

APPENDIX 8.11 FUTURE TRAFFIC VOLUMES "With Project" - 2000

(1/8)

Link	Car	Jeepney	Bus	Truck	Total
00-22B	31737	14760	5043	2075	53615
01-21A	604	674	244	163	1685
01-21B	604	674	244	163	1685
01-22A	539	480	123	73	1215
01-22B	539	480	123	73	1215
01-22C	435	414	59	46	954
02-21	3023	76	707	754	4560
02-22	270	260	15	55	600
02-23A	954	391	447	715	2507
02-23B	954	391	447	715	2507
02-24A	1498	525	295	568	2886
02-24B	1498	525	295	568	2886
02-24CX	1498	525	295	568	2886
02-24CY	1593	381	301	435	2710
02-24D	1087	187	245	248	1767
02-25A	369	15	104	109	597
02-25B	369	15	104	109	597
02-25C	220	13	79	65	377
02-26 X	255	17	59	66	397
02-26 Y	740	85	149	132	1106
02-27	133	284	37	25	479
03-21	502	617	156	109	1384
03-22A	153	101	39	35	328
03-22B	281	133	68	51	533
03-23	351	444	87	97	979
03-24A	1087	187	245	248	1767
03-24B	1438	630	332	345	2745
03-24C	1438	630	332	345	2745
03-25	351	444	87	97	979
04-21A	317	885	40	132	1374
04-21B	153	101	39	35	328
04-21C	153	101	39	35	328
04-23A	9	21	1	0	31
04-23B	9	21	1	0	31
05-21A	502	617	156	109	1384
05-21B	574	751	154	132	1611
05-21C	343	547	99	124	1113
05-21D	343	547	99	124	1113
05-22A	435	414	59	46	954
05-22B	435	414	59	46	954
05-23A	310	249	57	88	704
05-23B	210	212	44	33	499
05-23C	210	212	44	33	499
05-27A	283	174	44	67	568
05-27B	283	174	44	67	568
05-27C	479	219	64	139	901
05-51	479	219	64	139	901
11-12A	2075	954	838	823	4690
11-12B	2075	954	838	823	4690
11-12C	2075	954	838	823	4690
11-12D	2043	1318	854	721	4936
11-12E	1397	779	741	615	3532
11-12F	1397	779	741	615	3532
11-12G	164	237	99	545	1045
11-12H	164	237	99	545	1045
11-12I	45	71	17	27	160
11-21A	904	717	122	257	2000
11-21B	479	219	64	139	901
11-21C	479	219	64	139	901
12-12A	2359	1538	1217	1052	6166
12-12B	2475	1499	1270	1080	6324
12-12C	2475	1499	1270	1080	6324
12-12D	2625	1481	1277	1127	6510
12-12E	2625	1481	1277	1127	6510
12-12F	2625	1481	1277	1127	6510
12-12G	2222	1235	1049	975	5481
12-12H	2075	954	838	823	4690
12-21A	484	728	125	123	1460

APPENDIX 8.11 FUTURE TRAFFIC VOLUMES "With Project" - 2000

(2/8)

Link	Car	Jeepney	Bus	Truck	Total
12-21B	484	728	125	123	1460
12-22	133	284	37	25	479
12-23	351	444	87	97	979
12-29	604	674	244	163	1685
13-12A	4230	512	1452	1461	7655
13-12B	2468	440	1005	990	4903
13-12C	2468	440	1005	990	4903
13-12D	3076	472	1257	1510	6315
13-12E	2944	1421	1735	1541	7641
13-12F	2944	1421	1735	1541	7641
13-12G	2944	1421	1735	1541	7641
13-12H	3227	2106	1694	1525	8552
13-12I	2359	1538	1217	1052	6166
13-12J	2359	1538	1217	1052	6166
13-12K	2359	1538	1217	1052	6166
13-21	3023	76	707	754	4560
13-22A	270	260	15	55	600
13-22B	270	260	15	55	600
13-22C	270	260	15	55	600
13-23A	954	391	447	715	2507
13-23B	954	391	447	715	2507
13-23C	954	391	447	715	2507
13-24	1869	37	511	803	3220
13-51	0	0	0	0	0
14-12A	3826	828	1157	1434	7245
14-12B	4203	1506	1299	1475	8483
14-12C	4203	1506	1299	1475	8483
14-12D	4203	1506	1299	1475	8483
14-12E	4230	512	1452	1461	7655
14-21A	528	284	232	211	1255
14-21B	528	284	232	211	1255
14-21C	504	261	232	151	1148
14-21D	504	261	232	151	1148
14-21E	685	417	345	294	1741
14-21F	875	372	186	418	1851
14-21G	1312	1048	222	700	3282
14-22A	806	556	161	283	1806
14-22B	945	709	240	501	2395
14-22C	945	709	240	501	2395
14-22D	945	709	240	501	2395
14-24A	472	413	93	177	1155
14-24C	1869	37	511	803	3220
14-25A	180	156	113	143	592
14-25B	581	397	117	252	1347
14-26A	24	23	0	60	107
14-27	24	23	0	60	107
14-28A	589	454	395	557	1995
14-28B	589	454	395	557	1995
14-28C	589	454	395	557	1995
14-29A	2409	2312	347	953	6021
14-29B	1440	1469	165	523	3597
14-29C	328	155	100	192	775
14-30A	984	845	271	434	2534
14-30B	732	298	207	218	1455
14-31A	252	547	65	216	1080
14-31B	350	464	47	83	944
14-32	1869	37	511	803	3220
14-52	472	413	93	177	1155
14-57	1366	544	266	534	2710
21-11A	777	252	467	297	1793
21-11B	777	252	467	297	1793
21-11C	875	741	452	284	2352
21-11D	744	299	438	589	2070
21-11E	908	592	526	643	2669
21-11F	908	592	526	643	2669
21-11G	178	221	131	232	762
21-11H	178	221	131	232	762
21-11I	178	221	131	232	762

