

APPENDIX 11-2

SUMMARY OF TRAFFIC VOLUME ON STUDIED ROADS (MASBATE)

Traffic Volume by Vehicle Type MASBATE

Class of Road	Type of Road	w/o				with								
		Car	Jeep	Bus	Truck	Tri-Motor cycle	Motor cycle	Walk	Boat					
Primary Major	Rehab/	5	34	13	52	0	12	9	40	1	15	65	0	16
	Imp-1	13	17	6	22	58	44	18	24	10	24	75	60	62
	P17-2	13	17	6	22	58	44	18	24	10	24	75	60	62
	N2-2	61	37	18	60	176	28	45	33	17	45	141	28	28
	N1-3	10	19	3	32	0	22	14	28	1	5	49	27	27
	N14-2	5	34	18	52	0	12	9	41	1	16	66	0	16
	N2-3	32	23	11	42	108	17	20	16	9	24	69	14	14
	N14-1	5	34	13	52	0	12	10	46	2	17	74	0	19
	N1-2	10	19	3	32	0	22	14	27	1	5	47	0	25
	N1-1	10	19	3	32	0	22	14	27	1	5	47	0	26
Imp-2/ Widen	N2-1	86	91	13	52	243	71	71	79	14	44	208	63	63
	N2-4	32	23	11	42	108	17	18	14	7	22	61	11	11
Second'y Major	Rehab/	63	-	-	-	53	0	27	40	1	5	73	0	100
	Imp-1	3	1	-	-	5	12	77	8	1	2	87	16	16
	B6-2	6	5	0	11	11	24	9	12	2	2	28	8	8
	B11-1	8	48	2	10	68	36	16	61	4	14	94	0	41
	P31-1	4	1	-	5	5	20	10	14	2	2	28	12	12
	P29-3	1	-	-	-	-	-	2	6	0	0	9	0	21
	B3-1	1	-	-	1	1	7	6	6	1	1	12	5	5
	B11-2	4	-	-	4	4	20	16	13	2	2	31	10	10
	B12-1	5	4	0	9	9	26	8	14	1	1	24	9	9
	N10-1	7	17	2	2	29	0	23	51	5	11	91	32	32
	N2-5	2	50	7	59	0	61	11	68	3	12	93	0	59
	P21-1	24	16	1	41	41	134	34	67	3	3	104	52	52
Imp-2/ Widen	N8-1	-	-	-	-	-	-	-	-	-	-	-	-	-
New	B0-1	-	-	-	-	-	-	27	40	1	5	73	100	100
Const.	B16-1	-	-	-	-	-	-	23	26	0	5	55	23	23
	B1-1	-	-	-	-	-	-	3	8	0	1	12	0	30
	B14-2	-	-	-	-	-	-	7	3	0	2	12	5	5
	B1-2	-	-	-	-	-	-	3	8	0	1	12	0	30
	B14-1	-	-	-	-	-	-	12	10	0	3	24	22	22
	B10-1	1	-	-	1	1	7	5	8	1	1	14	7	7

Traffic Volume by Vehicle Type MASBATE

Class of Road	Type of Road	Road Number	w/o				with					
			Car	Jeep	Bus	Truck	Tri-Motor	Total	Tri-Motor	Total		
			-ncy			mal	mal	mal	mal			
Minor (Nat'l/Prov'l)	Rehab/Imp-1	P27-1	-	-	-	9	63	69	-	12	3	-
		P29-1	-	-	-	19	101	314	-	41	17	-
		P15-1	5	3	-	27	30	161	-	20	21	80
		P19-1	5	3	0	28	4	116	4	16	23	71
		P25-1	10	10	0	10	2	14	-	19	14	-
		P16-1	1	1	0	1	1	1	-	2	1	-
Minor (Barangay)	Rehab/Imp-1	B5-4	18	12	3	32	-	82	-	41	14	-
		B9-1	6	1	-	31	68	172	-	36	24	19
		B20-3	3	0	-	12	43	47	-	10	7	2
		B14-3	-	-	-	19	51	51	-	9	7	2
		B3-2	5	4	0	13	10	20	-	14	6	-
		B12-3	-	-	-	7	25	145	-	22	6	15
		B12-2	-	-	-	8	44	71	-	12	4	-
		B2-2	-	-	-	4	19	109	-	13	6	9
		B5-5	5	4	-	25	23	137	-	25	10	-
		B0-3	-	-	-	2	9	41	-	6	3	4
		B11-6	2	0	-	10	20	58	-	12	5	7
		B0-4	-	-	-	2	14	39	-	7	2	4
		B8-3	-	-	-	4	21	54	-	8	6	4
		B16-2	1	0	-	3	4	13	-	4	2	2
	New Const.	B0-2	-	-	-	6	33	127	-	16	10	11
		B8-2	-	-	-	7	37	109	-	16	7	-
B5-2		-	-	-	5	30	63	-	10	4	5	
B20-1		-	-	-	8	48	42	-	10	9	3	
B8-4		-	-	-	5	28	23	-	5	1	-	
B16-3		-	-	-	3	20	22	-	5	5	1	
B5-1		-	-	-	7	40	95	-	14	12	-	
B15-2		-	-	-	4	34	41	-	9	10	2	
B2-1	0	-	-	1	6	29	6	6	4	3		

APPENDIX 11-3

PROPOSED IMPROVEMENT (MASBATE)

NASBATE

Primary Major

Type of Road	Length (km)	1992 AADT	Existing Condition		Proposed Improvement	Proposed Bridge (Number/Total Length)	Cost (Million Peso)	IRR (%)				
Number		w/o with	L	Width	Type Condition		Road	Bridge Total				
Rehab/ Imp-1	N14-3	18.9	52	65	18.1 4.0-6.5	EAR V.Bad	Imp-1(6.0-GRV)	2-lane Br (n= 3,L= 68m)	12.72	4.98	17.70	20.8 (T)
					.8 4.0	GRV Bad	Rehab(6.0-GRV)					
	P17-1	10.6	58	75	10.6 3.6-4.5	GRV Bad/V.Bad	Rehab(6.0-GRV)	2-lane Br (n= 6,L= 95m)	7.52	7.53	15.15	13.4 (T)
	P17-2	8.3	58	77	8.3 4.0-4.5	GRV V.Bad	Rehab(6.0-GRV)	2-lane Br (n= 3,L= 40m)	10.10	3.34	13.44	11.8 (T)
	N2-2	18.3	176	141	8.6 5.0-6.0	GRV Fair	Imp-2(6.0-BMP)	2-lane Br (n= 4,L= 50m)	39.37	4.71	44.08	10.7 (T)
					9.7 4.5-5.5	GRV Bad/V.Bad	Imp-1(6.0-BMP)					
	N1-3	26.0	32	49	5.1 4.5	GRV Bad	Rehab(6.0-GRV)	2-lane Br (n=10,L=175m)	27.30	13.05	40.35	9.9 (T)
					20.9 4.5	EAR Bad/V.Bad	Imp-1(6.0-GRV)					
	N14-2	5.4	52	66	2.8 5.5	GRV V.Bad	Rehab(6.0-GRV)	2-lane Br (n= 4,L= 70m)	5.14	5.37	10.51	9.6 (T)
					2.6 5.5	EAR V.Bad	Imp-1(6.0-GRV)					
	N2-3	9.1	108	69	9.1 3.2-3.6	GRV Bad/V.Bad	Imp-1(6.0-BMP)	2-lane Br (n= 3,L= 40m)	17.71	3.34	21.04	6.7 (T)
	N14-1	8.5	52	74	8.5 5.5	GRV Bad/V.Bad	Rehab(6.0-GRV)		8.00	.00	8.00	5.4 (T)
	N1-2	4.2	32	47	4.2 4.5	GRV Bad/V.Bad	Rehab(6.0-GRV)		4.78	.00	4.78	3.5 (T)
	N1-1	12.9	32	47	7.4 5.5	GRV Fair		2-lane Br (n= 6,L=150m)	3.93	10.26	14.19	1.3 (T)
					5.5 5.5	GRV Bad	Rehab(6.0-GRV)					
Imp-2/ Widen	N2-1	2.5	243	208	2.5 6.0	GRV Fair	Imp-2(6.0-BMP)	2-lane Br (n= 2,L= 63m)	3.91	4.20	8.11	17.6 (T)
	N2-4	19.9	108	61	19.9 4.0-5.5	GRV Fair	Imp-2(6.0-BMP)	2-lane Br (n=11,L=255m)	38.47	17.87	56.34	2.7 (T)

(T):Traffic Project
(D):Development Project

MASBATE

Secondary Major

Type of Impr't	Road Number	Length (km)	1992 AADT w/o with	Existing Condition L Width Type Condition	Proposed Improvement	Proposed Bridge (Number/Total Length)	Cost (Million Pesos)	IRR (%)
Rehab/ Imp-1	N2-6	4.1	0	73 4.1 4.0-4.5 GRV Bad/V.Bad	Rehab(6.0-GRV)	2-lane Br (n= 3, L= 45m)	4.14 3.54 7.67	65.0 (T)
	B15-1	21.3	63	87 20.5 3.2-4.5 EAR Bad/V.Bad None	Imp-1(6.0-GRV) New-C(6.0-GRV)	2-lane Br (n= 3, L= 55m)	21.76 4.20 25.96	27.1 (T)
	B6-2	1.6	5	19 1.6 4.0 GRV Bad	Rehab(4.0-GRV)		.76 .00 .76	22.7 (D)
	B11-1	10.6	11	23 3.3 4.5 GRV V.Bad 7.3 4.5-5.0 EAR V.Bad	Rehab(4.0-GRV) Imp-1(4.0-GRV)	1-lane Br (n= 2, L= 40m)	4.49 2.02 6.51	20.8 (D)
	P31-1	13.8	68	94 6.0 4.0-4.5 GRV Bad 7.8 3.2-4.5 EAR Bad/V.Bad	Rehab(6.0-GRV) Imp-1(6.0-GRV)		10.00 .00 10.00	20.0 (T)
	P29-3	14.5	5	25 1.1 4.0 GRV Bad 5.9 4.0 EAR V.Bad 5.5 None	Rehab(6.0-GRV) Imp-1(6.0-GRV) New-C(6.0-GRV)		8.74 .00 8.74	19.8 (D)
	B3-1	20.0	0	9 10.1 4.0 EAR V.Bad 9.9 None	Imp-1(4.0-GRV) New-C(4.0-GRV)	1-lane Br (n= 3, L= 90m)	16.75 4.30 21.05	11.3 (T)
	B11-2	11.1	1	12 6.1 4.5 EAR V.Bad 5.0 None	Imp-1(4.0-GRV) New-C(4.0-GRV)	1-lane Br (n= 2, L= 50m)	4.75 2.50 7.25	9.2 (D)
	B12-1	15.0	4	31 3.2 4.5 GRV V.Bad 5.3 4.0 EAR V.Bad 6.5 None	Rehab(4.0-GRV) Imp-1(4.0-GRV) New-C(4.0-GRV)	1-lane Br (n= 3, L= 130m)	18.47 5.97 22.35	8.7 (D)
	N10-1	3.0	9	24 3.0 4.5-5.0 GRV Bad/V.Bad	Rehab(6.0-GRV)	2-lane Br (n= 3, L= 55m)	2.25 3.94 6.19	7.0 (D)
	N2-6	16.3	29	91 14.8 3.2-4.5 GRV Bad/V.Bad 1.5 4.0 GRV Fair	Rehab(6.0-GRV) Widen(6.0-GRV)	2-lane Br (n= 13, L= 160m)	14.34 13.52 27.86	5.2 (T)
	P21-1	2.9	59	93 1.8 5.8-5.9 PCC Good 1.1 5.7 GRV Bad	Rehab(6.0-GRV)		.69 .00 .69	.0 (T)
Imp-2/ Widen	N6-1	6.9	41	104 6 5.5 GRV Fair 6.3 4.5 GRV Fair	Widen(6.0-GRV)		3.59 .00 3.59	35.8 (D)
New Const.	B0-1	17.5	0	73 6.8 3.2-4.5 EAR V.Bad 10.8 None	Imp-1(6.0-GRV) New-C(6.0-GRV)	2-lane Br (n= 3, L= 40m)	16.66 3.34 19.99	34.3 (T)
	B16-1	23.3	0	55 2.5 4.0-4.5 EAR Bad/V.Bad 5.1 None 15.0 None	Imp-1(6.0-GRV) New-C(6.0-GRV) New-C(4.0-GRV) Rehab(4.0-GRV)	1-lane Br (n= 3, L= 240m)	23.69 10.11 33.80	25.5 (D)
	B1-1	14.9	0	12 1.6 3.2-4.5 GRV Bad/V.Bad 13.3 None	Rehab(4.0-GRV) New-C(4.0-GRV)		22.44 .00 22.44	13.2 (D)
	B14-2	10.0	0	12 10.0 None	New-C(4.0-GRV)		14.31 .00 14.31	11.8 (D)
	B1-2	3.0	0	12 3.0 None	New-C(4.0-GRV)		5.67 .00 5.67	10.1 (D)
	B14-1	10.2	0	24 2.2 1.5-4.0 GRV V.Bad 1.1 1.5-2.4 EAR V.Bad 5.9 None	Rehab(4.0-GRV) Imp-1(4.0-GRV) New-C(4.0-GRV)		15.20 .00 15.20	9.3 (D)
	B10-1	15.0	1	14 1.4 4.0 EAR V.Bad 12.2 None 1.4 4.0 GRV V.Bad	Imp-1(4.0-GRV) New-C(4.0-GRV) Rehab(4.0-GRV)	1-lane Br (n= 2, L= 45m)	19.01 2.35 21.37	1.5 (D)

(T):Traffic Project
(D):Development Project

MASBATE

Minor (National/Provincial)

Type of Impr't	Road Number	Length (km)	1992 AADI	Existing Condition	Proposed Improvement	Proposed Bridge (Number/Total Length)	Cost (Million Peso)	IRR (%)				
			w/o with	L	Width	Type	Condition					
Rehab/Imp-1	P27-1	3.7	0	12	3.7	3.2-3.6	EAR V.Bad	Imp-1(4.0-GRV)	1.71	.00	1.71	32.0 (D)
	P28-1	8.6	0	41	1.5-3.5-4.0	GRV.Bad/V.Bad	Rehab(4.0-GRV)	Imp-1(4.0-GRV)	4.57	.00	4.57	23.7 (D)
	P15-1	3.3	8	20	3.3	4.5-4.7	GRV Bad	Rehab(4.0-GRV)	1.93	.00	1.93	9.5 (D)
	P19-1	.7	8	16	.7	3.2	GRV Bad	Rehab(4.0-GRV)	.33	.00	.33	6.1 (D)
	P25-1	2.6	21	19	2.5	4.5	GRV Bad	Rehab(4.0-GRV)	1.08	.00	1.08	3.3 (D)
	P16-1	.7	2	2	.7	4.0	EAR V.Bad	Imp-1(4.0-GRV)	.29	.00	.29	.0 (D)

(T):Traffic Project
(D):Development Project

MASBATE

Minor (Barangby)

Type of Impr't	Road Number	Length (km)	1992 AADT w/o with	Existing Condition L Width Type Condition	Proposed Improvement	Proposed Bridge (Number/Total Length)	Cost (Million Peso)	IRR (%)
Rehab/ Imp-1	B5-4	4.6	33	4.5 4.5 EAR V.Bad	Imp-1(4.0-GRV)		2.18 .00 2.18	36.1 (D)
	B9-1	15.4	8	8.4 2.4-4.0 EAR V.Bad 7.0 None	Imp-1(4.0-GRV) New-C(4.0-GRV)		7.00 .00 7.00	28.8 (D)
	B20-3	1.4	3	1.4 4.5 EAR V.Bad	Imp-1(4.0-GRV)		.65 .00 .65	20.4 (D)
	B14-3	4.0	0	3 4.0 GRV V.Bad 1.8 3.2 EAR V.Bad 1.9 None	Rehab(4.0-GRV) Imp-1(4.0-GRV) New-C(4.0-GRV)		2.38 .00 2.38	17.5 (D)
	B3-2	7.5	9	14 5.1 4.5 EAR V.Bad 2.4 None	Imp-1(4.0-GRV) New-C(4.0-GRV)		3.14 .00 3.14	15.8 (D)
	B12-3	2.6	0	22 2.6 4.0 GRV V.Bad	Rehab(4.0-GRV)		1.29 .00 1.29	15.0 (D)
	B12-2	7.2	0	12 5.0 4.5 EAR V.Bad 2.2 None	Imp-1(4.0-GRV) New-C(4.0-GRV)	1-lane Sp (n= 3, L= 65m)	3.97 .74 4.71	15.0 (D)
	B2-2	1.6	0	13 1.6 4.0 GRV Bad	Rehab(4.0-GRV)		.72 .00 .72	15.3 (D)
	B5-6	8.0	9	25 8.0 4.5 GRV V.Bad	Rehab(4.0-GRV)	1-lane Sp (n= 1, L= 30m)	3.43 .34 3.77	14.9 (D)
	B0-3	1.1	0	5 .9 4.5 EAR V.Bad .2 4.5 GRV V.Bad	Imp-1(4.0-GRV) Rehab(4.0-GRV)		.48 .00 .48	11.5 (D)
	B11-6	3.1	3	12 3.1 3.2-4.0 GRV Bad/V.Bad	Rehab(4.0-GRV)		1.68 .00 1.68	10.5 (D)
	B0-4	3.2	0	7 3.2 4.0 EAR V.Bad	Imp-1(4.0-GRV)	1-lane Sp (n= 1, L= 20m)	1.81 .23 2.04	9.9 (D)
	B6-3	5.0	0	8 2.8 1.6-4.0 EAR Bad/V.Bad 2.2 None	Imp-1(4.0-GRV) New-C(4.0-GRV)		3.17 .00 3.17	5.6 (D)
	B16-2	.9	1	4 .9 4.0 EAR V.Bad	Imp-1(4.0-GRV)		.41 .00 .41	4.8 (D)
New Const.	B0-2	2.0	0	18 .3 4.0 GRV Fair 1.4 4.0 GRV V.Bad 1.3 None	Rehab(4.0-GRV) New-C(4.0-GRV)		.82 .00 .82	32.8 (D)
	B8-2	9.8	0	16 .5 2.4-3.2 EAR Bad/V.Bad 9.2 None	Imp-1(4.0-GRV) New-C(4.0-GRV)		4.30 .00 4.30	23.5 (D)
	B5-2	5.5	0	10 .2 3.2 EAR V.Bad 5.3 None	Imp-1(4.0-GRV) New-C(4.0-GRV)		3.06 .00 3.06	16.9 (D)
	B20-1	5.0	0	10 5.0 None	New-C(4.0-GRV)		3.06 .00 3.06	14.6 (D)
	B8-4	3.0	0	5 3.0 None	New-C(4.0-GRV)		1.92 .00 1.92	11.7 (D)
	B15-3	1.5	0	5 1.5 None	New-C(4.0-GRV)		.86 .00 .86	7.9 (D)
	B6-1	11.4	0	14 3.7 1.5-2.4 EAR V.Bad 7.7 None	Imp-1(4.0-GRV) New-C(4.0-GRV)		7.75 .00 7.75	7.3 (D)
	B15-2	15.0	0	9 15.0 None	New-C(4.0-GRV)		9.59 .00 9.59	5.7 (D)
	B2-1	5.3	0	5 .3 3.2 GRV Bad 5.0 None	Rehab(4.0-GRV) New-C(4.0-GRV)		3.34 .00 3.34	4.5 (D)

(T):Traffic Project
(D):Development Project

APPENDIX 11-4

QUANTITY AND CONSTRUCTION COST (MASBATE)

Quantity and Construction Cost M&SBATE

	Unit	N14-3	P17-1	P17-2	N2-2	N1-3	N14-2	N2-3	N14-1	N1-2	N1-1	N2-1	
Total Road Length	km	18.9	10.6	8.3	18.3	26.0	5.4	9.1	8.5	4.2	12.9	2.5	
Improvement Length	km	18.9	10.6	8.3	18.3	26.0	5.4	9.1	8.5	4.2	12.9	2.5	
Proposed Pavement Type		6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV											
Quantity													
100 Clearing & Grubbing	m2												
102 Stripping	m3												
105 Roadway & Drainage Excavation	m3	14175	12455	18736	129220		300	43297			3750	4005	
107 Borrow	m3	16379	8819	38876	1318	125190	19401		32428	20223	7858		
108 Aggregate Subbase	m3	12474	5996	5478	31390	17160	3664	18635	5610	2772	3630	4623	
118-1 Preparation of Prev. Road (Grvl)	m2	124740	69240	45750	120520	156000	36640	74684	56100	25200	96300	15000	
118-2 Preparation of Prev. Road (Asph)	m2												
118-3 Preparation of Pave. Surf. (PCC)	m2												
118-4 Preparation of Pave. Surf. (AC)	m2												
200 Crushed Aggr. Base Course	m3				18721			9309				2558	
300 Crushed Aggr. Surface Course	m3	16930	9540	7470		22950	4680		7560	3420	4950	18	
302 Bituminous Prime Coat	M.T.				132			66					
303 Bituminous Tack Coat	M.T.												
306 Bituminous Macadam Pavement	M.T.				109800			64600				15000	
310 Bitum. Concrete Surface Course	M.T.												
314 Double Bitum. Surface Treatment	m2												
315-1 PCC Pavement (t=23 cm)	m2												
315-2 PCC Pavement (t=20 cm)	m2												
316-3 PCC Pavement (t=18 cm)	m2	1200				3000	1200		600	2400		76	
413-1 RCPC (dia. 910mm)	m	570	315	255	555	780	155	270	255	120	155	5	
413-2 Headwall for RCPC (dia. 910mm)	Set	38	21	17	37	62	11	18	17	8	11		
500 Grouted Riprap	m3												
517 Side Ditch (Grouted Riprap)	m		1200	1950	16200			3900					
Slope Protection (Cut Slope)	m												
Slope Protection (Embank't Sl)	m												
2-lane Bridge, Superstructure	m	68	95	40	60	175	70	40			150	63	
1-lane Bridge, Superstructure	m												
1-lane Bridge, Abutment	Each	6	12	6	8	20	8	6			12	4	
1-lane Bridge, Abutment	Each												
2-lane Bridge, Pier	Each	2	1			1	1				3	2	
1-lane Bridge, Pier	Each												
2-lane Spillway	m												
1-lane Spillway	m												
Miscellaneous	l.s.	1	1	1	1	1	1	1	1	1	1	1	
Road Construction Cost	M.P.	12.72	7.62	10.10	39.37	27.30	5.14	17.71	8.00	4.78	3.93	3.91	
Bridge Construction Cost	M.P.	4.98	7.53	3.34	4.71	13.05	5.37	3.34	.00	.00	10.26	4.20	
Total Construction Cost	M.P.	17.70	15.15	13.44	44.08	40.35	10.51	21.04	8.00	4.78	14.19	8.11	
Road Construction Cost/Impr't km	M.P.	.87	.72	1.22	2.15	1.65	.95	1.95	.94	1.14	.72	1.56	
Total Construction Cost/Total km	M.P.	.94	1.43	1.62	2.41	1.65	1.95	2.31	1.14	1.14	1.10	3.24	

