exposed Area is 101.76 has; 3. Percentage of Exposure is 23.76%; 4. Replacement Cost is 10,000.00; 5. Exposed Value is 10,176,000,000.00	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
MA-A	Commercial	1. Area is 90.16 has; 2. Exposed Area is 10.05 has; 3. Percentage of Exposure is 11.15%; 4. Replacement Cost is 15,000.00; 5. Exposed Value is 1,507,500,000.00	Damaged structures entails financial instability of the businesses of small entrepreneurs; Discourages future investors.	Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; Encourage structure owners to secure building insurances.
MA-A	Tourism	1. Area is 16.55 has; 2. Exposed Area is 6.86has; 3. Percentage of Exposure is 41.45%; 4. Replacement Cost is 15,000.00; 5. Exposed Value is 1,029,000,000.00	Damage to land, facilities and interruption of transportation system may cause or reduce tourist revenues.	Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.
MA-A	Parks and Recreational	1. Area is 12.99 has; 2. Exposed Area is 4.05has; 3. Percentage of Exposure is 31.18%; 4. Replacement Cost is 15,000.00; 5. Exposed Value is 607,500,000.00	Loss of public spaces for parks and recreation which are usually not enough for the surrounding communities.	Rehabilitation support through immediate replacement of lost or damaged land and facilities.
MA-A	Cemetery	1. Area is 25.41 has; 2. Exposed Area is 2.15 has; 3. Percentage of Exposure is 8.46%; 4. Replacement Cost is 15,000.00; 5. Exposed Value is 322,500,000.00	Loss of public memorial park. Burden to the public who cannot afford high end private memorial parks.	Rehabilitation support through immediate replacement of lost or damaged land and facilities.
MATINA CROSSING	Residential	1. Area is 250.4 has; 2. Exposed Area is 29.25has; 3. Percentage of Exposure is 11.68%; 4. Replacement Cost is 10,000.00; 5. Exposed Value is 2,925,000,000.00	Poorly designed houses in the damaged slopes are always at risk for further sliding; Displacement of most houses made of light salvageable materials.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.

Table U-38 Urban Use Risk Assessment for Landslide Summary Matrix, Davao City

Barangay	Existing Land Use	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
MATINA CROSSING	Industrial	1. Area is 5.72 has; 2. Exposed Area is 4.06has; 3. Percentage of Exposure is 70.98%; 4. Replacement Cost is 15,000.00; 5. Exposed Value is 609,000,000.00	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/ structures at the affected areas.
MATINA CROSSING	Commercial	1. Area is 50.8 has; 2. Exposed Area is 0.21has; 3. Percentage of Exposure is 0.41%; 4. Replacement Cost is 15,000.00; 5. Exposed Value is 31,500,000.00	Damaged structures entails financial instability of the businesses of small entrepreneurs; Discourages future investors.; Damaged structures entails financial instability of the businesses of small entrepreneurs; Discourages future investors.	Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; Encourage structure owners to secure building insurances.
MATINA PANGI	Residential	1. Area is 152.49 has; 2. Exposed Area is 64.73has; 3. Percentage of Exposure is 42.45%; 4. Replacement Cost is 15,000.00; 5. Exposed Value is 9,709,500,000.00	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
MATINA PANGI	Commercial	1. Area is 4.88 has; 2. Exposed Area is 4.88has; 3. Percentage of Exposure is 100.00%; 4. Replacement Cost is 15,000.00; 5. Exposed Value is 732,000,000.00	Damaged structures entails financial instability of the businesses of small entrepreneurs; Discourages future investors.	Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; Encourage structure owners to secure building insurances.
MATINA PANGI	Parks and Recreational	1. Area is 0.53 has; 2. Exposed Area is 0.40 has; 3. Percentage of Exposure is 75.47%; 4. Replacement Cost is 15,000.00; 5. Exposed Value is 60,000,000.00	Loss of public spaces for parks and recreation which are usually not enough for the surrounding communities.	Rehabilitation support through immediate replacement of lost or damaged land and facilities.
MATINA PANGI	Tourism	1. Area is 0.55 has; 2. Exposed Area is 0.31; 3. Percentage of Exposure is 56.36%; 4. Replacement Cost is 15,000.00; 5. Exposed Value is 46,500,000.00	Damage to land, facilities and interruption of transportation system may cause or reduce tourist revenues.	Rehabilitation support through immediate replacement of lost or damaged land, facilities and access roads.