APPENDIX 8.11 FUTURE TRAFFIC VOLUMES "With Project" - 2000

(3/8)

Link	Car	Jeepney	Bus	Truck	Total
21-12A	45	71	17	27	160
21-12B	45	71	17	27	160
21-12C	183	89	85	240	597
21-12D	183	89	85	240	597
21-21A	1078	1055	294	633	3060
21-21B	340	953	80	204	1577
21-21C	591	1430	186	266	2473
21-22A	183	89	85	240	597
21-22B	183	89	85	240	597
21-23B	76	107	34	299	516
21-24A	301	246	184	252	983
21-24B	301	246	184	252	983
21-30A	1152	906	296	579	2933
21-30B	210	212	44	33	499
21-31	1136	854	295	588	2873
21-32	468	635	121	160	1384
21-52	251	476	106	63	896
21-53	251	476	106	63	896
21-91A	3	2	1	1	7
21-91B	3	2	1	1	7
22-11A	1175	606	470	766	3017
22-11B	1378	801	469	775	3423
22-11C	1391	869	214	667	3141
22-11D	1059	535	635	316	2545
22-11E	1059	535	635	316	2545
22-11F	1059	535	635	316	2545
22-11G	1199	639	645	392	2875
22-11H	1199	639	645	392	2875
22-11I	943	429	490	330	2192
22-11J	943	429	490	330	2192
22-11K	943	429	490	330	2192
22-11L	777	252	467	297	1793
22-21	329	328	44	75	776
22-22A	1198	716	310	585	2809
22-22B	1207	737	311	585	2840
22-22C	1207	737	311	585	2840
22-23	9	21	1	0	31
22-25A	483	369	174	184	1210
22-25B	74	40	26	27	167
22-28A	166	177	23	34	400
22-28B	166	177	23	34	400
22-29A	1207	737	311	585	2840
22-29B	1051	782	271	555	2659
22-29C	1051	782	271	555	2659
22-29D	1051	782	271	555	2659
22-29E	1136	854	295	588	2873
22-56	74	40	26	27	167
22-57A	57	18	28	28	131
22-57B	3	2	1	1	7
22-91	57	18	28	28	131
22-92	3	2	1	1	7
23-11A	935	89	367	588	1979
23-11B	1263	244	467	779	2753
23-11C	1263	244	467	779	2753
23-11D	1788	1601	489	777	4655
23-11E	1788	1601	489	777	4655
23-11F	1788	1601	489	777	4655
23-11G	1373	1201	483	800	3857
23-11H	1175	606	470	766	3017
23-21	317	885	40	132	1374
23-22	328	155	100	192	775
23-23	220	13	79	65	377
23-24A	42	18	16	22	98
23-24B	42	18	16	22	98
23-24C	42	18	16	22	98
23-24D	42	18	16	22	98
24-21AX	329	328	44	75	776
24-21AY	179	115	48	150	492

APPENDIX 8.11 FUTURE TRAFFIC VOLUMES "With Project" - 2000

(4/8)