Quantity and Construction Cost		MASBATE										
	Unit	N2-4	N2-6	B16-1	B6-2	B11-1	P31-1	P29-3	B3-1	B11-2	B12-1	N10-1
Total Road Length	km	19.9	4.1	21.3	1.6	10.6	13.8	14.5	20.0	11.1	15.0	3.0
Improvement Length	km	19.9	4.1	21.3	1.6	10.5	13.8	14.5	20.0	11.1	15.0	3.0
Proposed Pavement Type		6.0-BMP 6.0-GRV 6.0-GRV 4.0-GRV 4.0-GRV 6.0-GRV 6.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV 6.0-GRV										
Quantity												
100 Clearing & Grubbing	m2								198000			162500
102 Stripping	m3								20790			17550
105 Roadway & Drainage Excavation	m3	112620	21657	116650	300	6328	21368	10875	17475	8325	108130	3755
107 Borrow	m3		3015	7185	1704	2960	5713	4568	54875	3497	10729	1005
108 Aggregate Subbase	m3	38063	2705	14058	736	4876	9108	9570	9200	5106	5900	1980
118-1 Preparation of Prev. Road (Grvl)	m2											18760
118-2 Preparation of Prev. Road (Asph)	m2											
118-3 Preparation of Pave. Surf. (PCC)	m2											
118-4 Preparation of Pave. Surf. (AC)	m2											
200 Crushed Aggregate Base Course	m3											
300 Crushed Aggt. Surface Course	m3		3690	18630	960	6300	11862	13050	12000	6650	8556	2529
302 Bituminous Prime Coat	M.T.	143										
303 Bituminous Tack Coat	M.T.											
306 Bituminous Macadam Pavement	m2	119400										
310 Bitum. Concrete Surface Course	M.T.											
314 Double Bitum. Surface Treatment	m2											
316-1 PCC Pavement (t=23 cm)	m2											
316-2 PCC Pavement (t=20 cm)	m2											
316-3 PCC Pavement (t=18 cm)	m2											
413-1 RCPC (dia. 910mm)	m	600	120	645	24	168	420	436	610	176	2950	1140
413-2 Headwall for RCPC (dia. 910mm)	Set	40	8	43	3	21	28	29	50	22	43	6
500 Grouted Riprap	m3											
517 Side Ditch (Grouted Riprap)	m	8200	1450	8000					3950		5850	400
Slope Protection (Cut Slope)	m											
Slope Protection (Embank't Sl)	m											
2-lane Bridge, Superstructure	m	255	45	55								55
1-lane Bridge, Superstructure	m					40			90	50	130	
2-lane Bridge, Abutment	Each	22	6	6								6
1-lane Bridge, Abutment	Each					4						
2-lane Bridge, Pier	Each	5										
1-lane Bridge, Pier	Each											
2-lane Spillway	m											
1-lane Spillway	m											
Miscellaneous	l.s.	1	1	1	1	1	1	1	1	1	1	1
Road Construction Cost	M.P.	38.47	4.14	21.76	.76	4.49	10.00	8.74	16.76	4.75	16.47	2.25
Bridge Construction Cost	M.P.	17.87	3.54	4.20	.00	2.02	.00	.00	4.30	2.50	5.87	3.94
Total Construction Cost	M.P.	56.34	7.67	25.95	.76	6.51	10.00	8.74	21.06	7.25	22.35	6.19
Road Construction Cost/Impr't Km	M.P.	1.93	1.01	1.02	.47	.42	.72	.60	.84	.43	1.10	.75
Total Construction Cost/Total Km	M.P.	2.83	1.87	1.22	.47	.61	.72	.60	1.05	.65	1.49	2.06

Quantity and Construction Cost MARBATE

	Unit	N2-6	P21-1	N8-1	B0-1	B16-1	B1-1	B14-2	B1-2	B14-1	B10-1	P27-1	
Total Road Length	km	15.3	2.9	6.9	17.6	23.3	14.9	10.0	3.0	10.2	15.0	3.7	
Improvement Length	km	10.3	1.1	6.3	17.6	23.3	14.9	10.0	3.0	10.2	15.0	3.7	
Proposed Pavement Type		6.0-GRV 6.0-GRV 6.0-GRV 8.0-GRV 8.0-GRV 6.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV											
Quantity													
100 Clearing & Grubbing	m2	-	-	-	-	300000	250000	220000	75000	172500	268400	-	
102 Stripping	m3	-	-	-	-	31500	27000	24000	8100	13630	29280	-	
105 Roadway & Drainage Excavation	m3	75742	825	3591	43573	21225	185920	70000	45000	120520	87050	5813	
107 Borrow	m3	6162	622	7834	5147	80465	14266	23150	3945	10241	30675	1011	
108 Aggregate Subbase	m3	10158	726	1323	11515	12253	6854	4600	1380	4692	5900	1702	
118-1 Preparation of Prev. Road (Grv.)	m2	85900	7250	28350	104100	53550	17600	-	-	11520	12880	14440	
118-2 Preparation of Prev. Road (Asph)	m2	-	-	-	-	-	-	-	-	-	-	-	
118-3 Preparation of Pave. Surf. (PCC)	m2	-	-	-	-	-	-	-	-	-	-	-	
118-4 Preparation of Pave. Surf. (AC)	m2	-	-	-	-	-	-	-	-	-	-	-	
200 Crushed Aggregate Base Course	m3	-	-	-	-	-	-	-	-	-	-	-	
300 Crushed Aggr. Surface Course	m3	14570	990	5670	13482	16290	8886	6000	1800	5994	8844	2220	
302 Bituminous Prime Coat	M.T.	-	-	-	-	-	-	-	-	-	-	-	
303 Bituminous Tack Coat	M.T.	-	-	-	-	-	-	-	-	-	-	-	
305 Bituminous Macadam Pavement	m2	-	-	-	-	-	-	-	-	-	-	-	
310 Bitum. Concrete Surface Course	M.T.	-	-	-	-	-	-	-	-	-	-	-	
314 Double Bitum. Surface Treatment	m2	-	-	-	-	-	-	-	-	-	-	-	
316-1 FCC Pavement (t=23 cm)	m2	-	-	-	-	-	-	-	-	-	-	-	
316-2 FCC Pavement (t=20 cm)	m2	-	-	-	-	-	-	-	-	-	-	-	
315-3 FCC Pavement (t=18 cm)	m2	-	-	-	-	-	-	-	-	-	-	-	
415-1 RCPC (dia. 910mm)	m	495	30	195	525	916	680	600	180	476	783	56	
415-2 Headwall for RCPC (dia. 910mm)	Set	33	2	13	35	52	50	40	12	35	55	7	
500 Grouted Riprap	m	-	-	-	-	-	-	-	-	-	-	-	
517 Side Ditch (Grouted Riprap)	m	3300	-	-	4100	6000	9000	7000	2700	6210	8540	-	
Slope Protection (Cut Slope)	m	-	-	-	-	-	-	-	-	-	-	-	
Slope Protection (Embank't S)	m	-	-	-	-	-	-	-	-	-	-	-	
2-lane Bridge, Superstructure	m	150	-	-	40	-	-	-	-	-	-	-	
1-lane Bridge, Superstructure	m	-	-	-	-	240	-	-	-	-	-	45	
2-lane Bridge, Abutment	Each	26	-	-	6	-	-	-	-	-	-	-	
1-lane Bridge, Abutment	Each	-	-	-	-	6	-	-	-	-	-	4	
2-lane Bridge, Pier	Each	-	-	-	-	-	-	-	-	-	-	-	
1-lane Bridge, Pier	Each	-	-	-	-	9	-	-	-	-	-	1	
2-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-	
1-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-	
Miscellaneous	l.s.	1	1	1	1	1	1	1	1	1	1	1	
Road Construction Cost	M.P.	14.34	.69	3.59	16.55	23.69	22.44	14.31	5.57	15.20	19.01	1.71	
Bridge Construction Cost	M.P.	13.52	.00	3.34	3.34	10.11	.00	.00	.00	.00	2.35	.00	
Total Construction Cost	M.P.	27.86	.69	3.59	19.99	33.80	22.44	14.31	5.57	15.20	21.36	1.71	
Road Construction Cost/Impr't km	M.P.	.88	.62	.57	.95	1.02	1.51	1.43	1.86	1.49	1.27	.46	
Total Construction Cost/Total km	M.P.	1.71	.24	.52	1.14	1.45	1.51	1.43	1.86	1.49	1.42	.46	

Quantity and Construction Cost

MASBATE

	Unit	P29-1	P15-1	P19-1	P25-1	P16-1	B6-4	B9-1	B20-3	B14-3	B3-2	B12-3	
Total Road Length	km	8.6	3.3	.7	2.6	.7	4.5	15.4	1.4	4.0	7.5	2.6	
Improvement Length	km	8.6	3.3	.7	2.6	.7	4.5	15.4	1.4	4.0	7.5	2.6	
Proposed Pavement Type		4.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV 4.0-GRV											
Quantity													
100 Clearing & Grubbing	m2									28500			
102 Stripping	m3									2850			
105 Roadway & Drainage Excavation	m3	11256	567	1313		525	2700	17513		6325		2601	
107 Borrow	m3	2393	3297	192	819	221	1968	4655	1491	1725	2363	695	
108 Aggregate Subbase	m3	3985	1518	322	1196	322	2070	7084	544	1840	3460	1196	
118-1 Preparation of Prev. Road (Grvl)	m2	37100	15180	2110	11960	3220	20700	61650	6440	9660	34600	11930	
118-2 Preparation of Prev. Road (Asph)	m2												
118-3 Preparation of Pave. Surf. (PCC)	m2												
118-4 Preparation of Pave. Surf. (AC)	m2												
200 Crushed Aggr. Base Course	m3												
300 Crushed Aggr. Surface Course	m3	4638	1692	420	1500	420	2620	9120	840	2220	4320	1440	
302 Bituminous Prime Coat	M.T.												
303 Bituminous Tack Coat	M.T.												
306 Bituminous Macadam Pavement	m2												
310 Bitum. Concrete Surface Course	M.T.												
314 Double Bitum. Surface Treatment	m2												
316-1 PCC Pavement (t=23 cm)	m2												
316-2 PCC Pavement (t=20 cm)	m2												
316-3 PCC Pavement (t=18 cm)	m2	3480	1920	8	400	8	1200	800	24	1200	1200	800	
413-1 RCPC (dia. 910mm)	m	136	56	8	40	8	72	248	24	96	120	40	
413-2 Headwall for RCPC (dia. 910mm)	Set	17	7	1	6	1	9	31	3	12	15	5	
500 Grouted Riprap	m3												
517 Side Ditch (Grouted Riprap)	m												
Slope Protection (Cut Slope)	m												
Slope Protection (Embank't Sl)	m												
2-lane Bridge, Superstructure	m												
1-lane Bridge, Superstructure	m												
2-lane Bridge, Abutment	Each												
1-lane Bridge, Abutment	Each												
2-lane Bridge, Pier	Each												
1-lane Bridge, Pier	Each												
2-lane Spillway	m												
1-lane Spillway	m												
Miscellaneous	l.s.	1	1	1	1	1	1	1	1	1	1	1	
Road Construction Cost	M.P.	4.57	1.93	.33	1.08	.29	2.18	7.00	.65	2.38	3.14	1.29	
Bridge Construction Cost	M.P.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
Total Construction Cost	M.P.	4.57	1.93	.33	1.08	.29	2.18	7.00	.65	2.38	3.14	1.29	
Road Construction Cost/Impr't km	M.P.	.53	.58	.47	.42	.42	.48	.46	.47	.50	.42	.50	
Total Construction Cost/Total km	M.P.	.53	.58	.47	.42	.42	.49	.46	.47	.50	.42	.50	

Quantity and Construction Cost

MASBATE

	Unit	B12-2	B2-2	B5-5	B0-3	B11-6	B0-4	B8-3	B16-2	B0-2	B8-2	B5-2
Total Road Length	km	7.2	1.6	8.0	1.1	3.1	3.2	5.0	.9	2.0	9.8	5.5
Improvement Length	km	7.2	1.6	8.0	1.1	3.1	3.2	5.0	.9	1.7	9.8	5.5
Proposed Pavement Type		4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV
Quantity												
100 Clearing & Grubbing	m2	30000	-	-	-	-	-	33000	-	-	-	57500
102 Stripping	m3	3000	-	-	-	-	-	3300	-	-	-	5760
105 Roadway & Drainage Excavation	m3	9014	1200	6000	390	5138	2400	8725	675	2044	10050	5550
107 Borrow	m3	1969	904	2820	245	845	1008	1833	509	389	2872	2888
108 Aggregate Subbase	m3	3312	736	3680	506	1428	1472	2300	414	782	4508	2530
118-1 Preparation of Prev. Road (Grvl)	m2	23920	7360	36800	5050	11760	14720	11580	4140	7430	41040	3100
118-2 Preparation of Prev. Road (Asph)	m2	-	-	-	-	-	-	-	-	-	-	-
118-3 Preparation of Pave. Surf. (PCO)	m2	-	-	-	-	-	-	-	-	-	-	-
118-4 Preparation of Pave. Surf. (AC)	m2	-	-	-	-	-	-	-	-	-	-	-
200 Crushed Aggregate Base Course	m3	-	-	-	-	-	-	-	-	-	-	-
300 Crushed Aggr. Surface Course	m3	3924	960	4800	624	1680	1578	2622	540	960	5880	3210
302 Bituminous Prime Coat	M.T.	-	-	-	-	-	-	-	-	-	-	-
303 Bituminous Tack Coat	M.T.	-	-	-	-	-	-	-	-	-	-	-
306 Bituminous Macadam Pavement	m2	-	-	-	-	-	-	-	-	-	-	-
310 Bitum. Concrete Surface Course (M.T.)	m2	-	-	-	-	-	-	-	-	-	-	-
314 Double Bitum. Surface Treatment	m2	-	-	-	-	-	-	-	-	-	-	-
316-1 PCC Pavement (t=23 cm)	m2	-	-	-	-	-	-	-	-	-	-	-
316-2 PCC Pavement (t=20 cm)	m2	-	-	-	-	-	-	-	-	-	-	-
316-3 PCC Pavement (t=19 cm)	m2	2540	-	-	240	1200	2280	2520	-	400	-	600
413-1 RCPC (dia. 910mm)	m	144	24	128	16	48	48	120	16	24	160	160
413-2 Headwall for RCPC (dia. 910mm)	Set	18	3	16	2	6	6	15	2	3	20	20
500 Grouted Riprap	m3	-	-	-	-	-	-	-	-	-	-	-
517 Side Ditch (Grouted Riprap)	m	-	-	-	-	-	-	-	-	-	-	-
Slope Protection (Cut Slope)	m	-	-	-	-	-	-	-	-	-	-	-
Slope Protection (Embank't Sl)	m	-	-	-	-	-	-	-	-	-	-	-
2-lane Bridge, Superstructure	m	-	-	-	-	-	-	-	-	-	-	-
1-lane Bridge, Superstructure	m	-	-	-	-	-	-	-	-	-	-	-
2-lane Bridge, Abutment	Each	-	-	-	-	-	-	-	-	-	-	-
1-lane Bridge, Abutment	Each	-	-	-	-	-	-	-	-	-	-	-
2-lane Bridge, Pier	Each	-	-	-	-	-	-	-	-	-	-	-
1-lane Bridge, Pier	Each	-	-	-	-	-	-	-	-	-	-	-
2-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-
1-lane Spillway	m	65	-	30	-	-	20	-	-	-	-	-
Miscellaneous	l.s.	1	1	1	1	1	1	1	1	1	1	1
Road Construction Cost	M.P.	3.97	.72	3.43	.48	1.68	1.81	3.17	.41	.82	4.30	3.06
Bridge Construction Cost	M.P.	.74	.00	.34	.00	.00	.23	.00	.00	.00	.00	.00
Total Construction Cost	M.P.	4.71	.72	3.77	.48	1.68	2.04	3.17	.41	.82	4.30	3.06
Road Construction Cost/Impr't km	M.P./km	.55	.45	.43	.44	.54	.57	.63	.45	.49	.44	.56
Total Construction Cost/Total km	M.P./km	.65	.45	.47	.44	.54	.64	.63	.45	.41	.44	.55

Quantity and Construction Cost MASBATE

	Unit	B20-1	B8-4	B18-3	B5-1	B15-2	B2-1
Total Road Length	Km	5.0	3.0	1.5	11.4	15.0	5.3
Improved Length	Km	5.0	3.0	1.5	11.4	15.0	5.3
Proposed Pavement Type		4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV
Quantity							
100 Clearing & Grabbing	m2	64500	45000	22500	115500	225000	75000
102 Stripping	m3	6450	4500	2250	11550	22500	7500
105 Roadway & Drainage Excavation	m3	11515	7500	3750	23275	37500	13063
107 Borrow	m3	2071	1245	523	12899	5225	2136
108 Aggregate Subbase	m3	2300	1380	690	5244	6900	2438
118-1 Preparation of Prev. Road (Grvl)	m2	2530	-	-	7450	-	930
118-2 Preparation of Prev. Road (Asph)	m2	-	-	-	-	-	-
118-3 Preparation of Pave. Surf. (PCC)	m2	-	-	-	-	-	-
119-4 Preparation of Pave. Surf. (AC)	m2	-	-	-	-	-	-
200 Crushed Aggregate Base Course	m3	-	-	-	-	-	-
300 Crushed Aggr. Surface Course	m3	3000	1800	900	6552	9000	3180
302 Bituminous Prime Coat	M.T.	-	-	-	-	-	-
303 Bituminous Tack Coat	M.T.	-	-	-	-	-	-
306 Bituminous Macadam Pavement	m2	-	-	-	-	-	-
310 Bitum. Concrete Surface Course	M.T.	-	-	-	-	-	-
314 Double Bitum. Surface Treatment	m2	-	-	-	-	-	-
315-1 PCC Pavement (t=23 cm)	m2	-	-	-	-	-	-
315-2 PCC Pavement (t=20 cm)	m2	-	-	-	-	-	-
315-3 PCC Pavement (t=18 cm)	m2	-	-	-	1920	-	-
413-1 RCPC (dia. 910mm)	m	144	96	48	304	480	158
413-2 Headwall for RCPC (dia. 910mm)	Set	18	12	6	38	60	21
500 Grouted Riprap	m3	-	-	-	-	-	-
517 Slide Ditch (Grouted Riprap)	m	-	-	-	-	-	-
Slope Protection (Cut Slope)	m	-	-	-	-	-	-
Slope Protection (Embank't S1)	m	-	-	-	-	-	-
2-lane Bridge Superstructure	m	-	-	-	-	-	-
1-lane Bridge Superstructure	m	-	-	-	-	-	-
1-lane Bridge Abutment	Each	-	-	-	-	-	-
1-lane Bridge Abutment	Each	-	-	-	-	-	-
2-lane Bridge Pier	Each	-	-	-	-	-	-
1-lane Bridge Pier	Each	-	-	-	-	-	-
2-lane Spillway	m	-	-	-	-	-	-
1-lane Spillway	m	-	-	-	-	-	-
Miscellaneous	l.s.	1	1	1	1	1	1
Road Construction Cost	M.P.	3.06	1.92	.96	7.75	9.59	3.34
Bridge Construction Cost	M.P.	.00	.00	.00	.00	.00	.00
Total Construction Cost	M.P.	3.06	1.92	.96	7.75	9.59	3.34
Road Construction Cost/Impr't km	M.P.	.61	.64	.64	.68	.64	.63
Total Construction Cost/Total km	M.P.	.61	.64	.64	.68	.64	.63

APPENDIX 11-5

SUMMARY OF DEMOGRAPHIC AND AGRICULTURAL DATA (MASBATE)

Summary of Demographic and Agricultural Data

MASBATE

Class of Road	Type of Impr't	Road Number	1988		1988		1988		1988 Crop Area (ha)	1992 AADT w/o with	IRR (%)	
			Length (km)	Population	Total	/km	Total	Major Crop				
Second Major	Rehab/Imp-1	B6-2	1.6	2118	1324	1000	500(Corn)	250(Palay)	250(Coco.)	5	19	22.7
		B11-1	10.6	4419	417	1505	1400(Corn)	500(Coco.)	5(Palay)	11	23	20.8
		P29-3	14.5	7905	546	2100	1400(Coco.)	350(Palay)	350(Corn)	5	25	19.8
		B11-2	11.1	4213	380	350	350(Corn)			1	12	9.2
		B12-1	15.0	5678	379	1902	1500(Coco.)	250(Corn)	152(Palay)	4	31	8.7
		N10-1	3.0	3184	1061	603	300(Corn)	300(Coco.)	3(Palay)	9	24	7.0
Imp-2/Widen		N8-1	6.9	10755	1564	2503	1250(Corn)	1000(Coco.)	258(Palay)	41	104	35.8
New Const.		B16-1	23.9	18504	794	3433	1200(Corn)	1200(Coco.)	1083(Palay)	0	55	25.5
		B1-1	14.9	5148	346	1125	600(Coco.)	450(Palay)	75(Corn)	0	12	13.2
		B14-2	10.0	5908	591	2000	1650(Coco.)	300(Corn)	50(Palay)	0	12	11.8
		B1-2	3.0	2040	580	501	375(Coco.)	75(Palay)	50(Corn)	0	12	10.1
		B14-1	10.2	5787	557	2802	2500(Coco.)	250(Corn)	52(Palay)	0	24	9.3
		B10-1	15.0	5788	386	320	170(Palay)	150(Corn)		1	14	1.5
Minor (Nat'l/Prov't)	Rehab/Imp-1	P27-1	3.7	2384	544	1500	1200(Corn)	300(Coco.)		0	12	32.0
		P2-1	9.6	9372	1090	3502	2100(Coco.)	1400(Corn)	2(Palay)	0	41	23.7
		P15-1	3.3	3153	958	490	420(Coco.)	35(Palay)	35(Corn)	8	20	9.5
		P19-1	7	2905	4151	75	30(Palay)	30(Coco.)	15(Corn)	8	16	5.1
		P25-1	2.6	2278	575	40	30(Corn)	20(Palay)		21	19	3.3
		P16-1	.7	523	399	60	40(Corn)	20(Palay)		2	2	.0
Minor (Baran-gay)	Rehab/Imp-1	B5-4	4.5	8635	1919	3600	2000(Corn)	1000(Coco.)	500(Palay)	33	41	25.1
		B9-1	15.4	11336	735	2800	1200(Corn)	1200(Coco.)	400(Palay)	8	36	28.8
		B20-3	1.4	1139	514	1000	680(Palay)	150(Corn)	150(Coco.)	3	10	20.4
		B14-3	4.0	1323	331	1501	1400(Coco.)	51(Palay)	50(Corn)	0	9	17.5
		B3-2	7.5	4104	547	700	550(Palay)	140(Corn)		9	14	16.8
		B12-3	2.6	2752	1058	320	300(Coco.)	20(Corn)		0	22	16.0
		B12-2	7.2	2938	408	1230	900(Coco.)	240(Corn)		0	12	16.0
		B2-2	1.6	1435	897	200	150(Coco.)	30(Corn)		0	13	15.8
		B5-6	8.0	3872	484	1800	1000(Corn)	500(Coco.)	300(Palay)	9	26	14.9
		B0-3	1.1	1344	122	152	150(Corn)	2(Palay)		0	6	11.5
		B11-6	3.1	1185	383	600	440(Palay)	100(Corn)	60(Coco.)	3	12	10.5
		B0-4	3.2	1985	520	300	250(Corn)	50(Palay)		0	7	9.9
		B8-3	5.0	2770	554	525	455(Coco.)	35(Palay)	35(Corn)	0	8	5.5
		B16-2	.9	1037	1152	350	150(Corn)	150(Coco.)	50(Palay)	1	4	4.8
New Const.		B0-2	2.0	3789	1895	580	480(Coco.)	80(Corn)	20(Palay)	0	18	32.8
		B8-2	9.8	6202	533	2610	1500(Coco.)	300(Corn)	210(Palay)	0	16	23.5
		B20-1	5.0	3416	683	825	450(Coco.)	300(Corn)	75(Palay)	0	10	16.9
		B8-4	3.0	1671	557	1275	720(Coco.)	450(Corn)	105(Palay)	0	5	11.7
		B15-3	1.5	2634	1755	900	450(Corn)	450(Coco.)		0	5	7.9
		B6-1	11.4	5024	441	1230	1200(Coco.)	15(Palay)	15(Corn)	0	14	7.3
		B15-2	15.0	5801	387	900	450(Corn)	450(Coco.)		0	9	5.7
		B2-1	5.3	1684	318	700	600(Coco.)	50(Palay)	40(Corn)	0	6	4.5