Table U-38 Urban Use Risk Assessment for Landslide Summary Matrix, Davao City

Barangay	Existing Land Use	TECHNICAL FINDINGS	IMPLICATIONS	POLICY INTERVENTIONS
MATINA PANGI	Industrial	<ol style="list-style-type: none"> 1. Area is 0.03 has; 2. Exposed Area is 0.01has; 3. Percentage of Exposure is 33.33%; 4. Replacement Cost is 15,000.00; 5. Exposed Value is 1,500,000.00 	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/ structures at the affected areas.
TALOMO	Residential	<ol style="list-style-type: none"> 1. Area is 297.55 has; 2. Exposed Area is 10.51 has; 3. Percentage of Exposure is 3.53%; 4. Replacement Cost is 10,000.00; 5. Exposed Value is 1,051,000,000.00 	Residential houses in the damaged slopes are always at risk for further sliding; Displacement of houses specifically those owned by informal settlers.	LGU to provide proper evacuation plan and integrated emergency management mechanism to communities; Educate residents on natural warning signs & the severity of disasters; LGU to regulate illegal construction of houses on steep slopes.
TALOMO	Industrial	<ol style="list-style-type: none"> 1. Area is 15.84 has; 2. Exposed Area is 2.61has; 3. Percentage of Exposure is 16.48%; 4. Replacement Cost is 15,000.00; 5. Exposed Value is 391,500,000.00 	Structural damage to industrial facilities may cause major economic damage.	Government to provide structural mitigating measures such as drainage, erosion protection, vegetation, ground improvement, retaining walls/ structures at the affected areas.
TALOMO	Commercial	<ol style="list-style-type: none"> 1. Area is 20.65 has; 2. Exposed Area is 0.82has; 3. Percentage of Exposure is 3.97% 4. Replacement Cost is 15,000.00; 5. Exposed Value is 123,000,000.00 	Damaged structures entails financial instability of the businesses of small entrepreneurs; Discourages future investors.	Concerned agencies to require mitigating measure plan to building permit applicants for projects within landslide prone areas; Encourage structure owners to secure building insurances.

Integrated Major Decision Areas

The Integrated Major Decision Areas, categorized into Major Decision Area-1 (MDA-1), Major Decision Area-2 (MDA-2), and Major Decision Area-3 (MDA-3), summarizes the priority areas for intervention of the local government in terms of policies and projects in the next ten (10) years as a result of the Climate Disaster and Risk Assessment made, based on the five (5) exposed elements: Population, Critical Point Facilities, Lifeline Utilities, Natural Resource-Based Production Area and Urban Use.

After the assessment, Suawan, Matina Crossing, Talomo, Marilog, Tigatto, Ma-a, Matina Pangi, Panacan, Tamugan, Calinan, 19-B, Mintal, Tugbok, Bunawan, Bucana, Matina Aplaya were identified as Integrated Major Decision Areas-1. MDA-1 are the top priority areas for immediate attention, and implementation of risk mitigation projects and programs.

On the other hand, Buhangin, Leon Garcia Sr., 8-A, Los Amigos, Malabog and Salaysay are identified as Integrated Major Decision Areas-2. These barangays are the second highest priority, while barangays 1-A, 2-A,5-A, 21-C, 22-C, 23-C, 31-D, Centro, Waan, Lasang, Bago Aplaya, Catalunan Pequeño are identified as Integrated Major Decision Areas-3, the third highest in priority for risk and disaster mitigation projects.