Link	Car	Jeepney	Bus	Truck	Total
24-21B	179	115	48	150	492
24-21C	179	115	48	150	492
24-21D	76	24	30	28	158
24-21E	76	24	30	28	158
24-23B	42	18	16	22	98
24-91	42	18	16	22	98
31-21A	5714	1573	1077	2057	10421
31-21B	2869	908	1251	1173	6201
31-21C	2869	908	1251	1173	6201
31-22A	3737	2206	1450	1826	9219
31-22B	3737	2206	1450	1826	9219
31-22C	3737	2206	1450	1826	9219
31-22D	3737	2206	1450	1826	9219
31-22E	1140	1348	2033	1153	5674
31-22F	1140	1348	2033	1153	5674
31-25B	610	281	244	187	1322
31-25C	15	13	17	9	54
31-51	15	13	17	9	54
31-52	19	16	27	10	72
32-01A	62077	7673	6515	10203	86468
32-01B	62077	7673	6515	10203	86468
32-01C	62077	7673	6515	10203	86468
32-01D	41403	5095	4367	6735	57600
32-01E	41403	5095	4367	6735	57600
32-11A	22178	2281	1561	3507	29527
32-11B	7711	1328	1004	1957	12000
32-11C	7711	1328	1004	1957	12000
32-11D	6333	2007	1008	1816	11164
32-11E	6333	2007	1008	1816	11164
32-11F	3565	40	1008	1832	6445
32-12A	0	0	0	0	0
32-12B	0	0	0	0	0
32-12C	0	0	0	0	0
32-12D	0	0	0	0	0
32-12E	0	0	0	0	0
32-12F	0	0	0	0	0
32-12G	0	0	0	0	0
32-25	111	18	9	25	163
32-26A	1733	1004	19	344	3100
32-26B	90	27	12	23	152
32-27A	90	27	12	23	152
32-27B	90	27	12	23	152
33-11A	3565	40	1008	1832	6445
33-11B	5985	1059	1284	2803	11131
33-11C	5095	1062	1278	2118	9553
33-11D	3082	872	1157	1347	6458
33-11E	3082	872	1157	1347	6458
33-11F	3082	872	1157	1347	6458
33-11G	3082	872	1157	1347	6458
33-11H	2492	673	891	1088	5144
33-11I	2492	673	891	1088	5144
33-11J	935	89	367	588	1979
33-11K	935	89	367	588	1979
33-21A	2543	179	278	1051	4051
33-21B	2543	179	278	1051	4051
33-23A	1417	1300	9	849	3575
33-23B	1417	1300	9	849	3575
33-23C	1417	1300	9	849	3575
33-24A	588	738	89	312	1727
33-24B	588	738	89	312	1727
33-24C	301	218	89	136	744
33-24D	237	223	72	121	653
33-25	66	10	33	29	138
33-29A	732	298	207	218	1455
33-29B	732	298	207	218	1455
33-29C	732	298	207	218	1455
33-29D	732	298	207	218	1455
33-30A	350	464	47	83	944

APPENDIX 8.11 FUTURE TRAFFIC VOLUMES "With Project" - 2000

(5/8)

Link	Car	Jeepney	Bus	Truck	Total
33-30B	350	464	47	83	944
33-56A	174	122	54	48	398
33-56B	174	122	54	48	398
34-01A	41403	5095	4367	6735	57600
34-01B	41403	5095	4367	6735	57600
34-01C	6523	887	1616	2585	11611
34-12A	0	0	0	0	0
34-12B	0	0	0	0	0
34-12C	0	0	0	0	0
34-12D	28992	8923	2825	4840	45580
34-12E	10745	7780	1751	1986	22262
34-12F	1366	1309	32	321	3028
34-12G	7890	2196	1648	2906	14640
34-21A	5714	1573	1077	2057	10421
34-21B	5714	1573	1077	2057	10421
34-21C	5714	1573	1077	2057	10421
34-22A	34742	4258	3195	5905	48100
34-22B	8503	2427	843	1702	13475
34-22C	8503	2427	843	1702	13475
34-22D	8613	2445	852	1726	13636
34-22E	2543	179	278	1051	4051
34-22F	2543	179	278	1051	4051
34-27	111	18	9	25	163
34-31B	6523	887	1616	2585	11611
35-12A	7890	2196	1648	2906	14640
35-12B	7890	2196	1648	2906	14640
35-12C	7623	2139	1618	2822	14202
35-12D	3962	645	1325	1547	7479
35-12E	3962	645	1325	1547	7479
35-12F	3962	645	1325	1547	7479
35-12G	3826	828	1157	1434	7245
35-12H	3826	828	1157	1434	7245
35-21	539	155	101	154	949
35-22A	1417	1300	9	849	3575
35-22B	1417	1300	9	849	3575
35-23A	2657	262	553	1086	4558
35-23B	2657	262	553	1086	4558
35-23C	589	454	395	557	1995
35-24A	855	57	622	184	1718
35-24B	855	57	622	184	1718
35-24C	1366	544	266	534	2710
36-21A	2869	908	1251	1173	6201
36-21B	2001	399	942	128	3470
36-22A	1228	697	396	272	2593
36-22B	528	284	232	211	1255
36-23	539	155	101	154	949
36-51	15	13	17	9	54
41-21	66	10	33	29	138
41-22	237	223	72	121	653
41-23A	287	133	75	283	778
41-23B	262	129	67	274	732
41-24	76	24	30	28	158
41-51	137	11	71	71	290
41-91	71	1	38	42	152
41-92	57	18	28	28	131
42-11A	18020	1623	2203	2412	24258
42-11B	6955	1269	1214	1627	11065
42-21A	12739	1580	1038	1406	16763
42-21B	8712	2291	674	1295	12972
42-21C	8712	2291	674	1295	12972
42-21D	5561	1664	846	1993	10064
42-21E	5561	1664	846	1993	10064
42-21F	5561	1664	846	1993	10064
42-21G	6780	2814	920	2239	12753
42-22A	2150	713	220	410	3493
42-22B	2150	713	220	410	3493
42-22C	2150	713	220	410	3493
42-22D	1	0	0	0	1

APPENDIX 8.11 FUTURE TRAFFIC VOLUMES "With Project" - 2000

(6/8)