APPENDIX 11-6

SUMMARY OF ECONOMIC EVALUATION (MASBATE)

Summary of Economic Analysis MASBATE

Class of Road	Type of Road	Road Number	1992 AADT		Length (km)	Economic Cost (Mp/km)		Benefit (Mp/km)		Economic Indicator						
			w/o	with		Const. Period	Total	Normal	Diverged	Gene-Deve- Maint	Total	NPV	B/C	IRR		
					Improvement	duct. Maint.			rated	lop't sav'g	(Mp)	(%)				
Primary Major	Rehab/Imp-1	N14-3	52	65	18.9	18.9(6.0-GRV)	.78	.21	1.04	.00	1.34	6.6	1.4	20.8		
		P17-1	58	75	10.6	10.6(6.0-GRV)	1.19	.23	1.42	.39	1.27	-1.5	.9	13.4		
		P17-2	58	77	8.3	8.3(6.0-GRV)	1.35	.24	1.59	.80	1.26	-2.7	.8	11.8		
		N2-2	176	141	18.3	18.3(6.0-BMP)	2.00	.18	2.19	1.36	.09	1.58	-11.2	.7	10.7	
		N1-3	32	43	26.0	26.0(6.0-GRV)	1.29	.19	1.48	.57	.00	1.02	-12.0	.7	9.9	
		N14-2	52	66	5.4	5.4(6.0-GRV)	1.82	.21	1.83	.91	.02	1.22	-3.3	.7	9.6	
		N2-3	108	69	9.1	9.1(6.0-BMP)	1.92	.13	2.05	.90	.06	1.02	-9.3	.5	6.7	
		N14-1	52	74	8.5	8.5(6.0-GRV)	1.78	.23	1.01	.34	.04	.54	-4.0	.5	5.4	
		N1-2	32	47	4.2	4.2(6.0-GRV)	.95	.18	1.12	.27	.02	.47	-2.7	.4	3.5	
		N1-1	32	47	12.9	5.5(6.0-GRV)	2.14	.18	2.32	.38	.02	.67	-9.1	.3	1.3	
Imp-2/Widen	N2-1	243	208	2.5	2.5(6.0-BMP)	2.70	.29	2.99	3.05	.09	3.53	1.3	1.2	17.6		
	N2-4	108	61	19.9	19.9(6.0-BMP)	2.36	.13	2.48	.74	.06	.80	-33.4	.3	2.7		
Secondary Major	Rehab/Imp-1	N2-6	0	73	4.1	4.1(6.0-GRV)	1.56	.24	1.80	1.01	6.39	18.8	3.5	66.0		
		B15-1	63	87	21.3	21.3(6.0-GRV)	1.01	.19	1.20	1.15	.00	2.32	23.9	1.9	27.1	
		B6-2	5	19	1.6	1.6(4.0-GRV)	.39	.10	.49	.63	.01	.72	2.4	1.5	22.7	
		B11-1	11	23	10.6	10.6(4.0-GRV)	.51	.10	.61	.87	.00	.84	2.4	1.4	20.8	
		P31-1	69	94	13.8	13.8(6.0-GRV)	.60	.26	.86	.73	.01	1.08	3.1	1.3	20.0	
		P29-3	5	25	14.5	14.5(6.0-GRV)	.50	.15	.66	.45	.00	.84	2.7	1.3	19.8	
		B3-1	0	9	20.0	20.0(4.0-GRV)	.88	.10	.98	.74	.01	.73	-4.9	.7	11.3	
		B11-2	1	12	11.1	11.1(4.0-GRV)	.54	.10	.64	.26	.08	.42	-2.4	.7	9.2	
		B12-1	4	31	15.0	15.0(4.0-GRV)	1.24	.10	1.34	.48	.07	.79	-8.2	.6	8.7	
		N10-1	9	24	3.0	3.0(6.0-GRV)	1.72	.15	1.87	.78	.00	.96	-2.7	.5	7.0	
		N2-5	29	91	16.3	16.3(6.0-GRV)	1.42	.23	1.65	.23	.00	.79	-14.1	.5	5.2	
		P21-1	59	93	2.9	1.1(6.0-GRV)	.52	.27	.78	.17	.03	.34	-5	.4	.0	
		Imp-2/Widen	N8-1	41	104	6.9	6.3(6.0-GRV)	.47	.22	.59	1.44	.02	1.47	4.9	2.1	35.8
	New Const.	B0-1	0	73	17.6	17.6(6.0-GRV)	.94	.24	1.19	1.26	.03	2.53	23.7	2.1	34.3	
B16-1		0	55	23.3	7.7(6.0-GRV)	1.21	.14	1.35	1.70	.03	2.37	23.7	1.8	25.5		
B1-1		0	12	14.9	14.9(4.0-GRV)	1.25	.11	1.36	.42	.02	1.17	-2.8	.9	13.2		
B14-2		0	12	10.0	10.0(4.0-GRV)	1.19	.10	1.29	.42	.02	.99	-3.0	.8	11.8		
B1-2		0	12	3.0	3.0(4.0-GRV)	1.54	.11	1.65	.42	.03	1.08	-1.7	.7	10.1		
B14-1		0	24	10.2	10.2(4.0-GRV)	1.24	.10	1.34	.62	.02	.87	-4.8	.7	9.3		
B10-1	1	14	15.0	15.0(4.0-GRV)	1.18	.10	1.28	.13	.02	.29	-4.9	.2	1.5			

Summary of Economic Analysis

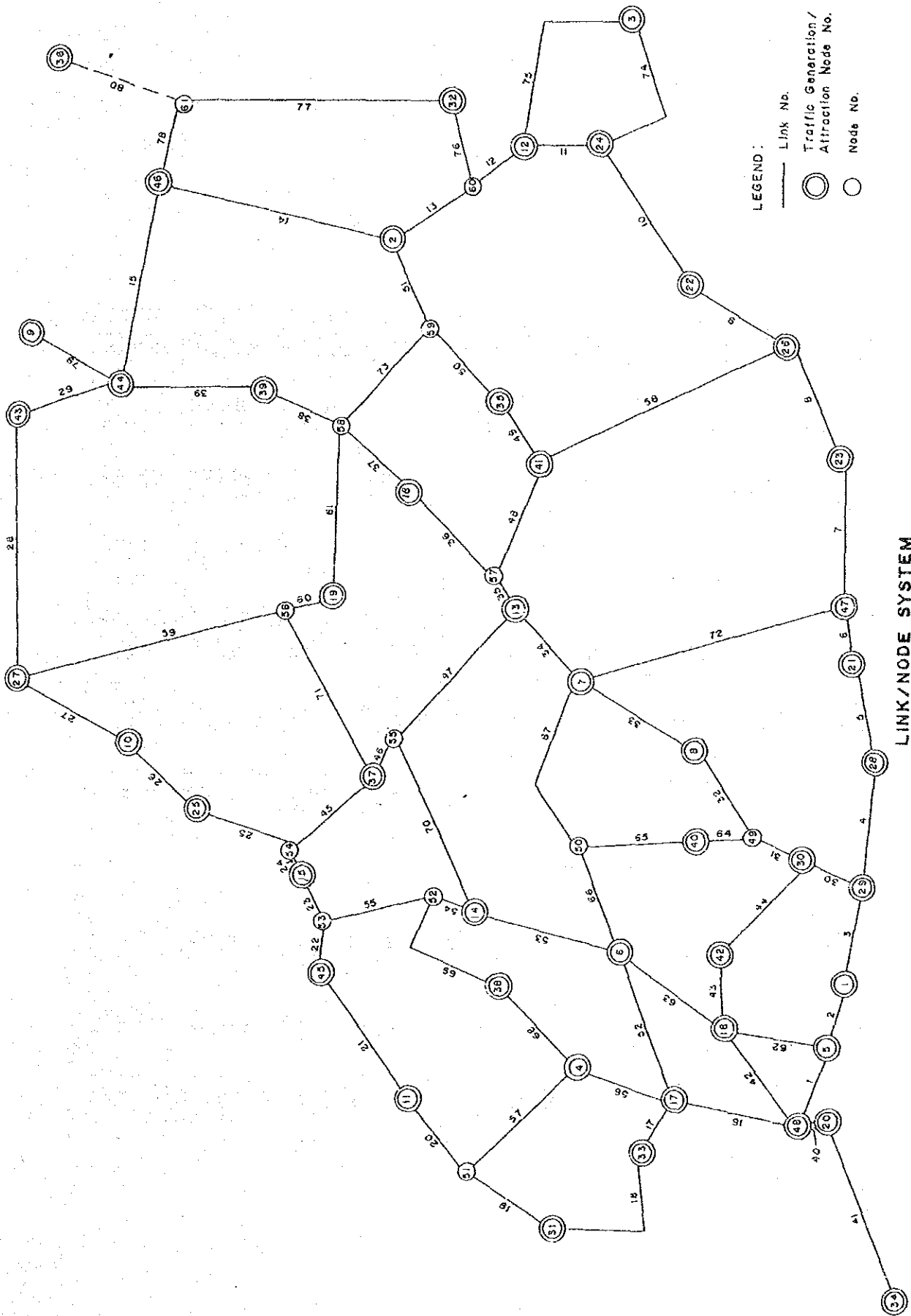
MASBATE

Class of Road	Type of Imp'nt	Road Number	1992 AADT		Length (km)	Economic Cost (Mp/km)		Benefit (Mp/km)		Economic Indicator							
			w/o	with		Total Improvement	Const. ruct.	Period. Maint.	Total	Normal Diver-ted	Gene-Deve-rated	Maint. lop't sav'g	Total	NPV (Mp)	B/C	IRR (%)	
Minor (Nat'l/Prov'l)	Rehab/Imp'l	P27-1	0	12	3.7	3.7(4.0-GRV)	.38	.10	.48	.64	.11	.27	.01	1.03	2.0	2.1	32.0
		P29-1	0	41	8.6	8.6(4.0-GRV)	.44	.11	.55	.61	.10	.14	.00	.85	2.5	1.5	23.7
		P16-1	8	20	3.3	3.3(4.0-GRV)	.49	.10	.58	.28	.02	.09	.01	.40	-.6	.7	9.5
		P18-1	8	16	.7	7.4(4.0-GRV)	.39	.10	.49	.19	.00	.06	.01	.26	-.2	.5	6.1
		P25-1	21	19	2.6	2.6(4.0-GRV)	.35	.10	.45	.15	.01	.02	.02	.20	-.6	.4	3.3
		P26-1	2	2	.7	7.4(4.0-GRV)	.35	.10	.45	.04	.02	.07	.01	.14	-.2	.3	.0
Minor (Baran-gay)	Rehab/Imp'l	B5-4	33	41	4.6	4.6(4.0-GRV)	.40	.11	.51	.74	.14	.41	.00	1.30	3.6	2.6	36.1
		B9-1	8	36	16.4	16.4(4.0-GRV)	.38	.11	.49	.63	.17	.09	.00	.89	6.2	1.8	28.8
		B20-3	3	10	1.4	1.4(4.0-GRV)	.39	.10	.49	.42	.04	.18	.01	.65	.2	1.3	20.4
		B14-3	0	9	4.0	4.0(4.0-GRV)	.49	.10	.59	.46	.03	.20	.01	.68	.3	1.1	17.5
		B3-2	9	14	7.5	7.5(4.0-GRV)	.35	.10	.45	.24	.12	.13	.00	.49	.4	1.1	16.8
		B12-3	0	22	2.6	2.6(4.0-GRV)	.41	.10	.51	.36	.07	.09	.01	.54	.1	1.1	16.0
		B12-2	0	12	7.2	7.2(4.0-GRV)	.54	.10	.64	.26	.06	.36	.00	.68	.3	1.1	16.0
		B2-2	0	13	1.6	1.6(4.0-GRV)	.38	.10	.48	.39	.01	.08	.01	.49	.0	1.0	16.6
		B5-5	9	26	8.0	8.0(4.0-GRV)	.39	.10	.49	.32	.04	.12	.01	.48	-.1	1.0	14.9
		B0-3	0	6	1.1	1.1(4.0-GRV)	.36	.10	.46	.18	.04	.12	.01	.36	-.1	.8	11.5
		B11-6	3	12	3.1	3.1(4.0-GRV)	.45	.10	.55	.29	.04	.07	.01	.41	-.4	.7	10.6
		B0-4	0	7	3.2	3.2(4.0-GRV)	.53	.10	.63	.23	.09	.11	.01	.44	-.6	.7	9.9
New Const.		B6-3	0	8	5.0	5.0(4.0-GRV)	.53	.10	.63	.16	.04	.12	.01	.31	-1.6	.5	5.6
		B16-2	1	4	.9	.9(4.0-GRV)	.38	.10	.48	.09	.04	.08	.01	.23	-.2	.5	4.8
		B0-2	0	18	2.0	1.7(4.0-GRV)	.40	.10	.50	.70	.14	.28	.01	1.14	1.1	2.3	32.8
		B6-2	0	19	9.8	9.8(4.0-GRV)	.36	.10	.46	.38	.13	.20	.00	.72	2.5	1.6	23.6
		B5-2	0	10	5.5	5.5(4.0-GRV)	.46	.10	.56	.37	.09	.18	.00	.63	.4	1.1	16.9
		B20-1	0	10	5.0	5.0(4.0-GRV)	.51	.10	.61	.28	.08	.25	.02	.59	-.1	1.0	14.6
		B8-4	0	5	3.0	3.0(4.0-GRV)	.53	.10	.63	.16	.03	.32	.02	.48	-.4	.8	11.7
		B15-3	0	5	1.6	1.5(4.0-GRV)	.53	.10	.63	.24	.09	.07	.02	.38	-.4	.6	7.9
		B5-1	0	14	11.4	11.4(4.0-GRV)	.57	.10	.67	.21	.08	.11	.01	.38	-3.3	.6	7.3
		B15-2	0	9	15.0	15.0(4.0-GRV)	.53	.10	.63	.21	.10	.04	.02	.32	-4.6	.5	5.7
	B2-1	0	6	6.3	6.3(4.0-GRV)	.52	.10	.62	.13	.04	.12	.02	.29	-1.8	.4	4.5	

**APPENDICES FOR
CHAPTER 12**

APPENDIX 12-1

RESULTS OF TRAFFIC PROJECTION FOR MAJOR ROADS (BOHOL)



TRAFFIC PROJECTION

BOHOL.

Movement of Passengers and Commodity

Link	Year	Number of Passengers				Commodity Tonnage					
		Normal	Diverted-1	Diverted-2	General	Total	Normal	Diverted-1	Diverted-2	General	
1	1988	10393				10393	835.09				835.09
	1992	12769	-141	24	101	12752	995.78	-9.03	9.47	4.11	1000.33
	1996	15639	-167	36	371	15879	1187.44	-10.49	9.07	14.42	1200.44
	2006	25342	-249	86	594	25779	1776.00	-15.01	13.89	20.89	1795.78
2	2016	39532	-362	168	915	40253	2546.11	-20.74	25.51	29.20	2580.08
	1988	8015				8015	758.09				758.09
	1992	10628	-116	30	101	10644	907.30	-8.59	9.70	4.44	912.85
	1996	13070	-137	44	371	13347	1086.26	-10.01	9.19	15.58	1101.01
3	2006	21365	-205	98	594	21852	1626.02	-14.38	14.04	22.51	1658.17
	2016	33568	-237	187	915	34373	2357.83	-19.95	25.98	31.38	2395.24
	1988	7824				7824	656.21				656.21
	1992	9384	-119	35	101	9402	786.13	-8.64	10.38	4.44	792.32
4	1996	11516	-140	61	371	11797	943.06	-10.06	9.86	15.88	958.45
	2006	18751	-210	111	594	19246	1424.02	-14.45	14.98	22.51	1447.05
	2016	29382	-304	209	915	30202	2056.97	-20.03	27.58	31.38	2095.89
	1988	4568				4568	337.55				337.55
5	1992	5708	-373	-11	37	5360	402.83	-31.87	.31	3.22	374.49
	1996	6954	-457	-12	132	6627	481.74	-38.08	-1.06	11.18	453.78
	2006	11197	-740	-14	200	10642	721.17	-56.72	-2.48	15.82	677.79
	2016	17369	-1154	-17	295	16392	1033.84	-80.93	-2.02	21.70	972.58
6	1988	4315				4315	315.61				315.61
	1992	5276	-382	81	37	5012	378.75	-32.06	1.92	3.70	360.30
	1996	6434	-468	99	132	6197	450.78	-38.30	.82	12.89	426.19
	2006	10333	-758	158	200	9932	675.44	-57.03	.11	18.30	636.82
7	2016	15011	-1182	241	295	15365	969.12	-81.34	1.34	25.16	914.28
	1988	5151				5151	328.99				328.99
	1992	5280	-395	-2	37	5079	380.17	-30.89	.19	1.90	361.36
	1996	7822	-410	-2	132	7342	484.38	-36.91	-.96	6.63	433.14
8	2006	12109	-661	-1	200	11547	699.48	-54.95	-2.24	9.47	641.76
	2016	18594	-1027	1	295	17862	982.36	-78.38	-2.03	13.10	915.05
	1988	4286				4286	281.59				281.59
	1992	5220	-264	34	37	5027	334.77	-27.33	1.15	1.35	309.93
9	1996	6342	-322	44	132	6195	398.62	-32.77	.56	4.66	371.07
	2006	10100	-520	79	200	9858	593.12	-48.98	.41	6.55	551.09
	2016	15842	-809	137	295	15459	846.93	-70.08	1.62	8.55	787.42
	1988	5077				5077	279.34				279.34
10	1992	6197	-297	-3	37	5938	331.31	-28.81	-.72	1.35	303.13
	1996	7541	-354	-2	132	7066	333.13	-34.49	-1.42	4.66	361.87
	2006	12041	-587	-1	200	11653	581.66	-51.47	-2.44	6.55	534.30
	2016	18553	-914	2	295	17836	826.56	-73.54	-2.83	8.95	759.14

TRAFFIC PROJECTION

BOHOL

Movement of Passengers and Commodity

Link/Year	Number of Passengers				Total	Commodity Tonnage				Total
	Normal	Diver- ted-1	Diver- ted-2	Gene- rated		Normal	Diver- ted-1	Diver- ted-2	Gene- rated	
9	1988	4725			4725	243.33				243.33
	1992	5760	-351	-50	5359	287.76	-30.97	-2.35	1.35	255.78
	1996	7001	-430	-60	6511	340.32	-37.05	-3.10	4.66	304.83
	2016	11148	-696	-95	10357	500.51	-55.26	-4.72	6.55	447.08
10	1988	17130	-1085	200	16045	707.85	-78.93	-6.23	8.95	530.64
	1992	4790			4790	246.17				246.17
	1996	5882	-353	-54	5475	290.54	-31.01	-2.53	1.35	258.24
	2016	11249	-700	-102	10447	342.80	-37.09	-3.34	4.56	307.03
11	1988	17254	-1091	295	16303	707.70	-79.01	-5.70	8.95	530.94
	1992	5651			5651	294.75				294.75
	1996	6899	-463	-56	6380	347.17	-37.56	-2.76	5.8	307.41
	2016	13402	-897	-106	12499	407.95	-41.53	-3.14	1.99	362.27
12	1988	20632	-1381	117	19268	834.91	-92.54	-6.48	4.30	740.19
	1992	4560			4560	232.32				232.32
	1996	5561	-350	-42	5169	273.72	-30.87	-1.46	5.81	247.20
	2016	10776	-695	-75	10006	321.78	-36.94	-1.52	19.93	303.26
13	1988	16571	-1083	3313	18692	469.53	-55.11	-2.01	27.51	439.92
	1992	4481			4481	218.13				218.13
	1996	5462	-329	-49	5084	256.42	-30.32	-1.74	10.41	234.77
	2016	10570	-655	-88	9807	300.62	-36.31	-1.74	36.58	299.24
14	1988	16241	-1023	3484	18573	610.83	-77.61	-3.35	75.50	605.37
	1992	4092			4092	179.77				179.77
	1996	4967	-639	-25	4303	210.45	-39.51	-2.22	3.57	174.19
	2016	9484	-1238	-45	8201	245.80	-45.94	-0.8	12.65	211.43
15	1988	14466	-1906	1725	14285	353.87	-69.22	-1.0	18.71	303.47
	1992	3979			3979	180.75				180.75
	1996	4882	595	13	5490	212.68	37.94	-2.0	6.12	256.54
	2016	9624	1153	19	10806	249.09	45.03	-3.1	21.78	315.59
16	1988	14925	1775	24	16724	362.04	56.55	-6.0	32.59	460.57
	1992	11879			11879	720.56				720.56
	1996	14537	-1135	-204	13198	847.71	-58.50	-12.13	2.80	779.88
	2016	28431	-2156	-406	25869	996.30	-68.11	-15.47	9.73	922.44
2016	1988	43906	-3278	-635	40111	2024.76	-133.71	-31.73	18.86	1878.17
	1992	14537	-1135	-204	13198	847.71	-58.50	-12.13	2.80	779.88
	1996	17732	-1372	-250	16110	996.30	-68.11	-15.47	9.73	922.44
	2016	43906	-3278	-635	40111	2024.76	-133.71	-31.73	18.86	1878.17

TRAFFIC PROJECTION

BOHOL

Movement of Passengers and Commodity

Link	Year	Number of Passengers				Commodity Tonnage					
		Normal	Diver- ted-1	Diver- ted-2	Gene- rated	Total	Normal	Diver- ted-1	Diver- ted-2	Gene- rated	Total
17	1988	7751				7751	500.37				500.37
	1992	9460	-179	-181	4	9103	591.95	-12.58	-11.17	.50	568.70
	1995	11513	-219	-232	13	11083	700.08	-15.17	-14.48	1.74	672.17
	2006	18393	-356	-377	20	17699	1028.85	-23.24	-21.98	2.45	986.08
2016	28354	-558	-558	30	27270	1453.07	-34.01	-29.69	3.36	1392.73	
18	1988	6344				6344	429.82				429.82
	1992	7751	-181	-202	4	7373	510.54	-12.53	-10.98	.50	487.42
	1995	9445	-221	-244	13	8992	606.50	-15.23	-14.31	1.74	578.70
	2006	15137	-350	-388	20	14409	838.46	-23.32	-21.75	2.46	855.85
2016	23401	-554	-557	30	22270	1276.79	-34.11	-29.21	3.36	1216.84	
19	1988	4844				4844	299.22				299.22
	1992	5870	-170	61	4	5765	356.45	-12.39	-4.24	.50	340.38
	1995	7099	-209	71	13	6973	435.05	-14.89	-6.39	1.74	405.52
	2006	11190	-340	97	20	10947	634.54	-22.86	-10.93	2.46	603.21
2016	17083	-534	180	30	16708	907.98	-33.49	-15.25	3.36	862.60	
20	1988	4848				4848	300.74				300.74
	1992	5881	-176	53	4	5762	368.20	-12.36	-4.26	1.15	342.72
	1995	7118	-215	61	13	6977	427.04	-14.92	-8.41	4.01	409.72
	2006	11243	-349	83	20	10997	637.24	-22.90	-10.94	5.71	609.11
2016	17187	-546	109	30	16708	911.55	-33.55	-15.25	7.86	870.61	
21	1988	4848				4848	308.62				308.62
	1992	5894	-160	-54	4	5684	363.05	-12.23	-4.92	1.15	347.06
	1995	7147	-196	-86	13	6958	428.58	-14.77	-6.61	4.01	412.31
	2006	11328	-321	-108	20	10980	583.71	-22.71	-10.59	5.71	806.12
2016	17354	-505	-169	30	16709	898.39	-33.30	-14.87	7.86	858.09	
22	1988	5508				5508	276.89				276.89
	1992	6588	-73	-10	4	6508	324.21	-7.56	-1.68	1.15	316.12
	1995	8099	-91	-14	13	8007	378.63	-9.48	-1.99	4.01	371.16
	2006	12799	-156	-27	20	12626	546.01	-15.47	-3.32	5.71	532.93
2016	19557	-256	-47	30	19283	760.66	-23.67	-5.44	7.86	739.41	
23	1988	5577				5577	272.75				272.75
	1992	6765	-37	-50	30	6709	319.59	-7.22	-2.75	3.65	313.27
	1995	8187	-49	-61	106	8133	373.54	-9.11	-3.22	12.57	373.78
	2006	12918	-96	-98	161	12824	539.45	-15.02	-4.94	17.39	536.89
2016	19718	-171	-153	238	19532	752.35	-23.11	-7.46	23.43	745.21	
24	1988	4983				4983	229.52				229.52
	1992	6022	-28	-75	30	5947	268.63	-7.05	-2.87	3.65	262.36
	1995	7261	-38	-92	105	7237	313.59	-8.93	-3.34	12.57	314.00
	2006	11373	-79	-144	161	11311	452.29	-14.76	-5.05	17.39	449.87
2016	17263	-146	-218	238	17138	630.24	-22.76	-7.57	23.43	623.35	

TRAFFIC PROJECTION

BOHOL

Movement of Passengers and Commodity

Link	Year	Number of Passengers				Commodity Tonnage					
		Normal	Diver- ted-1	Diver- ted-2	Gene- rated	Total	Normal	Diver- ted-1	Diver- ted-2	Gene- rated	Total
25	1988	4722				4722	207.99				207.99
	1992	5695	-72	-132	30	5521	243.34	-10.18	-5.48	6.76	234.43
	1996	6857	-93	-161	106	6708	284.32	-12.63	-6.66	23.30	288.54
	2006	10705	-168	-258	161	10439	409.97	-19.80	-9.80	32.23	412.56
	2016	16212	-284	-400	238	15756	571.63	-29.70	-13.96	43.41	571.27
26	1988	3276				3276	136.81				136.81
	1992	4012	-94	112	30	4060	162.03	-11.77	3.21	8.31	161.78
	1996	4900	-120	134	106	5019	191.43	-14.36	3.60	29.03	209.71
	2006	7884	-210	202	161	8037	282.71	-22.38	4.69	41.45	306.46
	2016	12226	-349	297	238	12412	401.52	-33.14	5.89	57.23	431.50
27	1988	2279				2279	102.17				102.17
	1992	2788	-86	99	30	2831	120.57	-11.56	3.81	6.97	119.80
	1996	3400	-109	120	106	3516	141.88	-14.09	4.49	24.48	156.77
	2006	8459	-192	187	161	8615	207.92	-21.98	6.42	35.49	227.85
	2016	8452	-319	283	238	8654	293.42	-32.55	8.73	49.68	319.28
28	1988	1685				1685	73.91				73.91
	1992	2064	-28	122	134	2292	87.33	-8.13	5.07	6.29	90.57
	1996	2519	-39	148	489	3117	102.90	-10.13	6.03	22.24	121.03
	2006	4053	-80	234	775	4981	151.30	-16.37	8.73	32.64	176.30
	2016	6285	-146	357	1186	7681	214.16	-24.87	11.98	46.09	247.35
29	1988	3394				3394	160.75				160.75
	1992	4215	86	50	315	4654	192.09	9.09	2.17	10.51	213.86
	1996	5209	108	60	1173	6549	228.36	11.23	2.65	37.73	279.87
	2006	8611	184	92	1960	10847	343.16	17.88	3.61	57.44	422.11
	2016	13643	299	137	3132	17212	494.10	26.91	4.87	83.55	609.43
30	1988	3555				3555	266.19				266.19
	1992	4369	222	82	92	4765	322.39	22.22	12.49	4.43	361.53
	1996	5354	276	107	337	6074	390.50	26.82	13.88	15.51	446.71
	2006	8698	462	195	535	9890	603.87	40.47	21.49	22.38	687.71
	2016	13612	740	394	821	15005	888.15	58.31	34.63	31.16	1012.25
31	1988	2485				2485	227.93				227.93
	1992	3072	220	125	92	3509	277.63	22.41	13.57	6.00	319.61
	1996	3787	274	159	337	4557	338.31	27.04	15.14	21.03	401.52
	2006	6230	462	282	535	7508	528.41	40.78	23.30	30.38	622.88
	2016	9851	741	470	821	11883	784.22	58.74	37.12	42.35	922.43
32	1988	2303				2303	204.65				204.65
	1992	2849	244	127	161	3381	250.10	22.92	14.15	6.09	293.26
	1996	3514	302	163	534	4572	305.81	27.59	15.86	21.36	370.58
	2006	5787	502	288	967	7545	480.75	41.49	24.37	30.91	577.52
	2016	9161	798	482	1510	11951	717.05	59.64	38.54	43.15	858.39

TRAFFIC PROJECTION

BOHOL

Movement of Passengers and Commodity

Link	Year	Number of Passengers				Commodity Tonnage					
		Normal	Diver- ted-1	Diver- ted-2	Gene- rated	Total	Normal	Diver- ted-1	Diver- ted-2	Gene- rated	Total
33	1988	2312			161	2312	195.34			195.34	186.34
	1992	2861	260	214	161	3496	239.01	23.06	16.08	7.79	286.93
	1996	3531	321	268	594	4713	292.43	27.74	18.24	27.34	368.75
	2006	5820	530	454	967	7772	460.85	41.69	27.81	39.54	569.89
	2016	9216	840	736	1510	12301	688.75	59.88	43.10	55.17	846.90
34	1988	3248				3248	221.35			221.35	221.35
	1992	4015	553	238	161	4967	269.47	32.27	19.53	8.94	330.21
	1996	4946	674	301	594	6515	327.86	38.30	22.42	31.49	420.06
	2006	8117	1082	520	967	10687	511.81	56.48	33.89	45.95	648.13
	2016	13793	1677	853	1510	16833	759.50	80.03	51.23	64.60	956.35
35	1988	4710				4710	248.24			248.24	248.24
	1992	5863	221	-65	200	6220	298.72	22.01	1.27	10.36	332.36
	1996	7272	274	-79	733	8200	357.79	26.49	1.29	36.51	422.08
	2006	12115	455	-128	1183	13625	545.05	39.80	2.04	53.28	640.18
	2016	19336	723	-200	1833	21692	793.11	57.16	3.70	74.95	928.91
36	1988	1546				1546	112.64			112.64	112.64
	1992	1932	591	94	154	2780	136.31	34.06	6.50	6.67	183.54
	1996	2403	721	120	307	3551	164.41	40.38	7.55	23.78	236.12
	2006	4028	1158	210	997	6393	263.11	59.57	11.71	35.61	360.00
	2016	6454	1796	348	1567	10165	371.18	84.38	18.01	51.14	524.72
37	1988	1415				1415	101.52			101.52	101.52
	1992	1760	594	53	209	2615	122.47	34.10	4.94	7.90	169.41
	1996	2180	725	69	772	3746	147.31	40.43	5.73	28.20	221.67
	2006	3618	1166	125	1270	6179	225.47	59.67	9.06	42.38	336.59
	2016	5750	1809	212	2001	9772	329.20	84.55	14.30	61.01	489.06
38	1988	1405				1405	81.57			81.57	81.57
	1992	1735	679	52	233	2701	97.54	47.97	5.55	9.26	160.42
	1996	2138	831	68	863	3901	116.23	57.36	6.62	32.94	213.15
	2006	3503	1345	126	1417	6391	174.95	86.07	10.57	49.16	320.75
	2016	5510	2097	218	2229	10053	252.28	123.62	16.72	70.36	452.97
39	1988	1230				1230	70.23			70.23	70.23
	1992	1522	656	156	241	2615	84.11	48.40	10.39	8.39	151.29
	1996	1876	851	195	822	3814	100.34	57.85	12.19	29.96	200.34
	2006	3081	1374	330	1457	6251	151.57	86.72	18.58	45.09	302.07
	2016	4856	2138	532	2311	9836	219.24	124.46	28.03	64.96	436.70
40	1988	3721				3721	188.66			188.66	188.66
	1992	4453	-	6	128	4626	218.55	-	-	7.61	226.13
	1996	5411	-	7	455	5883	251.68	-	-	25.67	278.77
	2006	8442	-	10	740	9192	354.47	-	-	38.50	393.56
	2016	12759	-	14	1156	13909	484.06	-	-	53.61	537.56

TRAFFIC PROJECTION

BOHOL

Movement of Passengers and Commodity

Link	Year	Number of Passengers				Commodity Tonnage					
		Normal	Diver- ted-1	Diver- ted-2	Gene- rated	Total	Normal	Diver- ted-1	Diver- ted-2	Gene- rated	Total
41	1988	1341	-	-	128	1341	45.90	-	-	7.61	46.90
	1992	1635	-	-	465	1763	55.01	-	-	26.87	80.86
	1996	1987	-	1	740	2453	64.10	-	0.09	38.80	131.19
	2016	3164	-	1	1136	3906	92.56	-	-0.04	53.61	182.51
42	1988	1375	-	-	15	1375	39.92	-	-	2.61	39.92
	1992	1683	971	-3	15	2655	46.75	58.77	2.16	2.61	110.30
	1996	2053	1175	-1	63	3281	54.41	68.78	2.47	9.10	134.76
	2016	3290	1853	11	83	5237	78.27	98.77	3.90	13.00	193.95
43	1988	677	-	-	126	677	20.47	-	-	1.98	20.47
	1992	823	-8	-6	-	810	23.96	.08	-1.0	1.98	25.91
	1996	998	-9	-6	-	988	27.86	.09	-0.68	6.88	34.76
	2016	1579	-11	-10	-	1558	40.02	.13	-0.08	9.78	49.85
44	1988	147	-	-	-	147	1.40	-	-	1.40	1.40
	1992	173	-10	7	-	170	1.56	.03	.09	1.16	2.83
	1996	204	-11	8	-	201	1.70	.04	.12	4.03	5.89
	2016	437	-21	19	-	435	2.80	.10	.19	7.89	10.98
45	1988	1688	106	54	-	1688	67.46	-	-	3.11	67.46
	1992	2049	128	64	-	2209	78.84	5.76	2.04	10.73	89.74
	1996	2481	202	99	-	2674	91.47	6.59	2.57	14.84	111.36
	2016	5998	307	148	-	6452	131.20	9.18	3.57	19.97	158.79
46	1988	2329	119	-51	12	2329	92.68	-	-	6.01	92.68
	1992	2931	146	-61	44	2911	108.56	15.72	-0.92	20.84	129.36
	1996	3433	237	-94	70	3562	126.44	19.22	-0.97	29.36	165.33
	2016	8329	372	-140	107	8658	182.04	29.25	-1.20	40.15	239.46
47	1988	2582	-	-	-	2582	91.30	-	-	4.37	91.30
	1992	3138	-103	-132	39	2942	105.54	-1.01	-4.90	15.19	132.04
	1996	3804	-122	-160	139	3661	123.86	-1.08	-5.43	21.44	188.67
	2016	6022	-183	-254	216	5801	176.28	-1.33	-7.73	29.36	260.10
48	1988	3488	-	-	-	3488	144.32	-	-	6.36	144.32
	1992	4340	-361	-156	107	3921	172.91	-11.85	-4.94	22.60	209.04
	1996	5382	-436	-207	397	5136	205.97	-13.56	-5.88	33.60	316.31
	2016	8563	-886	-349	658	8563	311.12	-19.42	-8.99	48.11	457.95

TRAFFIC PROJECTION

BOHOL

Movement of Passengers and Commodity

Link	Year	Number of Passengers				Total	Commodity Tonnage				Total
		Normal	Diver- ted-1	Diver- ted-2	Gene- rated		Normal	Diver- ted-1	Diver- ted-2	Gene- rated	
49	1988	3094			103.03	3094	103.03			103.03	
	1992	3798	-307	70	105	3667	121.77	-9.68	1.45	9.29	122.84
	1996	4648	-369	87	389	4755	143.12	-11.09	1.75	32.96	166.74
	2006	7509	-577	146	644	7722	210.05	-15.63	2.65	48.64	245.61
2016	11674	-874	233	1022	12055	296.55	-21.34	3.44	69.03	347.66	
50	1988	2247			83.38	2247	83.38			83.38	
	1992	2738	-319	-44	105	2479	98.09	-9.93	-0.50	5.70	93.25
	1996	3326	-384	-52	389	3279	114.68	-11.37	-0.61	19.93	122.63
	2006	6294	-599	-77	644	5261	166.78	-16.00	-0.80	28.70	178.69
2016	8135	-906	-111	1022	8140	233.87	-21.82	-1.19	39.98	250.84	
51	1988	2521			100.30	2521	100.30			100.30	
	1992	3075	-339	-62	165	2839	117.94	-10.98	-1.85	7.54	112.65
	1996	3739	-407	-74	610	3867	137.88	-12.57	-2.04	26.49	149.71
	2006	5960	-635	-113	1002	6213	200.20	-17.67	-2.84	38.50	218.18
2016	9169	-961	-166	1580	9622	280.36	-24.09	-4.04	54.03	306.27	
52	1988	2026			82.69	2026	82.69			82.69	
	1992	2419	-867	6	8	1566	95.09	-44.57	.39	1.75	52.66
	1996	2885	-1048	9	29	1874	109.32	-51.47	.51	6.02	64.37
	2006	4406	-1646	17	43	2821	151.62	-71.88	.70	8.37	88.81
2016	6550	-2498	31	62	4144	204.41	-97.36	.84	11.32	119.21	
53	1988	1271			43.90	1271	43.90			43.90	
	1992	1519	39	125	43	1725	50.98	13.50	4.47	5.02	73.98
	1996	1813	51	149	155	2168	59.24	16.55	4.99	17.24	98.01
	2006	2777	94	231	336	3339	83.90	25.96	7.14	23.78	140.78
2016	4140	162	347	351	5001	115.06	38.33	10.38	31.95	195.92	
54	1988	862			15.03	862	15.03			15.03	
	1992	1018	34	16	24	1098	16.78	1.11	.74	2.71	21.32
	1996	1201	41	19	104	1355	18.32	1.24	.93	9.26	29.96
	2006	1788	64	29	156	2037	24.08	1.66	1.27	12.65	39.63
2016	2600	96	43	228	2967	30.76	2.16	1.49	16.86	51.27	
55	1988	853			15.59	853	15.59			15.59	
	1992	1008	65	34	26	1134	17.36	1.46	1.01	2.50	22.33
	1996	1190	77	40	93	1400	19.16	1.61	1.24	8.56	30.57
	2006	1774	115	59	141	2090	24.82	2.11	1.67	11.68	40.28
2016	2583	168	86	208	3045	31.96	2.72	1.99	15.57	51.94	
56	1988	2191			63.16	2191	63.16			63.16	
	1992	2649	5	-9	20	2665	73.10	.03	-.25	4.05	76.94
	1996	3194	6	-10	71	3261	84.25	.03	-.24	14.01	98.10
	2006	4989	9	-16	104	5097	118.35	.04	-.32	19.68	137.76
2016	7574	13	-23	151	7714	161.10	.05	-.55	26.82	187.42	

Movement of Passengers and Commodity

Link	Year	Number of Passengers			Total	Commodity Tonnage			Total
		Normal	Diver- ted-1	Gene- rated-2		Normal	Diver- ted-1	Gene- rated-2	
57	1988	600			600	4.70			4.70
	1992	703	-5	9	707	5.16	-0.03	.16	5.99
	1996	823	-6	10	827	5.57	-0.03	.23	6.04
	2006	1202	-9	16	1209	7.00	-0.04	.32	10.53
	2016	1720	-13	24	1731	8.73	-0.05	.35	13.53
58	1988	134			134	4.83			4.83
	1992	166	-65	5	106	5.51	-2.44	.12	3.19
	1996	205	-80	6	132	6.50	-2.88	.14	3.77
	2006	340	-131	11	219	9.65	-4.27	.21	5.60
	2016	538	-207	18	349	13.75	-6.07	.31	7.98
59	1988	155			155	10.45			10.45
	1992	190	-53	-12	134	12.22	-3.41	-.70	8.80
	1996	233	-65	-14	184	14.18	-3.93	-.81	11.92
	2006	377	-103	-23	299	20.33	-5.52	-1.17	17.33
	2016	586	-157	-37	466	28.13	-7.53	-1.64	24.26
60	1988	155			155	10.45			10.45
	1992	190	100	56	366	12.22	14.74	3.96	34.49
	1996	233	123	68	499	14.18	17.92	4.57	49.26
	2006	377	205	110	810	20.33	27.78	6.66	73.08
	2016	586	326	171	1262	28.13	40.91	9.54	104.24
61	1988	827			827	75.08			75.08
	1992	1026	-100	-56	971	89.78	-14.74	-3.96	77.73
	1996	1269	-123	-68	1449	106.89	-17.52	-4.53	108.23
	2006	2097	-205	-110	2398	160.59	-27.78	-6.80	162.24
	2016	3318	-326	-170	3799	230.93	-40.91	-9.54	232.64
62	1988	216			216	2.28			2.28
	1992	249	27	4	280	2.48	.46	.06	3.34
	1996	288	32	4	324	2.66	.51	.09	4.42
	2006	411	47	6	464	3.28	.66	.12	5.67
	2016	576	68	9	653	4.03	.84	.12	7.17
63	1988	287			287	2.71			2.71
	1992	331	1015	32	1392	2.93	59.64	2.66	68.53
	1996	381	1228	41	1703	3.14	69.74	2.87	87.48
	2006	640	1933	73	2630	3.85	100.04	4.44	124.74
	2016	754	2343	122	3945	4.70	138.70	6.99	172.69
64	1988	492			492	36.33			36.33
	1992	598	-29	-12	737	42.51	-1.98	-.45	44.29
	1996	726	-35	-14	855	49.49	-1.08	-.46	59.21
	2006	1149	-53	-21	1499	71.12	-1.41	-.50	87.37
	2016	1758	-79	-30	2499	98.71	-1.82	-.85	118.69

TRAFFIC PROJECTION

BOHOL

Movement of Passengers and Commodity

Link	Year	Number of Passengers				Commodity Tonnage														
		Normal	Diver- ted-1	Diver- ted-2	Gene- rated	Total	Normal	Diver- ted-1	Diver- ted-2	Gene- rated	Total									
65	1988	-	-	-	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1992	-	43	14	37	94	-	-	-	-	-	1.06	.46	.88	2.38	-	-	-	-	-
	1996	-	51	16	181	198	-	-	-	-	-	1.16	.52	3.01	4.69	-	-	-	-	-
	2006	-	76	24	186	296	-	-	-	-	-	1.51	.59	4.14	6.33	-	-	-	-	-
66	2016	-	110	35	287	431	-	-	-	-	-	1.93	.85	5.56	8.34	-	-	-	-	-
	1988	5	-	-	-	5	.03	-	-	-	-	-	-	-	.03	-	-	-	-	-
	1992	6	158	42	37	342	.03	2.96	.98	1.85	5.82	-	-	-	-	-	-	-	-	-
	1996	6	186	50	131	373	.03	3.26	1.13	5.37	10.81	-	-	-	-	-	-	-	-	-
67	2006	9	278	75	196	558	.04	4.24	1.53	8.88	14.69	-	-	-	-	-	-	-	-	-
	2016	12	405	111	287	814	.05	5.44	1.91	12.02	19.41	-	-	-	-	-	-	-	-	-
	1988	5	-	-	-	5	.03	-	-	-	-	-	-	-	.03	-	-	-	-	-
	1992	6	114	28	-	148	.03	1.90	.53	.97	3.44	-	-	-	-	-	-	-	-	-
68	1996	6	136	33	-	175	.03	2.10	.63	3.37	6.13	-	-	-	-	-	-	-	-	-
	2006	9	202	51	-	262	.04	2.73	.85	4.73	8.55	-	-	-	-	-	-	-	-	-
	2016	12	295	76	-	383	.05	3.51	1.06	6.46	11.08	-	-	-	-	-	-	-	-	-
	1988	910	-	-	-	910	22.82	-	-	-	22.82	-	-	-	-	-	-	-	-	-
69	1992	1076	-	2	20	1097	26.00	-	-	.06	1.67	-	-	-	27.62	-	-	-	-	-
	1996	1288	-	2	71	1341	29.56	-	-	.05	5.56	-	-	-	35.17	-	-	-	-	-
	2006	1892	-	4	104	2000	40.21	-	-	.08	7.58	-	-	-	47.72	-	-	-	-	-
	2016	2760	-	6	161	2915	53.37	-	-	.12	9.95	-	-	-	63.19	-	-	-	-	-
70	1988	339	-	-	-	339	4.59	-	-	.05	1.17	-	-	-	4.69	-	-	-	-	-
	1992	396	-	-2	29	423	5.17	-	-	.09	3.98	-	-	-	6.38	-	-	-	-	-
	1996	493	-	-2	101	562	6.64	-	-	.13	5.37	-	-	-	9.70	-	-	-	-	-
	2006	675	-	-3	151	822	7.16	-	-	.12	7.10	-	-	-	12.56	-	-	-	-	-
71	2016	965	-	-5	220	1190	9.00	-	-	.12	7.10	-	-	-	16.22	-	-	-	-	-
	1988	1097	-	-	-	1097	28.04	-	-	28.04	-	-	-	-	-	-	-	-	-	-
	1992	1311	-33	-40	51	1289	32.30	11.94	1.27	4.71	50.21	-	-	-	-	-	-	-	-	-
	1996	1584	-33	-46	184	1668	37.11	14.82	1.48	16.33	69.71	-	-	-	-	-	-	-	-	-
72	2006	2388	-31	-65	286	2578	51.70	23.69	2.38	23.13	100.89	-	-	-	-	-	-	-	-	-
	2016	3548	-20	-89	431	3868	70.01	35.62	3.99	31.71	141.33	-	-	-	-	-	-	-	-	-
	1988	-	153	67	12	233	-	-	-	-	-	18.15	4.67	2.88	25.69	-	-	-	-	-
	1992	-	188	82	44	315	-	-	-	-	-	21.85	5.38	10.10	37.33	-	-	-	-	-
73	1996	-	307	133	70	511	-	-	-	-	-	33.30	7.83	14.61	55.74	-	-	-	-	-
	2006	-	482	207	107	796	-	-	-	-	-	48.44	11.18	20.36	79.98	-	-	-	-	-
	2016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1988	101	-	-	-	101	5.30	-	-	-	5.30	-	-	-	-	-	-	-	-	-
74	1992	123	181	127	-	431	5.19	7.35	5.19	.55	13.28	-	-	-	-	-	-	-	-	-
	1996	149	221	155	-	525	7.17	8.50	6.12	1.98	23.77	-	-	-	-	-	-	-	-	-
	2006	286	354	250	-	840	10.27	12.12	8.83	2.92	34.14	-	-	-	-	-	-	-	-	-
	2016	362	548	388	-	1297	14.22	16.71	12.09	4.16	47.16	-	-	-	-	-	-	-	-	-