Link	Car	Jeepney	Bus	Truck	Total
42-23B	2163	1889	135	19	4206
42-23C	2163	1889	135	19	4206
42-23D	562	1715	30	464	2771
42-23E	562	1715	30	464	2771
42-23F	562	1715	30	464	2771
42-23G	562	1715	30	464	2771
42-24A	3389	970	315	390	5064
42-24B	3389	970	315	390	5064
42-24C	2159	745	99	231	3234
42-25A	1675	272	346	173	2466
42-25B	1675	272	346	173	2466
42-25C	1675	272	346	173	2466
42-29C	1231	1165	76	251	2723
42-30A	1231	1165	76	251	2723
42-30B	1704	488	170	692	3054
42-31	28	7	10	10	55
42-33	155	158	26	43	382
42-36	2163	1889	135	19	4206
42-37A	2151	713	220	410	3494
42-91	1	0	0	0	1
43-21A	5871	3043	1883	597	11394
43-21B	5871	3043	1883	597	11394
43-21C	4582	2860	1702	505	9649
43-21D	4582	2860	1702	505	9649
43-21E	5249	2724	772	937	9682
43-21F	2150	713	220	410	3493
43-21G	2150	713	220	410	3493
43-22A	13904	9164	2941	1893	27902
43-22B	13904	9164	2941	1893	27902
43-23A	1848	554	763	363	3528
43-23B	1	0	0	0	1
43-23D	3565	2048	689	535	6837
43-26A	1994	1095	27	452	3568
43-26B	1994	1095	27	452	3568
43-27A	3283	1277	208	544	5312
43-27B	1735	897	31	387	3050
43-28A	422	373	1	50	846
43-28B	2041	776	189	220	3226
43-29A	1	0	0	0	1
43-29B	1	0	0	0	1
43-31A	4217	2298	112	879	7506
43-31B	4217	2298	112	879	7506
43-31C	2058	1554	14	647	4273
43-32	2159	745	99	231	3234
44-02A	28651	5927	3554	4357	42489
44-02B	24071	3149	2958	3289	33467
44-02C	24071	3149	2958	3289	33467
44-02D	17940	1585	2194	2404	24123
44-11A	0	0	0	0	0
44-11B	6574	3872	623	1520	12589
44-11C	1040	745	20	226	2031
44-11D	8080	3023	797	1477	13377
44-11E	80	38	9	8	135
44-11F	18020	1623	2203	2412	24258
44-11G	6955	1269	1214	1627	11065
44-11H	7161	3316	1546	1654	13677
44-11I	6351	1121	1173	1596	10241
44-11J	6351	1121	1173	1596	10241
44-21	6574	3872	623	1520	12589
44-23A	8440	3149	808	1644	14041
44-23B	2058	1554	14	647	4273
44-24A	8160	3062	806	1485	13513
44-24B	8300	2452	797	1356	12905
44-24C	8132	4401	1087	1332	14952
44-24D	2087	1960	172	534	4753
44-24E	1424	1576	127	358	3485
44-24F	1424	1576	127	358	3485
44-25	206	2047	331	27	2611
44-26B	206	2047	331	27	2611

APPENDIX 8.11 FUTURE TRAFFIC VOLUMES "With Project" - 2000

(7/8)

Link	Car	Jeepney	Bus	Truck	Total
44-26C	206	2047	331	27	2611
44-27A	79	70	2	114	265
44-27B	79	70	2	114	265
44-27C	79	70	2	114	265
44-29A	1026	818	140	256	2240
44-29B	1026	818	140	256	2240
44-31A	476	632	46	122	1276
44-31B	553	213	39	92	897
44-32	96	17	12	9	134
45-11A	6351	1121	1173	1596	10241
45-11B	5179	2454	1205	1955	10793
45-11C	5672	2478	1214	2098	11462
45-11D	5672	2478	1214	2098	11462
45-11E	4708	969	1152	1411	8240
45-11F	2815	540	1031	1181	5567
45-11G	3090	606	1144	1270	6110
45-11H	2954	943	1133	1363	6393
45-11I	2954	943	1133	1363	6393
45-11J	365	200	81	282	928
45-11K	365	200	81	282	928
45-21A	553	213	39	92	897
45-21B	661	217	93	146	1117
45-21C	137	11	71	71	290
45-23	1704	488	170	692	3054
45-25A	389	416	47	667	1519
45-25B	829	522	52	666	2069
45-25C	881	531	54	755	2221
45-25D	874	440	97	715	2126
45-27	79	70	2	114	265
45-28	1026	818	140	256	2240
45-29	856	426	131	228	1641
45-30B	561	466	128	254	1409
45-30C	561	466	128	254	1409
45-30D	242	154	49	58	503
45-30E	271	167	55	57	550
45-31	188	183	32	41	444
45-32A	0	0	0	0	0
45-32B	2226	898	766	923	4813
45-51A	331	79	113	141	664
45-51B	107	4	53	54	218
45-53A	2197	900	746	907	4750
45-53B	163	31	62	43	299
45-54	137	11	71	71	290
45-91	96	17	12	9	134
45-92	44	17	19	10	90
45-93	2226	898	766	923	4813
46-21A	6852	6040	712	1224	14828
46-21C	1312	923	192	240	2667
46-22AX	6852	6040	712	1224	14828
46-22AY	77	18	10	19	124
46-22B	1374	922	202	256	2754
46-22C	476	632	46	122	1276
46-22D	476	632	46	122	1276
46-22E	476	632	46	122	1276
46-25A	8307	10485	79	3760	22631
46-25B	96	17	12	9	134
46-25C	96	17	12	9	134
46-25D	96	17	12	9	134
46-25E	96	17	12	9	134
46-26A	1312	923	192	240	2667
46-26B	1312	923	192	240	2667
51-11A	1945	1055	754	721	4475
51-11B	1864	1197	736	686	4483
51-11C	1864	1197	736	686	4483
51-11D	1706	794	603	418	3521
51-11E	1706	794	603	418	3521
51-11F	1706	794	603	418	3521
51-11G	941	823	311	318	2393
51-11H	941	823	311	318	2393