TRAFFIC PROJECTION

BOHOL

Movement of Passengers and Commodity

Link	Year	Number of Passengers				Total	Commodity Tonnage				Total
		Normal	Diver- ted-1	Diver- ted-2	Gene- rated		Normal	Diver- ted-1	Diver- ted-2	Gene- rated	
73	1988	471	-	-	471	22.70	-	-	22.70	22.70	
	1992	577	-19	-34	584	26.60	-1.05	-1.58	3.36	27.34	
	1995	704	-23	-41	801	31.01	-1.20	-1.81	11.82	39.83	
	2006	1128	-36	-67	1383	44.68	-1.67	-2.57	17.20	57.64	
	2016	1740	-55	-103	2140	62.12	-2.26	-3.61	24.12	80.37	
74	1988	646	-	-	646	37.98	-	-	37.98	37.98	
	1992	766	-111	5	685	43.29	-6.58	.10	.79	37.60	
	1995	906	-132	6	867	49.27	-7.48	.10	2.67	44.55	
	2006	1361	-199	9	1296	67.15	-10.21	.09	3.56	60.60	
	2016	1994	-294	13	1891	89.31	-13.58	.10	4.66	80.48	
75	1988	-	-	-	-	-	-	-	-	-	
	1992	-	111	-6	357	-	6.58	-1.1	5.25	11.73	
	1995	-	132	-6	1021	-	7.48	-0.9	17.94	25.32	
	2006	-	199	-9	1540	-	10.21	-0.9	24.52	34.64	
	2016	-	294	-13	2285	-	13.58	-1.1	32.69	46.17	
76	1988	1180	-	-	1180	86.89	-	-	86.89	86.89	
	1992	1465	-	-	1903	103.82	-	-0.2	8.76	112.56	
	1995	1813	-	-	3428	123.49	-	-0.1	31.23	154.71	
	2006	2997	-	-1	5649	185.26	-	-0.2	46.70	231.94	
	2016	4744	-	-1	8920	266.11	-	-0.6	66.92	332.97	
77	1988	4	-	-	4	.23	-	-	.23	.23	
	1992	5	-	-	96	.28	-	.02	.75	1.06	
	1995	6	-	-	350	.34	-	.02	2.78	3.13	
	2006	10	-	1	596	.51	-	.03	4.82	4.86	
	2016	16	-	1	963	.75	-	.04	6.37	7.16	
78	1988	168	-	-	168	7.26	-	-	7.26	7.26	
	1992	208	-	-	488	8.67	-	-0.1	4.77	13.43	
	1995	257	-	-	1293	10.30	-	-0.2	16.95	27.23	
	2006	423	-	-1	2117	15.41	-	-0.2	25.22	40.60	
	2016	668	-	-1	3324	22.09	-	-0.4	35.99	58.04	
79	1988	839	-	-	839	49.27	-	-	49.27	49.27	
	1992	1050	-	-	1429	59.37	-	.01	8.28	67.66	
	1995	1309	-	-	2724	71.19	-	.01	29.78	100.99	
	2006	2202	-	-	4581	108.64	-	.02	48.43	154.11	
	2016	3634	-	-	7351	158.22	-	.01	66.19	224.43	
80	1988	171	-	-	171	7.50	-	-	7.50	7.50	
	1992	212	-	-	585	8.98	-	-	5.54	14.49	
	1995	262	-	-	1644	10.63	-	-	19.73	30.37	
	2006	433	-	-	2712	15.92	-	.01	29.54	45.46	
	2016	684	-	-	4287	22.83	-	-	42.36	65.20	

TRAFFIC PROJECTION

BOHOL

Traffic Volume

Link	Year	w/o				with					
		Car /Van	Jeep /ney	Bus Tru-ck	Sub-Total	Car /Van	Jeep /ney	Bus Tru-ck	Sub-Total		
1	1988	370	486	129	11071	486	570	158	13631	440	1803
	1992	447	589	158	13401	587	650	195	17171	447	2165
	1996	539	712	193	1741	1059	1021	319	2781	595	3380
	2006	834	1113	313	2601	1603	1546	498	3961	1041	5083
	2016	1243	1678	489	37791	2426	3162	1225	58131	1719	7119
2	1988	324	422	107	1111	427	495	192	11901	383	1573
	1992	382	512	131	11691	505	566	165	15051	394	1900
	1996	475	622	162	1591	647	695	270	20681	517	2584
	2006	740	977	264	2401	1026	1095	404	25251	748	3273
	2016	1107	1476	415	33491	1426	1862	625	39131	927	4508
3	1988	280	349	102	9241	361	413	126	1141	336	1351
	1992	338	424	126	1101	496	477	158	12781	346	1624
	1996	409	515	155	1321	774	753	258	20071	540	2548
	2006	634	808	252	1991	1152	1144	405	3021	813	3845
	2016	942	1219	394	28441	1626	2077	721	44241	1111	5333
4	1988	153	197	63	4591	193	216	72	541	176	701
	1992	184	238	77	5511	253	250	89	701	177	838
	1996	222	287	93	6701	391	390	143	10281	274	1302
	2006	341	448	150	10401	593	587	221	15401	410	1950
	2016	504	672	233	1451	828	828	272	2051	540	2548
5	1988	123	66	90	631	152	38	104	651	154	574
	1992	148	80	110	751	219	139	129	651	165	718
	1996	178	97	134	901	337	213	206	981	257	1111
	2006	274	150	215	1351	500	314	319	1401	383	1657
	2016	403	224	333	11541	729	729	258	11331	540	2548
6	1988	134	74	107	661	166	97	124	671	185	638
	1992	161	89	131	781	238	149	153	6081	182	789
	1996	193	107	158	931	347	227	242	981	280	1211
	2006	293	165	252	1381	537	333	371	1401	416	1797
	2016	429	245	387	12571	673	673	234	1101	540	2548
7	1988	104	50	95	3051	128	73	110	561	157	525
	1992	124	60	117	3671	184	127	130	671	165	654
	1996	149	73	142	4421	281	194	208	851	239	1005
	2006	225	111	226	1171	415	285	319	1211	355	1494
	2016	329	163	348	1671	524	524	185	1101	182	789
8	1988	118	80	96	3581	154	99	115	611	172	601
	1992	142	96	117	4311	237	137	148	551	168	746
	1996	171	115	143	491	366	210	236	821	259	1153
	2006	264	182	228	1321	544	303	363	1161	386	1719
	2016	392	274	352	1871	762	762	263	13331	416	1797

TRAFFIC PROJECTION

BOHOL

Traffic Volume

Link	Year	w/o						with							
		Car /Van	Jeep ney	Bus	Tru-ck	Sub-Total	Tri-Mot. cycl mal	Total	Car /Van	Jeep ney	Bus	Tru-ck	Sub-Total	Tri-Mot. cycl mal	Total
9	1988	76	38	106	58	378	-	430	102	61	118	53	334	-	487
	1992	91	46	129	68	335	-	517	170	120	188	47	474	-	622
	1996	109	55	157	81	402	-	562	258	182	219	69	728	-	955
	2006	166	85	249	118	619	-	961	380	267	337	97	1081	-	1418
	2016	242	127	383	168	920	-	1434	533	268	343	97	1041	-	1380
10	1988	94	91	92	62	279	-	433	66	101	108	57	332	-	487
	1992	40	110	112	74	336	-	521	151	121	141	47	460	-	609
	1996	48	132	136	81	403	-	526	228	183	224	69	704	-	933
	2006	73	204	216	127	620	-	955	333	268	343	97	1041	-	1380
	2016	107	304	331	179	922	-	1498	448	316	399	113	1276	-	1674
11	1988	107	86	117	58	368	-	550	132	102	133	56	423	-	605
	1992	127	103	143	68	442	-	662	201	141	162	56	560	-	734
	1996	151	124	175	80	530	-	794	305	215	259	81	860	-	1128
	2006	228	189	279	117	812	-	1223	448	316	399	113	1276	-	1674
	2016	330	280	429	184	1203	-	1819	604	428	533	141	1318	-	1917
12	1988	66	55	95	57	272	-	418	96	75	115	53	340	-	433
	1992	79	66	116	67	327	-	503	181	127	199	46	514	-	675
	1996	94	79	141	78	393	-	604	275	193	253	67	789	-	1036
	2006	143	123	224	114	604	-	932	404	283	389	94	1171	-	1537
	2016	210	184	345	161	899	-	1391	533	268	343	97	1041	-	1380
13	1988	77	58	90	53	277	-	418	109	79	109	50	347	-	497
	1992	92	70	109	62	333	-	503	201	134	151	46	532	-	691
	1996	110	84	133	73	400	-	604	307	204	241	66	820	-	1084
	2006	167	130	211	106	616	-	933	455	301	371	93	1220	-	1583
	2016	247	198	325	149	919	-	1391	604	428	533	141	1318	-	1917
14	1988	64	11	97	44	215	-	340	83	34	101	38	255	-	374
	1992	76	13	118	52	258	-	408	150	100	118	32	400	-	519
	1996	89	15	142	61	308	-	487	228	151	186	47	612	-	794
	2006	134	23	225	87	469	-	746	335	221	284	65	905	-	1175
	2016	193	34	343	121	692	-	1104	533	268	343	97	1041	-	1380
15	1988	65	87	75	32	259	-	382	111	125	110	43	390	-	550
	1992	78	105	93	38	312	-	461	188	163	150	43	549	-	716
	1996	92	126	113	44	375	-	555	289	253	242	71	854	-	1113
	2006	140	194	182	64	580	-	862	428	378	376	59	1281	-	1670
	2016	204	289	283	90	866	-	1291	604	428	533	141	1318	-	1917
16	1988	362	490	147	106	1105	-	1507	426	521	163	120	1230	-	1635
	1992	434	591	180	124	1329	-	1814	582	586	200	154	1522	-	1917
	1996	520	710	219	146	1595	-	2180	896	912	321	233	2353	-	2959
	2006	794	1098	352	212	2454	-	3362	1333	1369	496	313	3511	-	4410
	2016	1172	1634	543	297	3646	-	5005	1333	1369	496	313	3511	-	4410

TRAFFIC PROJECTION

BOHOL

Traffic Volume

Link	Year	w/o				with				Total	Tri-Mot. Ani- cycl cycl mal	Tri-Mot. Ani- cycl cycl mal	Total						
		Car Jeep- /Van ney	Bus Tru- ck	Tru-Sub- ck Total	Tri- cycl	Car Jeep- /Van ney	Bus Tru- ck	Tru-Sub- ck Total	Tri- cycl										
17	1988	203	241	129	82	553	-	235	-	890	252	312	135	94	792	-	248	-	1038
	1992	243	291	157	97	797	-	283	-	1070	345	454	125	112	1036	-	231	-	1267
	1996	291	349	191	114	945	-	340	-	1285	527	707	200	164	1598	-	361	-	1949
	2006	440	538	305	168	1451	-	526	-	1977	777	1063	309	232	2381	-	516	-	2896
	2016	543	800	470	237	2150	-	784	-	2934	777	1063	309	232	2381	-	516	-	2896
18	1988	172	202	105	70	549	-	196	-	746	211	258	109	80	559	-	204	-	863
	1992	206	244	129	83	662	-	237	-	899	258	376	102	96	862	-	194	-	1056
	1996	247	294	157	99	796	-	286	-	1082	443	587	162	143	1335	-	296	-	1632
	2006	376	454	251	147	1228	-	443	-	1671	656	835	252	203	1936	-	437	-	2433
	2016	551	678	388	209	1825	-	662	-	2486	656	835	252	203	1936	-	437	-	2433
19	1988	124	146	80	49	401	-	144	-	545	154	193	85	56	489	-	152	-	640
	1992	148	178	97	58	482	-	173	-	655	212	282	79	58	641	-	142	-	782
	1996	177	214	118	69	578	-	208	-	787	324	436	124	101	985	-	216	-	1201
	2006	270	329	186	104	888	-	322	-	1210	479	653	189	144	1465	-	318	-	1782
	2016	395	489	283	148	1317	-	479	-	1795	479	653	189	144	1465	-	318	-	1782
20	1988	124	148	80	49	402	-	144	-	546	155	194	85	56	490	-	152	-	642
	1992	149	178	97	59	483	-	174	-	657	213	283	79	58	644	-	143	-	786
	1996	178	215	118	70	580	-	209	-	790	326	439	124	102	991	-	217	-	1208
	2006	271	331	186	104	892	-	323	-	1216	482	657	190	146	1474	-	320	-	1794
	2016	398	492	285	149	1323	-	481	-	1806	482	657	190	146	1474	-	320	-	1794
21	1988	133	14	107	53	307	-	219	-	672	160	89	105	59	414	-	169	-	734
	1992	158	17	130	63	369	-	263	-	807	213	291	78	69	641	-	142	-	783
	1996	188	21	158	74	441	-	316	-	967	324	436	124	101	985	-	216	-	1201
	2006	282	32	250	110	674	-	485	-	1483	477	652	189	143	1462	-	317	-	1779
	2016	408	47	384	156	994	-	718	-	2194	477	652	189	143	1462	-	317	-	1779
22	1988	123	185	77	45	431	-	151	-	582	157	230	86	52	535	-	159	-	684
	1992	147	222	93	53	515	-	181	-	696	218	304	91	62	675	-	144	-	818
	1996	174	266	113	62	615	-	217	-	831	330	469	143	89	1030	-	216	-	1247
	2006	250	409	179	89	937	-	332	-	1269	483	700	218	123	1521	-	316	-	1840
	2016	378	609	273	124	1384	-	492	-	1877	483	700	218	123	1521	-	316	-	1840
23	1988	123	186	78	45	431	-	152	-	583	157	232	88	52	528	-	160	-	688
	1992	146	223	94	52	516	-	182	-	697	221	310	93	62	686	-	146	-	832
	1996	173	267	114	61	615	-	217	-	833	334	477	146	89	1046	-	219	-	1256
	2006	260	411	180	88	939	-	333	-	1271	490	711	222	124	1547	-	320	-	1867
	2016	377	611	275	123	1386	-	493	-	1880	490	711	222	124	1547	-	320	-	1867
24	1988	106	163	70	37	376	-	133	-	509	135	202	78	43	458	-	139	-	597
	1992	126	196	84	44	449	-	158	-	607	191	270	82	52	596	-	126	-	722
	1996	149	233	101	51	534	-	189	-	723	288	414	128	76	906	-	188	-	1093
	2006	222	357	159	74	811	-	288	-	1100	420	615	194	104	1331	-	274	-	1607
	2016	322	529	241	103	1195	-	426	-	1621	420	615	194	104	1331	-	274	-	1607

TRAFFIC PROJECTION

BOHOL

Traffic Volume

Link	Year	w/o				with				Total
		Car /Van ney	Jeep- Bus	Tru-Sub-ck	Tri-Mot. Anj- cycl mal	Car /Van ney	Jeep- Bus	Tru-Sub-ck	Tri-Mot. Anj- cycl mal	
25	1988	74	145	75	35	328	-	124	-	451
	1992	87	173	90	41	390	-	148	-	538
	1996	103	206	108	47	464	-	176	-	640
	2016	153	312	169	68	703	-	258	-	971
26	1988	221	460	256	95	1032	-	396	-	1429
	1992	51	55	68	25	199	-	84	-	283
	1996	61	66	83	30	240	-	102	-	343
	2016	111	123	164	52	451	-	194	-	644
27	1988	37	40	47	19	143	-	60	-	203
	1992	44	48	58	22	172	-	73	-	245
	1996	53	57	71	26	207	-	88	-	294
	2016	80	88	113	38	319	-	137	-	456
28	1988	117	130	176	54	477	-	206	-	683
	1992	27	29	35	14	105	-	44	-	149
	1996	32	35	43	16	126	-	53	-	179
	2016	59	65	84	28	235	-	101	-	336
29	1988	86	96	131	39	352	-	152	-	504
	1992	59	140	38	29	263	-	91	-	356
	1996	72	171	47	35	324	-	112	-	436
	2016	138	337	55	62	532	-	218	-	850
30	1988	93	152	58	35	337	-	88	-	426
	1992	113	185	71	42	411	-	108	-	520
	1996	137	225	87	51	501	-	132	-	633
	2016	214	356	142	78	791	-	212	-	1002
31	1988	320	539	222	115	1197	-	325	-	1522
	1992	76	120	41	30	266	-	66	-	332
	1996	93	147	50	36	326	-	81	-	408
	2016	179	287	102	69	637	-	161	-	798
32	1988	65	48	38	48	199	-	61	-	259
	1992	79	59	46	59	244	-	75	-	319
	1996	97	73	57	72	300	-	92	-	391
	2016	154	119	94	114	481	-	149	-	630

TRAFFIC PROJECTION

BOHOL

Traffic Volume

Link	Year	w/o				with													
		Car /Van	Jeep-ney	Bus	Tru-Sub-ck Total	Tri- Mot. cycl	Tru-Sub-ck Total	Car /Van	Jeep-ney	Bus	Tru-Sub-ck Total	Tri- Mot. cycl	Tri- Mot. cycl	Tri- Mot. cycl	Total				
33	1988	62	15	53	461	177	-	60	-	235	101	53	56	53	293	-	89	-	382
	1992	77	18	66	571	217	-	74	-	281	154	193	52	68	488	-	114	-	582
	1996	94	23	81	651	267	-	91	-	357	245	314	86	106	761	-	182	-	933
	2006	149	37	133	1051	429	-	147	-	576	373	488	136	158	1158	-	276	-	1432
	2016	326	57	211	1631	658	-	239	-	867	505	590	199	178	1478	-	411	-	1884
34	1988	94	75	47	521	267	-	79	-	345	148	136	68	73	425	-	123	-	548
	1992	115	92	58	641	329	-	97	-	425	209	236	77	78	601	-	169	-	770
	1996	140	113	72	781	403	-	119	-	521	332	381	127	121	961	-	269	-	1230
	2006	223	185	117	1211	647	-	192	-	839	505	590	199	178	1478	-	411	-	1884
	2016	340	290	185	1801	996	-	238	-	1294	658	715	257	173	1715	-	459	-	2184
35	1988	117	105	68	591	350	-	107	-	457	165	166	85	73	487	-	143	-	631
	1992	144	132	85	711	431	-	132	-	563	235	281	97	79	692	-	191	-	883
	1996	175	163	105	851	528	-	162	-	690	373	458	161	120	1112	-	306	-	1418
	2006	279	270	175	1291	853	-	265	-	1118	570	715	257	173	1715	-	459	-	2184
	2016	426	428	260	1881	1321	-	415	-	1787	715	257	173	1715	-	459	-	2184	
36	1988	36	25	31	261	119	-	38	-	167	71	63	49	40	222	-	69	-	291
	1992	44	31	39	311	146	-	47	-	193	120	136	46	44	348	-	97	-	445
	1996	54	38	49	381	179	-	58	-	237	191	224	76	67	558	-	156	-	713
	2006	86	62	82	581	288	-	95	-	383	291	349	120	98	858	-	238	-	1096
	2016	131	95	131	861	443	-	149	-	592	276	333	116	91	816	-	225	-	1041
37	1988	33	23	29	231	108	-	35	-	143	66	59	45	37	207	-	64	-	271
	1992	40	28	36	281	132	-	43	-	175	115	133	44	41	333	-	93	-	427
	1996	49	34	44	341	161	-	53	-	214	182	215	73	63	532	-	148	-	580
	2006	77	55	73	521	267	-	85	-	343	276	333	116	91	816	-	225	-	1041
	2016	117	85	117	761	394	-	133	-	527	276	333	116	91	816	-	225	-	1041
38	1988	29	21	25	191	97	-	33	-	125	65	59	47	35	206	-	64	-	270
	1992	35	26	35	221	118	-	40	-	158	115	136	46	40	336	-	94	-	430
	1996	42	31	43	271	143	-	48	-	192	181	218	76	60	534	-	148	-	582
	2006	66	49	71	401	226	-	78	-	305	273	336	119	86	815	-	224	-	1038
	2016	99	75	112	581	344	-	121	-	465	273	336	119	86	815	-	224	-	1038
39	1988	25	16	25	161	84	-	28	-	113	62	57	46	33	197	-	62	-	259
	1992	30	22	31	191	103	-	35	-	137	110	131	45	37	324	-	90	-	414
	1996	37	27	38	231	125	-	43	-	167	173	211	74	56	515	-	142	-	657
	2006	57	43	62	351	198	-	69	-	257	263	327	116	82	787	-	216	-	1003
	2016	87	65	98	501	301	-	106	-	408	263	327	116	82	787	-	216	-	1003
40	1988	134	100	17	131	283	-	484	353	1101	174	125	30	201	349	-	439	361	1149
	1992	188	120	20	151	312	-	577	422	1311	247	161	62	371	507	-	182	267	936
	1996	186	143	24	171	370	-	685	502	1557	366	247	97	521	763	-	254	397	1413
	2006	277	218	38	241	556	-	1035	765	2355	528	368	146	721	1114	-	384	571	2069
	2016	399	322	57	321	811	-	1519	1130	3460	528	368	146	721	1114	-	384	571	2069

TRAFFIC PROJECTION

BOHOL

Traffic Volume

Link	Year	w/o						with												
		Car /Van	Jeep ney	Bus ck	Tru- Sub- Total	Tri- Mot. cycl	Anti- mal	Car /Van	Jeep ney	Bus ck	Tru- Sub- Total	Tri- Mot. cycl	Anti- mal							
41	1988	41	32	6	3	82	161	123	-	-	365	57	43	11	6	118	168	131	-	406
	1992	49	39	7	4	98	194	148	-	441	91	65	26	12	12	194	68	99	-	360
	1996	58	47	9	4	118	234	179	-	530	139	101	41	17	299	108	150	-	558	
	2006	89	73	14	6	182	364	280	-	826	206	154	63	24	447	165	222	-	834	
	2016	132	110	22	9	273	547	424	-	1243	260	236	85	39	620	222	239	-	1071	
42	1988	31	45	17	6	98	-	38	-	136	76	91	31	16	215	25	80	-	319	
	1992	37	54	21	7	119	-	46	-	164	115	101	35	19	270	91	98	-	458	
	1996	44	65	25	8	143	-	56	-	198	176	157	55	28	416	144	153	-	713	
	2006	69	102	41	11	223	-	87	-	310	260	236	85	39	620	222	239	-	1071	
	2016	103	154	63	16	335	-	132	-	467	260	236	85	39	620	222	239	-	1071	
43	1988	11	12	14	3	40	-	16	-	56	18	18	14	4	53	7	20	-	81	
	1992	13	14	17	4	48	-	19	-	67	32	29	10	5	77	27	28	-	132	
	1996	16	17	20	4	57	-	23	-	80	50	45	16	7	118	43	44	-	205	
	2006	34	25	32	6	88	-	35	-	123	73	68	25	10	176	66	66	-	307	
	2016	36	37	49	8	130	-	53	-	183	73	68	25	10	176	66	66	-	307	
44	1988	2	2	2	2	7	0	10	3	17	3	3	2	4	9	2	10	4	21	
	1992	3	2	3	2	8	1	12	3	20	4	6	2	8	13	6	8	-	27	
	1996	3	2	3	3	9	1	14	3	23	4	6	2	3	19	8	12	-	39	
	2006	4	3	5	3	13	1	21	4	34	6	8	3	1	19	12	17	-	56	
	2016	6	5	7	4	19	1	30	6	49	9	12	5	2	27	12	17	-	56	
45	1988	37	25	32	11	105	-	87	-	192	53	40	36	16	144	20	113	-	278	
	1992	44	30	39	13	126	-	105	-	231	73	66	28	22	189	74	137	-	400	
	1996	52	36	47	15	150	-	126	-	276	110	103	44	32	239	117	208	-	614	
	2006	78	54	74	21	228	-	197	-	425	160	157	68	44	429	178	306	-	912	
	2016	113	80	114	30	336	-	297	-	633	160	157	68	44	429	178	306	-	912	
46	1988	51	35	44	15	145	-	120	-	265	73	54	47	23	197	27	153	-	376	
	1992	51	41	54	18	174	-	145	-	318	102	89	37	31	261	98	191	-	551	
	1996	72	49	66	21	207	-	175	-	382	155	140	60	48	402	156	292	-	850	
	2006	108	75	103	30	316	-	273	-	589	228	213	91	61	599	239	431	-	1269	
	2016	157	111	158	41	467	-	413	-	880	228	213	91	61	599	239	431	-	1269	
47	1988	44	1	53	21	119	89	131	-	339	58	25	51	23	157	95	147	-	399	
	1992	52	2	64	25	143	108	158	-	409	93	89	39	28	248	101	177	-	525	
	1996	62	2	78	28	171	130	190	-	490	142	141	61	38	381	160	271	-	812	
	2006	94	3	124	41	261	201	297	-	760	209	214	93	52	568	245	400	-	1213	
	2016	137	5	189	56	388	303	449	-	1140	209	214	93	52	568	245	400	-	1213	
48	1988	73	-	83	32	187	5	149	10	351	95	32	76	33	236	40	179	7	462	
	1992	88	-	103	38	229	6	184	12	431	159	127	54	31	375	142	261	-	777	
	1996	107	-	127	46	280	15	225	14	526	253	210	90	53	506	237	419	-	1262	
	2006	169	-	212	68	450	3	366	21	847	385	333	145	78	940	379	647	-	1956	
	2016	257	-	339	99	694	15	570	30	1310	385	333	145	78	940	379	647	-	1956	

TRAFFIC PROJECTION BOHOL

Link	Year	w/o					with						
		Car /Van	Jeep ney	Bus	Tru-Sub-ck	Trl-Mot. Ani-cycl	Total	Car /Van	Jeep ney	Bus	Tru-Sub-ck	Trl-Mot. Ani-cycl	Total
49	1988	48	-	74	23	145	-	125	7	277	-	-	-
	1992	58	-	91	27	176	-	152	8	336	34	157	5
	1996	69	-	111	32	212	-	184	10	406	131	228	-
	2006	105	-	180	47	332	-	292	14	637	213	358	-
	2016	155	-	280	66	500	-	444	20	966	333	541	-
50	1988	44	-	53	18	116	3	93	6	217	-	-	-
	1992	53	-	65	22	139	3	113	7	262	25	110	4
	1996	63	-	79	25	167	4	136	8	314	90	161	-
	2006	95	-	125	37	257	6	211	11	485	145	249	-
	2016	140	-	193	51	384	8	318	16	725	225	373	-
51	1988	51	-	60	22	133	3	107	7	250	-	-	-
	1992	61	-	73	26	160	4	129	8	301	29	128	5
	1996	73	-	89	30	192	5	185	9	361	107	193	-
	2006	111	-	141	43	296	7	241	13	557	171	298	-
	2016	162	-	217	62	441	9	363	19	832	255	446	-
52	1988	51	57	20	15	143	3	105	6	256	-	-	-
	1992	59	68	24	18	169	3	124	6	303	16	79	2
	1996	69	81	28	20	199	4	147	7	357	52	97	-
	2006	100	124	43	28	295	5	222	10	532	78	143	-
	2016	140	185	64	38	427	7	325	14	773	114	204	-
53	1988	17	10	28	10	65	1	31	6	103	-	-	-
	1992	20	12	34	11	77	2	37	7	122	18	62	7
	1996	23	14	40	13	91	2	43	8	144	60	124	-
	2006	34	22	61	19	136	3	65	11	215	92	187	-
	2016	49	31	92	26	197	4	95	15	311	138	272	-
54	1988	8	4	19	3	35	6	23	3	68	-	-	-
	1992	10	5	23	3	41	7	27	3	79	16	36	3
	1996	11	6	27	4	47	8	32	4	91	38	62	-
	2006	16	8	40	5	69	12	45	5	132	56	91	-
	2016	22	12	58	6	98	16	66	6	186	82	129	-
55	1988	4	2	20	3	28	12	30	4	75	-	-	-
	1992	4	2	23	3	33	14	35	5	87	22	44	4
	1996	5	3	28	4	38	17	41	5	101	39	64	-
	2006	6	4	41	6	56	24	59	7	145	58	93	-
	2016	8	5	60	6	79	34	83	8	205	84	132	-
56	1988	13	-	52	17	82	14	101	4	201	-	-	-
	1992	15	-	63	20	98	16	121	5	241	36	126	3
	1996	18	-	76	23	117	19	145	6	286	90	162	-
	2006	27	-	118	32	177	29	221	8	435	141	246	-
	2016	38	-	179	44	262	42	328	11	643	213	362	-

TRAFFIC PROJECTION

BOHOL

Traffic Volume

Link	Year	w/o				with												
		Car Jeep- /Van ney	Bus Tru- ck	Tri- Sub- Total	Mot. Ani- cycl mal	Car Jeep- /Van ney	Bus Tru- ck	Tri- Sub- Total	Mot. Ani- cycl mal									
57	1988	4	15	8	27	3	33	6	61	7	18	9	31	33	7	36	3	76
	1992	4	18	9	31	3	39	7	71	13	19	9	11	43	23	33	-	98
	1996	5	21	11	36	4	45	7	82	19	28	13	11	61	33	47	-	142
	2006	6	30	16	52	5	65	9	117	26	40	18	2	87	48	67	-	202
	2016	9	42	22	73	6	91	1	165	43	56	28	1	117	87	105	-	306
58	1988	4	5	5	14	3	17	4	31	4	3	5	4	8	3	9	1	22
	1992	5	6	6	17	4	21	4	38	6	4	1	5	11	2	8	-	21
	1996	5	7	7	14	7	21	4	47	9	6	2	7	18	4	12	-	34
	2006	9	11	11	23	11	35	6	75	14	10	3	11	27	6	19	-	52
	2016	14	18	2	36	18	55	9	117	34	14	12	4	51	36	63	-	99
59	1988	56	-	-	56	-	-	-	56	34	1	4	6	36	-	6	-	42
	1992	68	-	-	68	-	-	-	68	6	6	1	3	15	-	26	-	41
	1996	83	-	-	83	-	-	-	83	10	8	2	4	24	-	41	-	65
	2006	131	-	-	131	-	-	-	131	14	12	4	5	36	-	63	-	99
	2016	200	-	-	200	-	-	-	200	25	3	3	9	25	-	44	2	75
60	1988	3	2	3	9	-	15	7	25	11	4	6	9	30	-	79	-	129
	1992	4	2	4	11	-	18	8	30	20	16	4	11	50	-	125	-	203
	1996	5	3	5	14	-	22	9	37	31	25	5	16	78	-	189	-	306
	2006	7	4	7	21	-	35	1	57	47	38	10	23	117	-	212	3	340
	2016	11	7	12	31	-	54	2	87	27	10	15	20	72	-	342	-	545
61	1988	20	9	16	58	-	83	5	147	51	42	11	23	128	-	529	-	839
	1992	25	1	20	71	-	103	6	180	82	58	19	35	204	-	529	-	839
	1996	30	1	25	86	-	126	7	219	125	105	30	50	310	-	529	-	839
	2006	47	2	41	135	-	205	11	351	125	105	30	50	310	-	529	-	839
	2016	71	4	65	204	-	320	15	540	47	9	5	6	12	17	26	-	56
62	1988	1	7	-	9	18	20	-	47	4	9	2	1	17	7	30	-	54
	1992	2	8	-	10	20	23	-	54	6	13	2	1	24	10	43	-	76
	1996	2	9	-	11	23	27	-	62	9	19	3	2	33	14	60	-	107
	2006	3	13	-	16	33	38	-	88	123	98	17	43	266	-	429	-	767
	2016	4	18	-	23	47	53	-	123	126	120	21	43	266	-	429	-	767
63	1988	2	5	4	11	6	17	6	31	25	32	23	12	94	10	77	-	181
	1992	3	7	4	14	7	21	4	38	33	52	9	22	116	35	192	-	344
	1996	3	8	5	16	8	23	5	44	50	81	14	31	175	54	291	-	521
	2006	4	12	6	21	10	31	1	52	72	120	21	43	266	82	429	-	767
	2016	6	17	7	29	14	43	-	83	126	120	21	43	266	-	429	-	767
64	1988	21	25	-	61	52	59	-	126	30	31	1	8	71	4	95	-	170
	1992	25	30	-	71	62	68	-	161	54	41	7	13	114	-	145	-	260
	1996	30	35	-	81	74	70	-	181	84	64	11	18	178	-	227	-	405
	2006	46	55	-	121	113	105	-	278	126	98	17	26	267	-	343	-	610
	2016	67	82	-	171	166	152	-	414	126	98	17	26	267	-	343	-	610

TRAFFIC PROJECTION BOHOL

Link	Year	w/o				with			
		Car /Van	Jeep-ney	Bus	Tru-Sub-ck Total	Tri-cycl	Mot. cycl	Ani-mal	Total
65	1988	-	-	-	-	-	-	-	-
	1992	-	-	-	-	-	-	-	-
	1996	-	-	-	-	-	-	-	-
	2006	-	-	-	-	-	-	-	-
	2016	-	-	-	-	-	-	-	-
66	1988	1	1	0	2	0	2	-	2
	1992	1	1	0	2	0	2	-	2
	1996	2	1	0	3	0	2	-	3
	2006	2	1	0	3	1	3	-	4
	2016	3	1	0	4	1	4	-	5
67	1988	1	1	0	2	1	8	-	2
	1992	1	1	0	2	1	9	-	2
	1996	2	1	0	3	2	1	-	3
	2006	2	1	0	3	2	1	-	4
	2016	3	1	0	4	2	2	-	5
68	1988	5	22	6	33	5	41	2	80
	1992	6	25	7	38	6	48	2	94
	1996	7	30	8	45	7	56	2	110
	2006	10	45	11	66	11	82	3	161
	2016	13	65	15	93	15	117	4	229
69	1988	-	-	-	-	-	-	-	-
	1992	-	-	-	-	-	-	-	-
	1996	-	-	-	-	-	-	-	-
	2006	-	-	-	-	-	-	-	-
	2016	-	-	-	-	-	-	-	-
70	1988	12	13	23	51	9	35	2	90
	1992	14	16	27	57	11	41	2	106
	1996	16	18	33	67	13	49	2	125
	2006	23	27	50	100	17	73	3	186
	2016	31	40	74	145	23	105	5	269
71	1988	-	-	-	-	-	-	-	-
	1992	-	-	-	-	-	-	-	-
	1996	-	-	-	-	-	-	-	-
	2006	-	-	-	-	-	-	-	-
	2016	-	-	-	-	-	-	-	-
72	1988	-	-	-	-	-	-	-	-
	1992	-	-	-	-	-	-	-	-
	1996	-	-	-	-	-	-	-	-
	2006	-	-	-	-	-	-	-	-
	2016	-	-	-	-	-	-	-	-

TRAFFIC PROJECTION

BOHOL

Link	Year	w/o						with									
		Car Jeep- /Van ney	Bus Tru- ck	Tru- Sub- Total	Tri- Mot. cycl	Ani- mal	Total	Car Jeep- /Van ney	Bus Tru- ck	Tru- Sub- Total	Tri- Mot. cycl	Ani- mal	Total				
73	1988	11	5	27	8	21	2	50	15	5	61	37	6	35	1	73	
	1992	13	6	32	9	26	2	61	29	9	71	68	7	75	-	142	
	1996	15	7	39	1	31	2	73	43	15	10	102	-	119	-	221	
	2006	23	10	59	1	48	3	112	64	23	13	152	-	180	-	332	
	2016	33	14	88	2	72	4	166	84	23	13	182	-	-	-	-	
74	1988	8	7	9	42	7	56	105	12	19	8	9	47	5	51	102	
	1992	10	9	11	49	8	66	123	22	27	10	10	66	-	41	109	
	1996	11	23	10	57	10	78	144	31	39	15	13	99	-	58	157	
	2006	16	34	15	171	83	14	115	211	44	56	22	17	140	-	81	221
	2016	22	50	23	221	117	20	166	302	44	56	22	17	140	-	81	221
75	1988	-	-	-	-	-	-	-	5	9	4	3	21	2	23	46	
	1992	-	-	-	-	-	-	-	20	28	12	5	66	-	35	101	
	1996	-	-	-	-	-	-	-	30	43	18	8	98	-	51	149	
	2006	-	-	-	-	-	-	-	43	62	27	10	142	-	72	214	
	2016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
76	1988	17	32	13	21	85	14	108	83	53	22	27	135	14	143	292	
	1992	21	40	17	26	103	17	138	81	103	41	34	258	-	152	410	
	1996	25	49	21	30	125	21	153	129	167	67	50	413	-	239	652	
	2006	40	79	34	46	199	33	254	198	260	106	72	536	-	360	996	
	2016	60	123	54	66	302	50	410	-	-	-	-	-	-	-	-	
77	1988	0	-	1	1	2	-	2	8	9	2	3	4	-	9	5	
	1992	1	-	1	1	3	-	3	6	9	4	6	20	-	9	29	
	1996	1	-	2	1	3	-	3	10	15	7	1	34	-	15	49	
	2006	1	-	3	1	5	-	5	16	25	11	1	54	-	25	78	
	2016	2	-	4	2	8	-	8	-	-	-	-	-	-	-	-	
78	1988	2	4	2	2	9	1	12	7	11	6	3	27	2	28	58	
	1992	2	4	2	2	12	1	14	26	36	16	5	82	-	42	124	
	1996	3	5	3	3	14	2	18	41	58	25	8	132	-	66	199	
	2006	5	9	5	4	23	3	29	63	90	39	12	205	-	101	306	
	2016	7	14	8	6	35	5	46	-	-	-	-	-	-	-	-	
79	1988	11	22	9	12	54	9	73	23	38	16	16	93	10	101	204	
	1992	13	27	12	15	67	11	91	60	79	32	22	194	-	110	303	
	1996	16	34	15	18	82	14	112	98	132	54	33	318	-	177	494	
	2006	26	56	25	27	134	22	186	153	209	87	49	493	-	272	770	
	2016	40	88	40	39	207	35	293	-	-	-	-	-	-	-	-	
80	1988	-	-	-	-	-	6	74	-	-	-	-	-	2	301	64	
	1992	-	-	-	-	-	7	92	-	-	-	-	-	7	1008	1015	
	1996	-	-	-	-	-	9	114	-	-	-	-	-	11	1617	1628	
	2006	-	-	-	-	-	1	188	-	-	-	-	-	17	2491	2508	

APPENDIX 12-2

SUMMARY OF TRAFFIC VOLUME ON STUDIED ROADS (BOHOL)

Traffic Volume by Vehicle Type BOHOL

Class of Road	Type of Road	w/o					with							
		Car	Jeep	Bus	Truck	Total	Car	Jeep	Bus	Truck	Total			
Primary Major	Rehab/ N4-4	77	18	66	57	217	0	74	-	-	293	0	89	-
	Imp-1 N9-2	53	-	65	22	139	3	113	7	-	144	25	110	4
	N7-2	20	12	34	11	77	2	37	7	-	103	18	62	7
	N7-4	4	2	23	3	33	14	35	5	-	47	22	44	4
Imp-2/ Widen	N4-6	116	92	58	64	329	0	97	-	-	425	0	123	-
Secondary Major	Rehab/ P80-1	6	1	-	-	7	18	38	48	405	-	56	13	-
	Imp-1 P124-1	16	36	-	-	52	72	12	-	19	-	49	37	12
	P39-1	14	16	27	5	62	1	41	2	-	20	22	25	8
	N3-3	2	2	-	-	4	3	19	28	151	-	19	10	11
	N10-2	68	-	-	-	68	0	-	-	-	34	1	0	6
	N10-3	68	-	-	-	68	0	-	-	-	34	1	0	6
	P72-2	2	0	-	-	2	7	17	28	170	-	21	-	5
	P81-2	2	0	-	-	2	5	9	8	101	-	15	-	4
	P49-2	36	69	-	-	105	110	54	-	86	-	49	69	-
	P148-1	25	1	20	25	71	5	29	26	218	-	27	10	15
	N3-6	4	3	-	-	7	5	29	26	218	-	10	17	14
	P110-1B	-	-	-	-	-	-	-	-	-	-	5	9	4
	N6-2	4	18	9	-	31	0	39	1	-	7	18	9	0
	P58-1	11	20	-	-	31	28	20	40	33	-	40	12	22
	P72-1	25	30	-	7	62	5	84	-	-	30	31	1	8
	N11-1	65	122	-	-	187	154	102	-	164	-	91	127	-
P157-1	6	12	-	-	18	22	6	-	10	-	8	12	-	
P41-1	6	-	26	7	38	6	48	2	-	8	6	23	7	
Imp-2/ Widen	N2-2	158	120	20	15	312	577	422	-	-	174	125	30	20
	P11-1	10	8	-	-	18	12	75	85	580	-	24	45	-
	P113-1	-	-	-	-	-	39	72	72	727	-	22	43	-
	P300-6	3	1	-	-	4	12	27	50	279	-	13	18	-
	P41-2	6	-	25	7	38	6	48	2	-	8	6	23	7
	P48-1	17	29	-	-	46	34	31	-	49	-	24	32	-
P128-1	2	4	2	2	12	1	14	-	-	7	11	6	3	

Traffic Volume by Vehicle Type BOHOL

Class of Road	Type of Impr't	Road Number	w/o			with										
			Car Jeep -ney	Bus Truck	Total	Car Jeep -ney	Bus Truck	Total								
Minor (Natl/Prov'l)	Rehab/Imp-1	P116-1	10	-	11	27	65	86	588	-	1	72	39	42	58	
		P108-1	9	-	16	10	59	112	561	-	3	81	11	39	31	
		P62-1	9	7	16	9	62	96	497	-	3	62	19	36	56	
		P110-1a	6	6	12	8	50	78	403	-	2	59	8	28	23	
		P146-1	5	0	6	18	57	58	455	-	1	45	25	24	38	
		P119-1	1	0	1	4	11	12	176	-	0	8	6	4	6	
		P150-1	2	0	2	9	24	26	179	-	0	17	11	8	13	
		P151-1	5	3	8	12	35	112	420	-	3	46	15	20	32	
		P123-1	6	6	11	7	46	47	353	-	1	53	8	28	22	
		P42-1	6	5	11	7	45	56	356	-	2	67	8	29	23	
		P87-1	7	1	7	18	46	66	484	-	1	50	28	29	48	
		P64-1	6	4	9	6	37	48	289	-	1	43	6	21	17	
		P121-1	-	-	-	8	10	9	119	-	-	12	9	8	12	
		P6-1	-	-	-	12	13	22	229	-	-	21	16	14	22	
		P120-1	-	-	-	23	32	26	406	-	-	38	29	25	40	
		P28-1	4	4	9	6	34	62	285	-	2	43	6	20	15	
		P36-1	1	-	-	26	29	22	401	-	0	39	20	26	41	
		P140-1	-	-	-	23	28	21	394	-	-	37	28	25	41	
		P25-1	9	1	9	23	50	48	554	-	0	59	30	38	61	
		P154-1	2	0	2	5	11	17	116	-	0	14	8	8	12	
		P67-1	6	4	10	7	40	35	307	-	1	46	7	25	20	
		P85-1	5	4	9	5	38	55	307	-	2	45	6	22	18	
		P43-1	-	-	-	18	26	25	285	-	-	28	17	27	27	
		P200-1	4	3	7	5	32	40	242	-	1	28	18	16	26	
		P300-1	-	-	-	8	9	12	147	-	-	13	9	10	24	
	Minor (Barangay)	Rehab/Imp-1	B25-2	0	-	2	0	8	58	99	-	2	13	0	1	1
			B28-5	-	-	-	5	13	14	105	-	-	9	8	4	7
			B28-3	-	-	-	4	5	15	98	-	-	9	7	5	8
			B11-2	-	-	-	6	6	14	117	-	-	11	8	7	10
			B46-2	-	-	-	4	4	13	81	-	-	7	6	4	6
		B48-3	-	-	-	3	3	6	58	-	-	5	4	3	6	
		B46-1	-	-	-	3	7	9	46	-	-	4	4	2	2	
		B34-1	-	-	-	5	7	7	88	-	-	8	6	5	8	
		B29-2	-	-	-	6	12	12	122	-	0	11	8	6	10	
		B2-1	1	1	2	1	7	10	55	-	0	8	5	5	8	
		B17-3	-	-	-	3	5	4	61	-	-	6	4	4	6	
		B4-1	-	-	-	-	-	11	113	-	-	9	7	6	9	
		B25-1	-	-	-	4	5	4	68	-	-	6	5	4	7	
New Const.		B22-2	0	0	0	3	10	13	54	-	-	5	4	1	1	
		B18-3	-	-	-	-	-	26	81	-	-	3	3	0	1	
		B24-1	-	-	-	-	-	20	62	-	-	6	6	2	1	
		B37-1	-	-	-	-	-	25	70	-	-	4	5	1	1	
		B13-1	-	-	-	-	-	21	53	-	-	6	4	1	2	
		B24-2	-	-	-	6	10	11	101	-	1	13	2	6	5	
		B2-2	-	-	-	-	-	5	20	-	-	2	2	1	1	
		B4-2	-	-	-	-	-	12	31	-	-	3	3	1	1	
		B44-1	-	-	-	-	-	2	2	61	-	-	5	5	2	
		B39-2	-	-	-	2	2	18	61	-	-	5	3	2	3	

APPENDIX 12-3

PROPOSED IMPROVEMENT (BOHOL)

BOHOL

Primary Major

Type of Impr't	Road Number	Length (km)	1992 AADT w/o With	Existing Condition		Proposed Improvement	Proposed Bridge (Number/Total Length)	Cost (Million Peso)		IRR (%)				
				L	Width			Road	Bridge Total					
Rehab/ Imp-1	N6-4	10.2	217	293	5.4	5.4	BT	Bad	Rehab(6.0-BMP)	16.11	.00	16.11	8.9	(T)
					3.8	6.0	GRV	Bad	Imp-1(6.0-BMP)					
	N9-2	6.3	139	144	4.6	4.8	BT	Bad	Rehab(6.0-BMP)	13.15	5.37	18.52	8.1	(T)
					1.7	6.2	GRV	Bad	Imp-1(6.0-BMP)					
	N7-2	14.3	77	103	.3	6.0	BT	Bad	Rehab(6.0-BMP)	18.57	.00	18.57	3.3	(T)
					10.8	6.0	GRV	Bad	Imp-1(6.0-BMP)					
					3.2	6.0	BT	Fair	-					
	N7-4	11.2	33	47	11.2	4.2-4.9	GRV	Bad/V.Bad	Rehab(6.0-GRV)	15.12	.00	15.12	.0	(T)
Imp-2/ Widen	N4-6	7.1	329	426	6.6	6.4	BT	Fair	-	1.18	.00	1.18	15.7	(T)
					.5	6.0	GRV	Fair	Imp-2(6.7-AC)					