APPENDIX 8.11 FUTURE TRAFFIC VOLUMES "With Project" - 2000

(8/8)

Link	Car	Jeepney	Bus	Truck	Total
51-21A	136	309	43	61	549
51-22	136	309	43	61	549
51-23A	0	0	0	0	0
51-23B	136	309	43	61	549
51-24	136	309	43	61	549
51-25	297	155	145	202	799
51-27A	1043	313	311	119	1786
51-27B	1234	1483	394	261	3372
51-28A	1234	1483	394	261	3372
51-28B	1234	1483	394	261	3372
51-28C	293	137	33	52	515
51-29	1	0	0	1	2
51-51	60	121	1	4	186
52-11A	365	200	81	282	928
52-11B	365	200	81	282	928
52-11CX	258	506	58	90	912
52-11CY	137	810	46	22	1015
53-11A	137	810	46	22	1015
53-11B	2210	1745	745	902	5602
53-11C	0	0	0	0	0
53-11D	0	0	0	0	0
53-11E	0	0	0	0	0
53-11F	1588	1236	602	613	4039
53-11G	2191	1720	744	824	5479
53-11H	2191	1720	744	824	5479
53-11I	1945	1055	754	721	4475
53-11J	1945	1055	754	721	4475
53-21	2342	2100	792	924	6158
53-22A	2226	898	766	923	4813
53-22B	2226	898	766	923	4813
53-24A	2342	2100	792	924	6158
53-24B	2839	3200	694	1668	8401
53-25A	621	520	147	214	1502
53-25B	621	520	147	214	1502
53-25C	293	137	33	52	515
53-27A	914	656	179	266	2015
53-27B	1162	802	251	343	2558
53-27C	165	103	3	37	308
53-28A	258	176	73	79	586
53-28B	122	88	33	38	281
53-29A	165	103	3	37	308
53-29B	4	1	0	1	6
53-30	286	191	44	75	596
53-52	946	723	226	281	2176
53-53	381	264	106	117	868
53-94A	122	88	33	38	281
53-94BX	122	88	33	38	281
53-94BY	168	103	4	37	312
53-96	286	191	44	75	596
54-11A	941	823	311	318	2393
54-11B	738	789	282	368	2177
54-11C	494	812	160	346	1812
54-11D	420	735	137	316	1608
54-11E	420	735	137	316	1608
54-11F	328	658	105	267	1358
54-11G	478	578	178	296	1530
54-11H	386	351	127	193	1057
54-11I	386	351	127	193	1057
54-21	337	491	41	133	1002
54-23	115	80	30	34	259
54-24A	74	77	23	30	204
54-24B	74	77	23	30	204
54-27	95	78	32	51	256
54-28	6	1	0	1	8
54-29A	74	77	23	30	204
54-29B	6	1	0	1	8
54-30	154	301	51	103	609
54-51	60	121	1	4	186
54-52	4	1	0	1	6
54-92	1	0	0	1	2

APPENDIX 8.12 FUTURE TRAFFIC VOLUMES "With Project" - 2010

(1/8)