(T):Traffic Project
(D):Development Project

Secondary Major

Type of Impr't	Road Number	Length (km)	1992 ADT w/o with	Existing Condition		Proposed Improvement	Proposed Bridge (Number/Total Length)	Cost (Million Peso)		ERR (%)	
				L Width	Type Condition			Road	Bridge Total		
Rehab/Imp-1	P80-1	7.7	7	5.7	3.4-4.0 CRV Bad/V. Bad	Rehab(6.0-GRV) New-C(6.0-GRV)		11.76	.00	11.76	9.3 (D)
	P124-1	20.4	52	20.4	3.4-4.5 GRV Bad/V. Bad	Rehab(6.0-GRV)	2-lane Br (n= 4, L= 55m)	13.08	4.61	17.60	6.3 (D)
	P99-1	3.3	62	3.3	5.2 GRV Bad	Rehab(6.0-GRV)	2-lane Br (n= 1, L= 10m)	2.67	.98	3.64	6.2 (T)
	N3-3	2.9	4	2.9	4.3 GRV Bad	Rehab(6.0-GRV)		1.83	.00	1.83	4.4 (D)
	N10-2	18.9	68	18.3	4.5 BT Fair 4.2 GRV Bad	Rehab(6.0-GRV)	2-lane Br (n=12, L=180m)	19.25	14.40	33.67	3.7 (T)
	N10-3	12.0	63	12.0	4.2 GRV Bad	Rehab(6.0-GRV)	2-lane Br (n= 4, L= 50m)	16.32	4.31	19.63	3.5 (T)
	P72-2	15.7	3	10.6	3.0-4.0 GRV Bad 3.6 3.0 EAR V. Bad 1.5 None	Imp-1(6.0-GRV) New-C(6.0-GRV)	2-lane Br (n= 2, L= 83m)	20.13	5.00	25.13	3.2 (D)
	P81-2	16.1	2	3.0	3.2 EAR V. Bad 9.7 3.6-4.0 GRV V. Bad 3.4 None	Imp-1(6.0-GRV) Rehab(6.0-GRV) New-C(6.0-GRV)		19.36	.00	19.36	3.1 (D)
	P48-2	18.9	105	18.9	3.0-3.8 GRV Bad/V. Bad	Rehab(6.0-GRV)	2-lane Br (n= 2, L= 75m)	22.68	4.68	27.36	1.8 (D)
	P146-1	14.9	71	14.7	4.2 GRV Bad .2 4.0 PCC Good	Rehab(6.0-GRV)	2-lane Br (n= 3, L= 65m)	17.28	4.60	21.87	1.3 (T)
	N3-5	3.7	7	3.7	3.4 GRV Bad	Rehab(6.0-GRV)	2-lane Br (n= 1, L= 75m)	2.65	4.10	6.75	1.1 (D)
	P110-1B	9.5	0	21	6.3 2.8-5.5 GRV Bad 2 4.2 PCC Bad 3.0 None	Rehab(6.0-GRV) New-C(6.0-GRV)		13.63	.00	13.63	.1 (D)
	N6-2	3.2	31	3.2	4.0 GRV Bad	Rehab(6.0-GRV)		4.35	.00	4.35	.0 (T)
	P58-1	7.7	31	40	6.6 3.6-4.0 GRV Bad/V. Bad .9 4.1 BT Good 2 4.1 PCC Good	Rehab(6.0-GRV)		8.37	.00	8.37	.0 (D)
	P72-1	6.0	62	71	7 4.0 BT Fair 1.9 3.2-6.1 GRV Bad 2.8 3.4-4.0 BT Bad 4 4.2 BT Fair 2 4.7 PCC Fair	Imp-1(6.0-BMP) Rehab(6.0-BMP) Widen(6.0-BMP)		10.69	.00	10.69	.0 (T)
	N11-1	38.5	186	237	8 6.7 BT Fair 37.7 3.2-5.2 GRV Bad	Rehab(6.0-GRV)	2-lane Br (n= 5, L= 38m)	61.02	6.42	67.43	.0 (D)
	P157-1	5.5	18	20	3.2 3.6 EAR Bad 2.3 4.5 GRV Bad/V. Bad	Imp-1(6.0-GRV) Rehab(6.0-GRV)		3.97	.00	3.97	.0 (D)
	P41-1	6.2	38	44	6.2 4.0-4.5 GRV Bad	Rehab(6.0-GRV)		7.17	.00	7.17	.0 (T)
Imp-2/ Widen	N2-2	3.2	312	348	3.2 4.0 GRV Good	Imp-2(6.0-BMP)	2-lane Br (n= 1, L= 10m)	4.85	.98	5.83	29.0 (T)
	P111-1	3.5	18	70	3.5 4.0 GRV Good	Widen(6.0-GRV)	2-lane Br (n= 1, L= 10m)	1.85	.38	2.22	23.3 (D)
	P113-1	7.5	0	66	7.5 3.2 GRV Fair	Widen(6.0-GRV)	2-lane Br (n= 4, L= 40m)	7.41	3.91	11.33	15.5 (D)
	P300-6	22.3	4	33	16.6 4.0 GRV Good/Fair 5.7 None	Widen(6.0-GRV) New-C(6.0-GRV)		19.23	.00	19.23	11.1 (D)
	P41-2	8.9	38	44	8.9 3.2 GRV Fair	Widen(6.0-GRV)	2-lane Br (n= 2, L= 50m)	10.98	3.42	14.39	.0 (T)
	P49-1	9.2	45	67	9.2 3.2 GRV Fair	Widen(6.0-GRV)	2-lane Br (n= 2, L= 64m)	11.33	4.24	15.57	.0 (D)
	P128-1	6.5	12	27	6.5 4.0 GRV Fair	Widen(6.0-GRV)	2-lane Br (n= 2, L= 33m)	3.43	2.48	5.91	.0 (T)

(T):Traffic Project
(D):Development Project

BOHOL

Minor (National/Provincial)

Type of Impr't	Road Number	Length (km)	1992 ADT	w/o	Existing Condition	Proposed Improvement	Proposed Bridge (Number/Total Length)	Cost (Million Peso)	IRR (%)
					L Width Type Condition		Road Bridge Total		
Rehab/Imp-1	P116-1	4.5	11	72	4.5 3.8-4.0 GRV Bad	Rehab(6.0-GRV)	2-lane Br (n= 1, L= 15m)	4.83 1.18 5.61	27.1 (D)
	P106-1	10.9	16	81	10.9 4.9 GRV Bad	Rehab(6.0-GRV)	2-lane Br (n= 1, L= 10m)	10.64 .98 11.62	25.3 (D)
	P82-1	9.9	16	62	6 4.6 BT V.Bad 9.3 3.2-3.6 GRV Bad	Rehab(6.0-BMP) Rehab(6.0-GRV)		7.49 .00 7.49	22.9 (D)
	P110-1a	5.0	12	59	5.0 4.0-5.5 GRV Bad	Rehab(6.0-GRV)		3.07 .00 3.07	22.5 (D)
	P146-1	7.4	6	45	7.4 3.4-5.0 GRV Bad	Rehab(6.0-GRV)		5.61 .00 5.61	21.3 (D)
	P119-1	4.0	1	8	4.0 3.4 EAR V.Bad	Imp-1(4.0-GRV)		1.71 .00 1.71	19.5 (D)
	P150-1	2.9	2	17	1.9 4.9 GRV Bad 1.0 3.2 EAR V.Bad	Rehab(4.0-GRV) Imp-1(4.0-GRV)	1-lane Br (n= 1, L= 23m)	1.34 1.10 2.44	17.8 (D)
	P151-1	9.8	8	46	7.8 4.0 GRV Bad 2.0 None	Rehab(6.0-GRV) Rep-C(6.0-GRV)	2-lane Br (n= 2, L= 35m)	11.08 2.56 13.64	17.8 (D)
	P123-1	8.6	11	63	8.6 3.8-4.6 GRV Bad	Rehab(6.0-GRV)		5.36 .00 5.36	17.6 (D)
	P42-1	11.4	11	57	11.4 3.2-4.0 GRV Bad/V.Bad	Rehab(6.0-GRV)		10.78 .00 10.78	16.8 (D)
	P87-1	8.0	7	50	8.0 2.8-3.8 GRV Bad	Rehab(6.0-GRV)		9.87 .00 9.87	16.8 (D)
	P64-1	5.4	9	43	5.0 3.2-3.6 GRV Bad .4 4.0 BT Bad	Rehab(6.0-GRV) Rehab(6.0-BMP)		3.56 .00 3.56	14.4 (D)
	P121-1	2.6	0	12	1.1 3.6 GRV Bad 1.5 2.8 EAR V.Bad	Rehab(4.0-GRV) Imp-1(4.0-GRV)		1.20 .00 1.20	12.6 (D)
	P6-1	2.3	0	21	2.3 3.0 GRV Bad	Rehab(4.0-GRV)		1.05 .00 1.05	12.0 (D)
	P120-1	3.3	0	38	3.3 3.4 GRV Bad	Rehab(6.0-GRV)		2.89 .00 2.89	11.6 (D)
	P28-1	11.7	9	43	4.9 3.6-4.2 GRV Bad 6.9 3.4 EAR V.Bad	Rehab(6.0-GRV) Imp-1(6.0-GRV)	2-lane Br (n= 1, L= 15m)	11.72 1.19 12.90	11.3 (D)
	P36-1	4.5	0	39	3.2 4.0-5.9 GRV Bad .3 4.0 FCC Fair .6 4.7 GRV Fair .4 4.5 EAR Bad	Widen(6.0-GRV) Imp-1(6.0-GRV)		6.99 2.24 8.63	10.0 (D)
	P140-1	3.7	0	37	3.7 4.0 GRV Bad	Rehab(6.0-GRV)	2-lane Br (n= 1, L= 10m)	3.44 .96 4.42	9.7 (D)
	P25-1	9.8	9	59	9.6 3.0-4.0 GRV Bad	Rehab(6.0-GRV)	2-lane Br (n= 1, L= 20m)	6.94 1.39 7.82	9.5 (D)
	P154-1	6.6	2	14	2.3 3.2 GRV V.Bad 4.2 3.2-4.9 EAR Bad/V.Bad	Rehab(4.0-GRV) Imp-1(4.0-GRV)	1-lane Br (n= 1, L= 24m)	3.20 1.13 4.33	9.0 (D)
	P67-1	6.6	10	46	1.0 6.0 BT Fair .3 4.6 BT Bad 3.3 3.2-4.0 GRV Bad	Rehab(6.0-BMP) Rehab(6.0-GRV)		3.75 .00 3.75	8.8 (D)
	P85-1	10.3	9	45	10.3 2.8-3.8 GRV Bad	Rehab(6.0-GRV)	2-lane Br (n= 1, L= 30m)	13.42 2.04 15.46	7.9 (D)
	P43-1	3.6	0	28	3.6 3.0 GRV V.Bad	Rehab(6.0-GRV)		4.25 .00 4.25	7.1 (D)
	P200-1	8.6	7	28	7.4 4.0 GRV Bad 1.2 2.4 EAR V.Bad	Rehab(6.0-GRV) Imp-1(6.0-GRV)		8.15 .00 8.15	6.6 (D)
	P300-1	2.3	0	13	2.3 3.0 GRV Bad	Rehab(4.0-GRV)		1.04 .00 1.04	2.7 (D)

(I):Traffic Project
(D):Development Project

BOHOL

Minor (Barangay)

Type of Improvement	Road Number	Length (km)	1992 AADT w/o	Existing Condition	Proposed Improvement	Proposed Bridge (Number/Total Length)	Cost (Million Peso)	IRR (%)
				L Width Type Condition			Road Bridge Total	
Rehab/Imp-1	B25-2	11.2	2	13 8.2 3.2 EAR V.Bad	Imp-1(4.0-GRV) New-C(4.0-GRV)	1-lane Sp (n= 1.1, 15m)	5.76 .17 5.93	26.6 (D)
	B28-5	1.1	0	9 .4 3.0-3.8 PCC Fair	Rehab(4.0-GRV)		.32 .00 .32	23.3 (D)
	B28-9	1.7	0	9 1.6 2.4 GRV Bad	Rehab(4.0-GRV)		.68 .00 .68	14.9 (D)
	B11-2	1.3	0	11 1.3 2.9 GRV Bad	Rehab(4.0-GRV)		.60 .00 .60	11.2 (D)
	B46-2	3.0	0	7 2.0 3.7 GRV Bad	Rehab(4.0-GRV) New-C(4.0-GRV)		1.50 .00 1.50	9.9 (D)
	B46-3	1.3	0	5 .9 3.5-4.5 GRV Bad	Rehab(4.0-GRV)		.56 .00 .56	9.4 (D)
	B45-1	2.8	0	4 1.8 2.6-3.7 EAR V.Bad	Imp-1(4.0-GRV) New-C(4.0-GRV)		1.42 .00 1.42	7.2 (D)
	B34-1	1.4	0	8 1.4 3.0 GRV Bad	Rehab(4.0-GRV)		.72 .00 .72	9.1 (D)
	B33-2	3.5	0	11 4 3.1 PCC Good	Rehab(4.0-GRV)		2.31 .00 2.31	3.5 (D)
	B2-1	2.4	2	8 2.4 4.6 EAR Bad	Imp-1(4.0-GRV)		.93 .00 .93	2.6 (D)
	B17-3	1.4	0	6 1.4 2.7 GRV Bad	Rehab(4.0-GRV)		.64 .00 .64	1.8 (D)
	B4-1	1.7	0	9 1.7 3.4-3.6 GRV Bad	Rehab(4.0-GRV)		.79 .00 .79	.0 (D)
New Const.	B25-1	.9	0	6 .9 4.0 GRV Bad	Rehab(4.0-GRV)		.41 .00 .41	.0 (D)
	B22-2	2.5	0	5 1.6 3.2 EAR V.Bad	Imp-1(4.0-GRV) New-C(4.0-GRV)		1.41 .00 1.41	20.6 (D)
	B18-3	1.0	0	3 1.0 None	New-C(4.0-GRV)		.85 .00 .85	19.2 (D)
	B24-1	2.3	0	6 1.9 3.2 GRV V.Bad	Rehab(4.0-GRV) New-C(4.0-GRV)		1.26 .00 1.26	18.7 (D)
	B37-1	2.0	0	4 2.0 None	New-C(4.0-GRV)		1.10 .00 1.10	16.2 (D)
	B13-1	5.3	0	5 2.4 2.4-2.8 EAR Bad/V.Bad	Imp-1(4.0-GRV) New-C(4.0-GRV)		2.68 .00 2.68	15.5 (D)
	B24-2	4.0	0	5 4.0 None	New-C(4.0-GRV)		2.21 .00 2.21	13.8 (D)
	B2-2	5.3	0	13 1.4 3.4 GRV Bad	Rehab(4.0-GRV) New-C(4.0-GRV)		3.64 .00 3.64	10.4 (D)
	B4-2	1.6	0	2 1.6 None	New-C(4.0-GRV)		.89 .00 .89	6.9 (D)
	B44-1	2.0	0	3 2.0 None	New-C(4.0-GRV)		1.15 .00 1.15	5.4 (D)
	B39-2	5.9	0	5 1.1 3.6 GRV Bad	Rehab(4.0-GRV) New-C(4.0-GRV)		3.26 .00 3.26	.0 (D)

(T):Traffic Project
(D):Development Project

APPENDIX 12-4

QUANTITY AND CONSTRUCTION COST (BOHOL)

Quantity and Construction Cost BOHOL

	Unit	N4-4	N9-2	N7-2	N7-4	N4-5	P80-1	P124-1	P39-1	N3-3	N10-2	N10-3	
Total Road Length	Km	10.2	6.3	14.3	11.2	7.1	7.7	20.4	3.3	2.9	18.9	12.0	
Improvement Length	Km	10.2	6.3	11.1	11.2	.5	7.7	20.4	3.3	2.9	18.3	12.0	
Proposed Pavement Type		6.0-BMP 6.0-BMP 6.0-BMP 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV											
Quantity													
100 Clearing & Grubbing	m2	-	-	-	-	-	50000	-	-	-	-	-	
102 Stripping	m3	-	-	-	-	-	5400	-	-	-	-	-	
105 Roadway & Drainage Excavation	m3	2807	22715	481	126000	210	94125	3375	5680	2175	98332	117330	
107 Borrow	m3	1827	-	3787	5088	420	3784	19107	703	1639	4575	2295	
108 Aggregate Subbase	m3	21824	9888	27004	7392	1398	5082	13464	2178	1914	12078	7920	
118-1 Preparation of Prev. Road (Grv.)	m2	38000	11390	104400	47950	3000	22480	113470	20280	19140	99020	61760	
118-2 Preparation of Prev. Road (Asph)	m2	34860	22080	1800	-	-	-	-	-	-	-	-	
118-3 Preparation of Pave. Surf. (PCC)	m2	-	-	-	-	-	-	-	-	-	-	-	
118-4 Preparation of Pave. Surf. (AC)	m2	-	-	-	-	-	-	-	-	-	-	-	
200 Crushed Aggregate Base Course	m3	10438	6445	11355	10080	746	6750	18860	2970	2610	16281	10710	
300 Crushed Aggr. Surface Course	m3	-	-	-	-	-	-	-	-	-	-	-	
302 Bituminous Prime Coat	M.T.	73	45	80	-	4	-	-	-	-	-	-	
303 Bituminous Tack Coat	M.T.	-	-	-	-	-	-	-	-	-	-	-	
306 Bituminous Macadam Pavement	m2	61200	37800	66600	-	369	-	-	-	-	-	-	
310 Bitum. Concrete Surface Course	M.T.	-	-	-	-	-	-	-	-	-	-	-	
314 Double Bitum. Surface Treatment	m2	-	-	-	-	-	-	-	-	-	-	-	
315-1 PCC Pavement (t=23 cm)	m2	-	-	-	-	-	-	-	-	-	-	-	
316-2 PCC Pavement (t=20 cm)	m2	-	-	-	-	-	-	-	-	-	-	-	
316-3 PCC Pavement (t=18 cm)	m2	-	-	-	-	-	-	-	-	-	-	-	
413-1 RCPC (dia. 910mm)	m	300	195	380	330	15	1200	630	106	90	1260	600	
413-2 Headwall for RCPC (dia. 910mm)	Set	20	13	22	22	1	285	42	7	6	555	360	
500 Grouted Riprap	m3	-	-	-	5600	-	4680	150	1550	-	10400	6500	
517 Side Ditch (Grouted Riprap)	m	-	8700	-	-	-	-	-	-	-	-	-	
Slope Protection (Cut Slope)	m	-	-	-	-	-	-	-	-	-	-	-	
Slope Protection (Embank't Slope)	m	-	-	-	-	-	-	55	10	-	180	50	
2-lane Bridge, Superstructure	m	-	100	-	-	-	-	-	-	-	-	-	
1-lane Bridge, Superstructure	m	-	-	-	-	-	-	-	-	-	-	-	
2-lane Bridge, Abutment	Each	-	2	-	-	-	-	8	2	-	24	8	
1-lane Bridge, Abutment	Each	-	-	-	-	-	-	-	-	-	-	-	
2-lane Bridge, Pier	Each	-	3	-	-	-	-	-	-	-	1	-	
1-lane Bridge, Pier	Each	-	-	-	-	-	-	-	-	-	-	-	
2-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-	
1-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-	
Miscellaneous	M.P.	1	1	1	1	1	1	1	1	1	1	1	
Road Construction Cost	M.P.	16.11	13.15	18.57	15.12	1.18	11.76	13.08	2.67	1.83	18.25	15.32	
Bridge Construction Cost	M.P.	.00	6.37	.00	.00	.00	.00	4.61	.98	.00	14.40	4.31	
Total Construction Cost	M.P.	16.11	19.52	18.57	15.12	1.18	11.76	17.69	3.64	1.83	33.67	19.63	
Road Construction Cost/Impr't Km	M.P.	1.58	2.09	1.67	1.35	2.37	1.53	.64	.81	.63	1.05	1.28	
Total Construction Cost/Total Km	M.P.	1.58	2.94	1.30	1.35	.17	1.53	.86	1.10	.63	1.78	1.64	

Quantity and Construction Cost BOHOL

	Unit	P72-2	P81-2	F49-2	P145-1	N3-5	P110-1B	M6-2	P58-1	P72-1	N11-1	P41-1
Total Road Length	km	15.7	16.1	18.9	14.9	3.7	9.5	3.2	7.7	6.0	38.5	6.2
Improved Length	km	15.7	16.1	18.9	14.7	3.7	9.3	3.2	6.6	5.1	37.7	6.2
Proposed Pavement Type		6.0-GRV	6.0-GRV	6.0-GRV	6.0-GRV	6.0-GRV	6.0-GRV	6.0-GRV	6.0-BMP	6.0-GRV	6.0-GRV	6.0-GRV
Quantity												
100 Clearing & Grubbing	m2	37500	74800	-	-	-	75000	-	-	-	-	-
102 Stripping	m3	4050	8160	-	-	-	8100	-	-	-	-	-
105 Roadway & Drainage Excavation	m3	155620	101430	152110	102940	-	94404	36000	68801	44304	395760	48375
107 Borrow	m3	4972	27520	3917	4443	7308	7882	648	1482	257	7534	3084
108 Aggregate Subbase	m3	10362	10626	12474	9702	2442	6138	2112	4356	6939	24882	4092
118-1 Preparation of Prev. Road (Grvl)	m2	56280	54320	80460	77210	15910	26090	13760	28200	8380	152910	34040
118-2 Preparation of Prev. Road (Asph)	m2	-	-	-	-	-	-	-	-	-	-	-
118-3 Preparation of Pav. Surf. (PCC)	m2	-	-	-	-	-	-	-	-	-	-	-
118-4 Preparation of Pav. Surf. (AC)	m2	-	-	-	-	-	-	-	-	-	-	-
200 Crushed Aggregate Base Course	m3	14130	14490	16173	12780	3330	8190	2790	5940	4941	31859	5409
300 Crushed Aggr. Surface Course	M.T.	-	-	-	-	-	-	-	-	35	-	-
302 Bituminous Prime Coat	M.T.	-	-	-	-	-	-	-	-	-	-	-
303 Bituminous Tack Coat	M.T.	-	-	-	-	-	-	-	-	28920	-	-
306 Bituminous Macadam Pavement	m2	-	-	-	-	-	-	-	-	-	-	-
310 Bitum. Concrete Surface Course	M.T.	-	-	-	-	-	-	-	-	-	-	-
314 Double Bitum. Surface Treatment	m2	-	-	-	-	-	-	-	-	-	-	-
316-1 PCC Pavement (t=23 cm)	m2	-	-	-	-	-	-	-	-	-	-	-
316-2 PCC Pavement (t=20 cm)	m2	-	-	-	-	-	-	-	-	-	-	-
316-3 PCC Pavement (t=18 cm)	m2	-	-	5580	3000	-	-	600	-	-	13740	1140
413-1 RCP (dia. 910mm)	m	510	585	570	436	105	390	50	195	143	1125	180
413-2 Headwall for RCP (dia. 910mm)	Set	34	39	38	29	7	26	6	13	10	75	12
500 Grouted Riprap	m3	-	-	-	-	-	284	-	-	-	-	-
517 Side Ditch (Grouted Riprap)	m	7900	5830	9050	8500	-	5150	1500	3100	4700	18850	2150
Slope Protection (Cut Slope)	m	-	-	-	-	-	-	-	-	-	-	-
Slope Protection (Embank't Sl)	m	-	-	-	-	-	-	-	-	-	-	-
2-lane Bridge, Superstructure	m	83	-	75	65	76	-	-	-	-	88	-
1-lane Bridge, Superstructure	m	-	-	-	-	-	-	-	-	-	-	-
2-lane Bridge, Abutment	Each	4	-	4	6	2	-	-	-	-	10	-
1-lane Bridge, Abutment	Each	-	-	-	-	-	-	-	-	-	-	-
2-lane Bridge, Pier	Each	2	-	2	1	2	-	-	-	-	-	-
1-lane Bridge, Pier	Each	-	-	-	-	-	-	-	-	-	-	-
2-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-
1-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous	I.s.	1	1	1	1	1	1	1	1	1	1	1
Road Construction Cost	M.P.	20.13	19.36	22.68	17.28	2.65	13.63	4.35	8.37	10.69	51.02	7.17
Bridge Construction Cost	M.P.	5.00	0.00	4.65	4.60	4.10	0.00	0.00	0.00	0.00	6.42	0.00
Total Construction Cost	M.P.	25.13	19.36	27.33	21.88	6.75	13.63	4.35	8.37	10.69	57.44	7.17
Road Construction Cost/Impr't km	M.P.	1.28	1.20	1.20	1.18	.72	1.47	1.36	1.26	1.72	2.10	1.16
Total Construction Cost/Total km	M.P.	1.60	1.20	1.45	1.47	1.83	1.43	1.36	1.09	1.78	1.48	1.16