Link	Car	Jeepney	Bus	Truck	Total
00-22B	41920	19468	6707	2828	70923
01-21A	766	873	314	187	2140
01-21B	766	873	314	187	2140
01-22A	674	618	157	82	1531
01-22B	674	618	157	82	1531
01-22C	537	525	74	52	1188
02-21	4019	94	925	942	5980
02-22	342	338	19	63	762
02-23A	1254	543	571	821	3189
02-23B	1254	543	571	821	3189
02-24A	1923	686	372	681	3662
02-24B	1923	686	372	681	3662
02-24CX	1923	686	372	681	3662
02-24CY	2002	491	376	515	3384
02-24D	1271	241	293	288	2093
02-25A	473	18	137	128	756
02-25B	473	18	137	128	756
02-25C	282	17	106	78	483
02-26 X	310	20	71	75	476
02-26 Y	886	102	179	145	1312
02-27	161	343	45	28	577
03-21	615	769	196	129	1709
03-22A	177	124	47	41	389
03-22B	324	162	82	59	627
03-23	414	543	107	111	1175
03-24A	1271	241	293	288	2093
03-24B	1685	784	399	398	3266
03-24C	1685	784	399	398	3266
03-25	414	543	107	111	1175
04-21A	387	1135	49	153	1724
04-21B	177	124	47	41	389
04-21C	177	124	47	41	389
04-23A	10	27	1	0	38
04-23B	10	27	1	0	38
05-21A	615	769	196	129	1709
05-21B	722	963	197	155	2037
05-21C	442	706	129	145	1422
05-21D	442	706	129	145	1422
05-22A	537	525	74	52	1188
05-22B	537	525	74	52	1188
05-23A	381	316	72	102	871
05-23B	254	266	54	38	612
05-23C	254	266	54	38	612
05-27A	382	230	61	79	752
05-27B	382	230	61	79	752
05-27C	649	291	87	166	1193
05-51	649	291	87	166	1193
11-12A	2540	1184	1047	941	5712
11-12B	2540	1184	1047	941	5712
11-12C	2540	1184	1047	941	5712
11-12D	2489	1619	1061	828	5997
11-12E	1634	923	912	700	4169
11-12F	1634	923	912	700	4169
11-12G	200	293	120	637	1250
11-12H	200	293	120	637	1250
11-12I	53	87	21	31	192
11-21A	1173	912	160	304	2549
11-21B	649	291	87	166	1193
11-21C	649	291	87	166	1193
12-12A	2923	1983	1538	1211	7655
12-12B	3064	1887	1600	1242	7793
12-12C	3064	1887	1600	1242	7793
12-12D	3246	1867	1609	1292	8014
12-12E	3246	1867	1609	1292	8014
12-12F	3246	1867	1609	1292	8014
12-12G	2725	1549	1316	1118	6708
12-12H	2540	1184	1047	941	5712
12-21A	575	886	152	139	1752

APPENDIX 8.12 FUTURE TRAFFIC VOLUMES "With Project" - 2010

(2/8)

Link	Car	Jeepney	Bus	Truck	Total
12-21B	575	886	152	139	1752
12-22	161	343	45	28	577
12-23	414	543	107	111	1175
12-29	766	873	314	187	2140
13-12A	5528	650	1857	1776	9811
13-12B	3136	561	1268	1171	6136
13-12C	3136	561	1268	1171	6136
13-12D	3839	601	1571	1789	7800
13-12E	3680	1792	2152	1825	9449
13-12F	3680	1792	2152	1825	9449
13-12G	3680	1792	2152	1825	9449
13-12H	4049	2700	2130	1811	10690
13-12I	2923	1983	1538	1211	7655
13-12J	2923	1983	1538	1211	7655
13-12K	2923	1983	1538	1211	7655
13-21	4019	94	925	942	5980
13-22A	342	338	19	63	762
13-22B	342	338	19	63	762
13-22C	342	338	19	63	762
13-23A	1254	543	571	821	3189
13-23B	1254	543	571	821	3189
13-23C	1254	543	571	821	3189
13-24	2330	46	640	955	3971
13-51	0	0	0	0	0
14-12A	4980	1036	1482	1759	9257
14-12B	5474	1812	1651	1789	10726
14-12C	5474	1812	1651	1789	10726
14-12D	5474	1812	1651	1789	10726
14-12E	5528	650	1857	1776	9811
14-21A	662	355	295	243	1555
14-21B	662	355	295	243	1555
14-21C	633	327	295	174	1429
14-21D	633	327	295	174	1429
14-21E	852	513	430	339	2134
14-21F	1100	437	234	489	2260
14-21G	1623	1243	271	815	3952
14-22A	1001	670	198	348	2217
14-22B	1145	843	291	593	2872
14-22C	1145	843	291	593	2872
14-22D	1145	843	291	593	2872
14-24A	574	481	113	203	1371
14-24C	2330	46	640	955	3971
14-25A	219	187	135	165	706
14-25B	707	474	140	291	1612
14-26A	29	28	0	69	126
14-27	29	28	0	69	126
14-28A	732	532	477	637	2378
14-28B	732	532	477	637	2378
14-28C	732	532	477	637	2378
14-29A	2972	2772	425	1189	7358
14-29B	1755	1754	200	665	4374
14-29C	402	194	122	240	958
14-30A	1235	1021	331	529	3116
14-30B	935	371	261	261	1828
14-31A	300	650	71	268	1289
14-31B	410	555	50	96	1111
14-32	2330	46	640	955	3971
14-52	574	481	113	203	1371
14-57	1661	640	318	651	3270
21-11A	1003	325	612	328	2268
21-11B	1003	325	612	328	2268
21-11C	1089	926	566	344	2925
21-11D	941	383	560	684	2568
21-11E	1148	755	674	748	3325
21-11F	1148	755	674	748	3325
21-11G	218	278	162	262	920
21-11H	218	278	162	262	920
21-11I	218	278	162	262	920

APPENDIX 8.12 FUTURE TRAFFIC VOLUMES "With Project" - 2010

(3/8)

Link	Car	Jeepney	Bus	Truck	Total
21-12A	53	87	21	31	192
21-12B	53	87	21	31	192
21-12C	226	111	106	278	721
21-12D	226	111	106	278	721
21-21A	1345	1360	366	763	3834
21-21B	455	1280	108	247	2090
21-21C	777	1899	246	322	3244
21-22A	226	111	106	278	721
21-22B	226	111	106	278	721
21-23B	95	135	43	338	611
21-24A	375	307	230	283	1195
21-24B	375	307	230	283	1195
21-30A	1453	1175	371	703	3702
21-30B	254	266	54	38	612
21-31	1439	1114	370	712	3635
21-32	608	820	159	188	1775
21-52	322	619	138	75	1154
21-53	322	619	138	75	1154
21-91A	4	2	1	1	8
21-91B	4	2	1	1	8
22-11A	1501	795	599	956	3851
22-11B	1777	1067	594	962	4400
22-11C	1802	1156	278	816	4052
22-11D	1415	706	860	385	3366
22-11E	1415	706	860	385	3366
22-11F	1415	706	860	385	3366
22-11G	1615	837	882	475	3809
22-11H	1615	837	882	475	3809
22-11I	1225	558	646	367	2796
22-11J	1225	558	646	367	2796
22-11K	1225	558	646	367	2796
22-11L	1003	325	612	328	2268
22-21	442	457	55	93	1047
22-22A	1506	926	385	708	3525
22-22B	1516	952	387	709	3564
22-22C	1516	952	387	709	3564
22-23	10	27	1	0	38
22-25A	641	441	235	211	1528
22-25B	98	52	37	33	220
22-28A	223	233	34	39	529
22-28B	223	233	34	39	529
22-29A	1516	952	387	709	3564
22-29B	1322	1022	337	673	3354
22-29C	1322	1022	337	673	3354
22-29D	1322	1022	337	673	3354
22-29E	1439	1114	370	712	3635
22-56	98	52	37	33	220
22-57A	76	25	39	35	175
22-57B	4	2	1	1	8
22-91	76	25	39	35	175
22-92	4	2	1	1	8
23-11A	1188	111	463	744	2506
23-11B	1590	305	585	984	3464
23-11C	1590	305	585	984	3464
23-11D	2302	2216	620	979	6117
23-11E	2302	2216	620	979	6117
23-11F	2302	2216	620	979	6117
23-11G	1743	1556	613	994	4906
23-11H	1501	795	599	956	3851
23-21	387	1135	49	153	1724
23-22	402	194	122	240	958
23-23	282	17	106	78	483
23-24A	53	22	21	30	126
23-24B	53	22	21	30	126
23-24C	53	22	21	30	126
23-24D	53	22	21	30	126
24-21AX	442	457	55	93	1047
24-21AY	225	149	64	174	612

APPENDIX 8.12 FUTURE TRAFFIC VOLUMES "With Project" - 2010

(4/8)

Link	Car	Jeepney	Bus	Truck	Total
24-21B	225	149	64	174	612
24-21C	225	149	64	174	612
24-21D	88	26	37	34	185
24-21E	88	26	37	34	185
24-23B	53	22	21	30	126
24-91	53	22	21	30	126
31-21A	7278	1923	1379	2620	13200
31-21B	3683	1152	1602	1447	7884
31-21C	3683	1152	1602	1447	7884
31-22A	4716	2721	1845	2313	11595
31-22B	4716	2721	1845	2313	11595
31-22C	4716	2721	1845	2313	11595
31-22D	4716	2721	1845	2313	11595
31-22E	1657	1915	2888	1490	7950
31-22F	1657	1915	2888	1490	7950
31-25B	747	350	316	240	1653
31-25C	18	16	20	11	65
31-51	18	16	20	11	65
31-52	27	23	38	13	101
32-01A	80174	10002	8301	13327	111804
32-01B	80174	10002	8301	13327	111804
32-01C	80174	10002	8301	13327	111804
32-01D	53238	6605	5588	8686	74117
32-01E	53238	6605	5588	8686	74117
32-11A	28346	2931	1984	4502	37763
32-11B	10582	1861	1271	2592	16306
32-11C	10582	1861	1271	2592	16306
32-11D	8677	2815	1277	2398	15167
32-11E	8677	2815	1277	2398	15167
32-11F	4841	49	1277	2415	8582
32-12A	0	0	0	0	0
32-12B	0	0	0	0	0
32-12C	0	0	0	0	0
32-12D	0	0	0	0	0
32-12E	0	0	0	0	0
32-12F	0	0	0	0	0
32-12G	0	0	0	0	0
32-25	161	24	13	29	227
32-26A	2425	1408	27	441	4301
32-26B	123	37	17	28	205
32-27A	123	37	17	28	205
32-27B	123	37	17	28	205
33-11A	4841	49	1277	2415	8582
33-11B	8182	1402	1630	3734	14948
33-11C	6420	1365	1617	2588	11990
33-11D	3891	1108	1468	1615	8082
33-11E	3891	1108	1468	1615	8082
33-11F	3891	1108	1468	1615	8082
33-11G	3891	1108	1468	1615	8082
33-11H	3130	818	1124	1323	6395
33-11I	3130	818	1124	1323	6395
33-11J	1188	111	463	744	2506
33-11K	1188	111	463	744	2506
33-21A	3478	233	356	1423	5490
33-21B	3478	233	356	1423	5490
33-23A	2222	1787	11	1088	5108
33-23B	2222	1787	11	1088	5108
33-23C	2222	1787	11	1088	5108
33-24A	684	901	106	364	2055
33-24B	684	901	106	364	2055
33-24C	322	222	106	149	799
33-24D	226	203	75	130	634
33-25	79	13	40	33	165
33-29A	935	371	261	261	1828
33-29B	935	371	261	261	1828
33-29C	935	371	261	261	1828
33-29D	935	371	261	261	1828
33-30A	410	555	50	96	1111