Quantity and Construction Cost BOHOL

	Unit	P157-1	N2-2	P111-1	P113-1	P300-6	P128-1	P41-2	P49-1	P116-1	P106-1	P62-1	
Total Road Length	km	5.5	3.2	3.5	7.5	22.3	6.5	8.9	9.2	4.5	10.9	9.9	
Improvement Length	km	5.5	3.2	3.5	7.5	22.3	6.5	8.9	9.2	4.5	10.9	9.9	
Proposed Pavement Type		6.0-CRV 6.0-BMP 6.0-CRV 6.0-CRV 6.0-CRV 6.0-CRV 6.0-CRV 6.0-CRV 6.0-CRV 6.0-CRV 6.0-CRV 6.0-CRV 6.0-CRV											
Quantity													
100 Clearing & Grubbing	m2	-	-	-	-	125400	-	-	-	-	-	-	
102 Stripping	m3	-	-	-	-	13680	-	-	-	-	-	-	
105 Roadway & Drainage Excavation	m3	7814	5446	4690	51087	75732	8710	100120	103600	20997	49304	16489	
107 Borrow	m3	4356	-	1208	731	17438	2243	868	897	911	5417	4318	
108 Aggregate Subbase	m3	3630	5421	910	2550	8078	1690	3026	3128	2970	7194	6911	
118-1 Preparation of Prev. Road (Grvl)	m2	27220	12800	14000	24000	66400	26000	29480	29440	18570	54630	39070	
118-2 Preparation of Prev. Road (Asph)	m2	-	-	-	-	-	-	-	-	-	-	2700	
118-3 Preparation of Pave. Surf. (PCC)	m2	-	-	-	-	-	-	-	-	-	-	-	
118-4 Preparation of Pave. Surf. (AC)	m2	-	-	-	-	-	-	-	-	-	-	-	
200 Crushed Aggregate Base Course	m3	-	-	-	-	-	-	-	-	-	-	-	
300 Crushed Aggr. Surface Course	m3	-	3274	3150	6750	20070	5850	8010	8280	4050	9810	514	
302 Bituminous Prime Coat	M.T.	-	23	-	-	-	-	-	-	-	-	614	
303 Bituminous Tack Coat	M.T.	-	-	-	-	-	-	-	-	-	-	3600	
306 Bituminous Macadam Pavement	m2	-	19200	-	-	-	-	-	-	-	-	-	
310 Bitum. Concrete Surface Course	M.T.	-	-	-	-	-	-	-	-	-	-	-	
314 Double Bitum. Surface Treatment	m2	-	-	-	-	-	-	-	-	-	-	-	
316-1 PCC Pavement (t=23 cm)	m2	-	-	-	-	-	-	-	-	-	-	-	
316-2 PCC Pavement (t=20 cm)	m2	-	-	-	-	-	-	-	-	-	-	-	
316-3 PCC Pavement (t=18 cm)	m2	-	-	-	-	-	-	-	-	-	-	-	
413-1 RCPC (dia. 910mm)	m	165	90	105	225	840	195	270	270	136	330	300	
413-2 Headwall for RCPC (dia. 910mm)	Set	11	6	7	15	65	13	18	18	9	22	20	
500 Grouted Riprap	m3	-	-	-	3750	6990	-	4450	4600	2250	4750	1450	
517 Side Ditch (Grouted Riprap)	m	700	-	-	-	-	-	-	-	-	-	-	
Slope Protection (Cut Slope)	m	-	-	-	-	-	-	-	-	-	-	-	
Slope Protection (Embank't Sl)	m	-	-	-	-	-	-	-	-	-	-	-	
2-lane Bridge, Superstructure	m	-	10	10	40	-	33	50	64	15	10	-	
1-lane Bridge, Superstructure	m	-	-	-	-	-	-	-	-	-	-	-	
2-lane Bridge, Superstructure	m	-	2	2	8	-	4	4	4	2	2	-	
1-lane Bridge, Abutment	Each	-	-	-	-	-	-	-	-	-	-	-	
1-lane Bridge, Abutment	Each	-	-	-	-	-	-	-	-	-	-	-	
1-lane Bridge, Pier	Each	-	-	-	-	-	-	1	2	-	-	-	
1-lane Bridge, Pier	Each	-	-	-	-	-	-	-	-	-	-	-	
2-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-	
1-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-	
Miscellaneous	I.S.	1	1	1	1	1	1	1	1	1	1	1	
Road Construction Cost	M.P.	3.97	4.85	1.85	7.41	19.33	8.43	10.98	11.33	4.33	10.54	7.49	
Bridge Construction Cost	M.P.	.00	.98	.98	3.91	.00	2.48	3.42	4.24	1.18	.98	.00	
Total Construction Cost	M.P.	3.97	5.83	2.82	11.32	19.33	5.91	14.39	15.57	5.51	11.52	7.49	
Road Construction Cost/Impr't km	M.P.	.72	1.51	.63	.99	.87	.63	1.23	1.23	.96	.98	.76	
Total Construction Cost/Total km	M.P.	.72	1.82	.81	1.51	.87	.91	1.62	1.69	1.22	1.07	.76	

Quantity and Construction Cost BOHOL

	Unit	P110-1a	P146-1	P119-1	P150-1	P151-1	P123-1	P42-1	P87-1	P64-1	P121-1	P6-1
Total Road Length	km	5.0	7.4	4.0	2.9	9.8	8.5	11.4	8.0	5.4	2.6	2.3
Improvement Length	km	5.0	7.4	4.0	2.9	9.8	8.5	11.4	8.0	5.4	2.6	2.3
Proposed Pavement Type		6.0-GRV	6.0-GRV	4.0-GRV	4.0-GRV	6.0-GRV	6.0-GRV	6.0-GRV	6.0-GRV	6.0-GRV	4.0-GRV	4.0-GRV
							6.0-BMP					
Quantity												
100 Clearing & Grubbing	m2	-	-	-	-	44000	-	-	-	-	-	-
102 Stripping	m3	-	-	-	-	4800	-	-	-	-	-	-
105 Roadway & Drainage Excavation	m3	-	24075	3000	2113	67095	3975	42000	55275	2638	2813	1725
107 Borrow	m3	4260	1439	1260	450	3911	6493	6896	1485	2135	1409	1300
108 Aggregate Subbase	m3	3300	4884	1840	1334	6458	5610	7524	5280	3978	1195	1058
113-1 Preparation of Prev. Road (Grvl)	m2	-	-	-	12040	33070	52260	50280	24680	29640	9260	10580
118-2 Preparation of Prev. Road (Asph)	m2	-	-	-	-	-	-	-	-	-	-	-
118-3 Preparation of Pave. Surf. (PCC)	m2	-	-	-	-	-	-	-	-	-	-	-
118-4 Preparation of Pave. Surf. (AC)	m2	-	-	-	-	-	-	-	-	-	-	-
200 Crushed Aggregate Base Course	m3	-	-	-	-	-	-	-	-	409	-	-
300 Crushed Aggr. Surface Course	m3	4500	6560	2400	1620	8820	7650	9549	6390	4500	1560	1380
302 Bituminous Prime Coat	M.T.	-	-	-	-	-	-	-	-	3	-	-
303 Bituminous Tack Coat	M.T.	-	-	-	-	-	-	-	-	2400	-	-
306 Bituminous Macadam Pavement	m2	-	-	-	-	-	-	-	-	-	-	-
310 Bitum-Concrete Surface Course	M.T.	-	-	-	-	-	-	-	-	-	-	-
314 Double Bitum-Surface Treatment	m2	-	-	-	-	-	-	-	-	-	-	-
316-1 PCC Pavement (t=23 cm)	m2	-	-	-	-	-	-	-	-	-	-	-
316-2 PCC Pavement (t=20 cm)	m2	-	-	-	-	-	-	-	-	-	-	-
316-3 PCC Pavement (t=18 cm)	m2	-	-	-	800	-	-	-	-	-	-	-
413-1 RCPC (dia. 910mm)	Set	150	225	64	48	360	255	4740	5400	165	40	40
413-2 Headwall for RCPC (dia. 910mm)	Set	10	15	8	6	24	17	345	240	11	5	5
500 Grouted Riprap	m	-	-	-	-	-	-	2800	4500	-	-	-
517 Side Ditch (Grouted Riprap)	m	-	3700	-	-	4450	-	-	-	-	-	-
Slope Protection (Cut Slope)	m	-	-	-	-	-	-	-	-	-	-	-
Slope Protection (Embank't Sl)	m	-	-	-	-	-	-	-	-	-	-	-
1-lane Bridge, Superstructure	m	-	-	-	23	-	-	-	-	-	-	-
2-lane Bridge, Superstructure	m	-	-	-	-	-	-	-	-	-	-	-
1-lane Bridge, Abutment	Each	-	-	-	2	-	-	-	-	-	-	-
2-lane Bridge, Abutment	Each	-	-	-	-	-	-	-	-	-	-	-
1-lane Bridge, Pier	Each	-	-	-	-	-	-	-	-	-	-	-
2-lane Bridge, Pier	Each	-	-	-	-	-	-	-	-	-	-	-
1-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-
1-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous	I.S.	1	1	1	1	1	1	1	1	1	1	1
Road Construction Cost	M.P.	3.07	6.61	1.71	1.34	11.08	5.36	10.78	9.87	3.55	1.20	1.05
Bridge Construction Cost	M.P.	.00	.00	.00	1.10	2.56	.00	.00	.00	.00	.00	.00
Total Construction Cost	M.P.	3.07	6.61	1.71	2.44	13.64	5.36	10.78	9.87	3.55	1.20	1.05
Road Construction Cost/Impr't Km	M.P.	.61	.89	.43	.46	1.13	.83	.95	1.23	.66	.46	.46
Total Construction Cost/Total Km	M.P.	.61	.89	.43	.84	1.39	.63	.95	1.23	.66	.46	.46

Quantity and Construction Cost BOHOL

	Unit	P120-1	P28-1	P26-1	P140-1	P25-1	P164-1	P57-1	P86-1	P43-1	P200-1	P300-1	
Total Road Length	Km	3.3	11.7	4.5	3.7	9.8	6.5	6.6	10.3	3.6	8.6	2.3	
Improvement Length	Km	3.3	11.7	4.2	3.7	9.8	5.5	5.6	10.3	3.6	8.6	2.3	
Proposed Pavement Type		6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV 6.0-GRV											
Quantity													
100 Clearing & Grubbing	m2	-	-	-	-	-	-	-	-	-	-	-	
102 Stripping	m3	-	70200	189	5538	6600	9375	4066	77250	27000	42900	1725	
106 Roadway & Drainage Excavation	m3	-	11369	2662	476	9537	1598	3175	2086	2073	1957	1160	
107 Borrow	m3	2178	7722	2490	2442	6468	2390	3885	6798	2376	5676	1058	
108 Aggregate Subbase	m3	13860	53000	24740	18980	63080	27000	34380	37000	10800	42780	10580	
118-1 Preparation of Prev. Road (Grv)	m2	-	-	-	-	-	-	-	-	-	-	-	
118-2 Preparation of Prev. Road (Asph)	m2	-	-	-	-	-	-	-	-	-	-	-	
118-3 Preparation of Pave. Surf. (PCC)	m2	-	-	-	-	-	-	-	-	-	-	-	
118-4 Preparation of Pave. Surf. (AC)	m2	-	-	-	-	-	-	-	-	-	-	-	
200 Crushed Aggregate Base Course	m3	-	-	-	-	-	-	-	-	-	-	-	
300 Crushed Aggr. Surface Course	m3	2970	10530	3780	3330	8820	3720	4770	7785	3240	7740	1380	
302 Bituminous Prime Coat	M.T.	-	-	-	-	-	-	307	-	-	-	-	
303 Bituminous Tack Coat	M.T.	-	-	-	-	-	-	2	-	-	-	-	
306 Bituminous Macadam Pavement	m2	-	-	-	-	-	-	1800	-	-	-	-	
310 Bitum. Concrete Surface Course	M.T.	-	-	-	-	-	-	-	-	-	-	-	
314 Double Bitum. Surface Treatment	m2	-	-	-	-	-	-	-	-	-	-	-	
316-1 PCC Pavement (t=23 cm)	m2	-	-	-	-	-	-	-	-	-	-	-	
316-2 PCC Pavement (t=20 cm)	m2	-	-	-	-	-	-	-	-	-	-	-	
316-3 PCC Pavement (t=18 cm)	m2	-	-	-	-	-	-	-	9900	-	-	-	
413-1 RCPC (dia. 910mm)	m	105	345	330	105	300	104	165	315	105	255	40	
413-2 Headwall for RCPC (dia. 910mm)	Set	7	23	22	7	20	13	11	21	7	17	5	
500 Grouted Riprap	m3	-	4550	3864	3400	-	-	-	5150	1800	3300	-	
517 Side Ditch (Grouted Riprap)	m	-	-	-	-	-	-	-	-	-	-	-	
Slope Protection (Cut Slope)	m	-	-	-	-	-	-	-	-	-	-	-	
Slope Protection (Embank't Sl)	m	-	-	-	-	-	-	-	-	-	-	-	
2-lane Bridge, Superstructure	m	-	15	35	10	20	-	-	30	-	-	-	
1-lane Bridge, Superstructure	m	-	-	-	-	-	24	-	-	-	-	-	
2-lane Bridge, Abutment	Each	-	2	2	2	2	-	-	2	-	-	-	
1-lane Bridge, Abutment	Each	-	-	-	-	-	-	-	-	-	-	-	
2-lane Bridge, Pier	Each	-	-	1	-	-	-	-	1	-	-	-	
1-lane Bridge, Pier	Each	-	-	-	-	-	-	-	-	-	-	-	
2-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-	
1-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-	
Miscellaneous	I.S.	1	1	1	1	1	1	1	1	1	1	1	
Road Construction Cost	M.P.	2.89	11.72	6.39	3.44	6.64	3.20	3.75	13.42	4.25	8.15	1.04	
Bridge Construction Cost	M.P.	.00	1.18	2.24	.98	1.38	1.13	.00	2.04	.00	.00	.00	
Total Construction Cost	M.P.	2.89	12.90	8.63	4.42	7.92	4.33	3.75	15.46	4.25	8.15	1.04	
Road Construction Cost/Impr't km	M.P./km	.87	1.00	1.82	.93	.67	.49	.67	1.90	1.18	.95	.45	
Total Construction Cost/Total km	M.P./km	.87	1.10	1.92	1.19	.81	.67	.87	1.50	1.18	.95	.45	

Quantity and Construction Cost BOHOL

	Unit	B25-2	B28-5	B28-3	B11-2	B46-2	B48-3	B46-1	B34-1	B29-2	B2-1	B17-3
Total Road Length	km	11.2	1.1	1.7	1.3	3.0	1.3	2.8	1.4	3.5	2.4	1.4
Improve ment Length	km	11.2	1.7	1.6	1.3	3.0	1.3	2.8	1.4	3.1	2.4	1.4
Proposed Pavement Type		4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV
Quantity		45000	-	-	-	10000	-	12000	-	-	-	-
100 Clearing & Grubbing	m2	4500	-	-	-	1000	-	1200	-	-	-	-
102 Stripping	m3	22875	1313	1200	975	300	975	1200	-	938	-	1050
105 Roadway & Drainage Excavation	m3	2906	142	504	735	3555	410	2662	2177	11320	755	791
107 Borrow	m3	5152	322	736	598	1380	598	1238	644	1426	1104	644
108 Aggregate Subbase	m3	27060	2310	7360	6980	9200	5980	7960	5180	11800	11040	6440
118-1 Preparation of Prev. Road (Grvl)	m2	-	-	-	-	-	-	-	-	-	-	-
118-2 Preparation of Prev. Road (Asph)	m2	-	-	-	-	-	-	-	-	-	-	-
118-3 Preparation of Pave. Surf. (PCC)	m2	-	-	-	-	-	-	-	-	-	-	-
118-4 Preparation of Pave. Surf. (AC)	m2	-	-	-	-	-	-	-	-	-	-	-
200 Crushed Aggregate Base Course	m3	-	-	-	-	-	-	-	-	-	-	-
300 Bituminous Prime Coat	m3	6720	420	960	780	1800	780	1680	840	1680	1440	840
302 Bituminous Tack Coat	M.T.	-	-	-	-	-	-	-	-	-	-	-
303 Bituminous Macadam Pavement	M.T.	-	-	-	-	-	-	-	-	-	-	-
310 Bitum. Concrete Surface Course	M.T.	-	-	-	-	-	-	-	-	-	-	-
314 Double Bitum. Surface Treatment	m2	-	-	-	-	-	-	-	-	-	-	-
316-1 PCC Pavement (t=23 cm)	m2	-	-	-	-	-	-	-	-	-	-	-
316-2 PCC Pavement (t=20 cm)	m2	-	-	-	-	-	-	-	-	-	-	-
316-3 PCC Pavement (t=18 cm)	m2	-	-	-	-	-	-	-	-	-	-	-
413-1 RPC (dia. 910mm)	m	224	8	24	24	56	24	56	24	48	40	24
413-2 Headwall for RPC (dia. 910mm)	Set	28	1	3	3	7	3	7	3	6	5	3
500 Grouted Riprap	m3	-	-	-	-	-	-	-	-	-	-	-
517 Side Ditch (Grouted Riprap)	m	-	-	-	-	-	-	-	-	-	-	-
Slope Protection (Cut Slope)	m	-	-	-	-	-	-	-	-	-	-	-
Slope Protection (Embank't Sl)	m	-	-	-	-	-	-	-	-	-	-	-
2-lane Bridge, Superstructure	m	-	-	-	-	-	-	-	-	-	-	-
1-lane Bridge, Superstructure	m	-	-	-	-	-	-	-	-	-	-	-
2-lane Bridge, Abutment	Each	-	-	-	-	-	-	-	-	-	-	-
1-lane Bridge, Abutment	Each	-	-	-	-	-	-	-	-	-	-	-
2-lane Bridge, Pier	Each	-	-	-	-	-	-	-	-	-	-	-
1-lane Bridge, Pier	Each	-	-	-	-	-	-	-	-	-	-	-
1-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-
1-lane Spillway	m	15	-	-	-	-	-	-	-	-	-	-
Miscellaneous	l.s.	1	1	1	1	1	1	1	1	1	1	1
Road Construction Cost	M.P.	5.76	.32	.68	.60	1.50	.56	1.42	.72	2.31	.93	.64
Bridge Construction Cost	M.P.	.17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Total Construction Cost	M.P.	6.93	.32	.68	.60	1.50	.56	1.42	.72	2.31	.93	.64
Road Construction Cost/Impr't km	M.P.	.51	.46	.43	.46	.50	.43	.51	.51	.51	.39	.46
Total Construction Cost/Total km	M.P.	.53	.29	.40	.46	.50	.43	.51	.51	.56	.39	.46

Quantity and Construction Cost BOHOL

	Unit	B4-1	B26-1	B22-2	B18-3	B24-1	B37-1	B13-1	B24-2	B2-2	B4-2	B44-1	B39-2
Total Road Length	Km	1.7	.9	2.5	1.0	2.3	2.0	5.3	4.0	6.8	1.5	2.0	5.9
Improved Length	Km	1.7	.9	2.5	1.0	2.3	2.0	5.3	4.0	6.8	1.5	2.0	5.9
Proposed Pavement Type		4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV	4.0-GRV
Quantity													
100 Clearing & Grubbing	m2	-	-	22800	12000	16800	24000	34800	48000	64800	18000	20000	57600
102 Stripping	m3	-	-	2280	1200	1680	2400	3480	4800	6480	1800	2000	5760
105 Roadway & Drainage Excavation	m3	-	-	3025	1000	2556	2000	6168	4000	8025	1500	500	4800
107 Borrow	m3	1859	833	1195	565	917	1130	2248	2260	3335	848	2930	3389
108 Aggregate Subbase	m3	782	414	1150	460	1058	920	2438	1840	3128	690	920	2714
118-1 Preparation of Prev. Road (Grvl)	m2	7410	4140	1980	-	3320	-	8700	-	4900	-	-	4950
118-2 Preparation of Prev. Road (Asph)	m2	-	-	-	-	-	-	-	-	-	-	-	-
118-3 Preparation of Pave. Surf. (PCC)	m2	-	-	-	-	-	-	-	-	-	-	-	-
118-4 Preparation of Pave. Surf. (AC)	m2	-	-	-	-	-	-	-	-	-	-	-	-
200 Crushed Aggregate Base Course	m3	-	-	-	-	-	-	-	-	-	-	-	-
300 Crushed Aggr. Surface Course	m3	1020	540	1440	500	1308	1200	3180	2400	4080	900	1200	3420
302 Bituminous Prime Coat	M.T.	-	-	-	-	-	-	-	-	-	-	-	-
303 Bituminous Tack Coat	M.T.	-	-	-	-	-	-	-	-	-	-	-	-
306 Bituminous Macadam Pavement	m2	-	-	-	-	-	-	-	-	-	-	-	-
310 Bitum. Concrete Surface Course	M.T.	-	-	-	-	-	-	-	-	-	-	-	-
314 Double Bitum. Surface Treatment	m2	-	-	-	-	-	-	-	-	-	-	-	-
316-1 PCC Pavement (t=23 cm)	m2	-	-	-	-	-	-	-	-	-	-	-	-
316-2 PCC Pavement (t=20 cm)	m2	-	-	400	-	480	-	-	-	-	-	-	600
316-3 PCC Pavement (t=18 cm)	m2	-	-	72	32	64	64	136	128	200	48	48	168
413-1 RCPC (dia. 910mm)	m	24	16	72	32	64	64	136	128	200	48	48	168
413-2 Headwall for RCPC (dia. 910mm)	Set	3	2	9	4	8	8	17	16	25	6	6	21
500 Grouted Riprap	m3	-	-	-	-	-	-	-	-	-	-	-	-
517 Side Ditch (Grouted Riprap)	m	-	-	-	-	-	-	-	-	-	-	-	-
Slope Protection (Cut Slope)	m	-	-	-	-	-	-	-	-	-	-	-	-
Slope Protection (Embank't Sl)	m	-	-	-	-	-	-	-	-	-	-	-	-
2-lane Bridge, Superstructure	m	-	-	-	-	-	-	-	-	-	-	-	-
1-lane Bridge, Superstructure	m	-	-	-	-	-	-	-	-	-	-	-	-
1-lane Bridge, Abutment	Each	-	-	-	-	-	-	-	-	-	-	-	-
1-lane Bridge, Abutment	Each	-	-	-	-	-	-	-	-	-	-	-	-
1-lane Bridge, Pier	Each	-	-	-	-	-	-	-	-	-	-	-	-
1-lane Bridge, Pier	Each	-	-	-	-	-	-	-	-	-	-	-	-
2-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-	-
1-lane Spillway	m	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous	M.P.	1	1	1	1	1	1	1	1	1	1	1	1
Road Construction Cost	M.P.	.79	.41	1.41	.85	1.26	1.10	2.68	2.21	3.64	.83	1.15	3.26
Bridge Construction Cost	M.P.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Total Construction Cost	M.P.	.79	.41	1.41	.85	1.26	1.10	2.68	2.21	3.64	.83	1.15	3.26
Road Construction Cost/Impr't Km	M.P./Km	.46	.46	.56	.56	.55	.56	.51	.56	.54	.55	.58	.55
Total Construction Cost/Total Km	M.P./Km	.46	.46	.56	.56	.55	.56	.51	.56	.54	.55	.58	.55