APPENDIX 8.12 FUTURE TRAFFIC VOLUMES "With Project" - 2010

(5/8)

Link	Car	Jeepney	Bus	Truck	Total
33-30B	410	555	50	96	1111
33-56A	190	125	57	52	424
33-56B	190	125	57	52	424
34-01A	53238	6605	5588	8686	74117
34-01B	53238	6605	5588	8686	74117
34-01C	8198	1112	2033	3164	14507
34-12A	0	0	0	0	0
34-12B	0	0	0	0	0
34-12C	0	0	0	0	0
34-12D	37234	11678	3643	6284	58839
34-12E	14269	10390	2333	2596	29588
34-12F	1645	1509	40	378	3572
34-12G	9843	2621	2073	3541	18078
34-21A	7278	1923	1379	2620	13200
34-21B	7278	1923	1379	2620	13200
34-21C	7278	1923	1379	2620	13200
34-22A	44852	5574	4112	7711	62249
34-22B	11209	3198	1097	2219	17723
34-22C	11209	3198	1097	2219	17723
34-22D	11370	3222	1111	2248	17951
34-22E	3478	233	356	1423	5490
34-22F	3478	233	356	1423	5490
34-27	161	24	13	29	227
34-31B	8198	1112	2033	3164	14507
35-12A	9843	2621	2073	3541	18078
35-12B	9843	2621	2073	3541	18078
35-12C	9515	2542	2035	3442	17534
35-12D	5155	817	1666	1902	9540
35-12E	5155	817	1666	1902	9540
35-12F	5155	817	1666	1902	9540
35-12G	4980	1036	1482	1759	9257
35-12H	4980	1036	1482	1759	9257
35-21	645	191	120	178	1134
35-22A	2222	1787	11	1088	5108
35-22B	2222	1787	11	1088	5108
35-23A	3235	319	650	1313	5517
35-23B	3235	319	650	1313	5517
35-23C	732	532	477	637	2378
35-24A	999	70	745	204	2018
35-24B	999	70	745	204	2018
35-24C	1661	640	318	651	3270
36-21A	3683	1152	1602	1447	7884
36-21B	2493	517	1164	156	4330
36-22A	1586	885	512	317	3300
36-22B	662	355	295	243	1555
36-23	645	191	120	178	1134
36-51	18	16	20	11	65
41-21	79	13	40	33	165
41-22	226	203	75	130	634
41-23A	331	158	100	318	907
41-23B	311	159	94	308	872
41-24	88	26	37	34	185
41-51	164	14	86	83	347
41-91	85	1	46	50	182
41-92	76	25	39	35	175
42-11A	22834	2058	2790	3002	30684
42-11B	8968	1640	1549	2001	14158
42-21A	16052	2007	1306	1751	21116
42-21B	10980	2880	850	1592	16302
42-21C	10980	2880	850	1592	16302
42-21D	7065	2087	1064	2338	12554
42-21E	7065	2087	1064	2338	12554
42-21F	7065	2087	1064	2338	12554
42-21G	8600	3542	1157	2625	15924
42-22A	2755	925	286	474	4440
42-22B	2755	925	286	474	4440
42-22C	2755	925	286	474	4440
42-22D	1	0	0	0	1

APPENDIX 8.12 FUTURE TRAFFIC VOLUMES "With Project" - 2010

(6/8)

Link	Car	Jeepney	Bus	Truck	Total
42-23B	2701	2410	172	22	5305
42-23C	2701	2410	172	22	5305
42-23D	700	2170	37	525	3432
42-23E	700	2170	37	525	3432
42-23F	700	2170	37	525	3432
42-23G	700	2170	37	525	3432
42-24A	4305	1242	396	477	6420
42-24B	4305	1242	396	477	6420
42-24C	2763	962	127	280	4132
42-25A	2107	339	436	213	3095
42-25B	2107	339	436	213	3095
42-25C	2107	339	436	213	3095
42-29C	1550	1474	95	292	3411
42-30A	1550	1474	95	292	3411
42-30B	2160	635	215	800	3810
42-31	34	9	12	11	66
42-33	194	199	32	48	473
42-36	2701	2410	172	22	5305
42-37A	2756	925	286	474	4441
42-91	1	0	0	0	1
43-21A	7595	4031	2425	765	14816
43-21B	7595	4031	2425	765	14816
43-21C	5914	3792	2189	652	12547
43-21D	5914	3792	2189	652	12547
43-21E	6837	3597	1024	1102	12560
43-21F	2755	925	286	474	4440
43-21G	2755	925	286	474	4440
43-22A	17786	11926	4052	2479	36243
43-22B	17786	11926	4052	2479	36243
43-23A	2409	747	1034	456	4646
43-23B	1	0	0	0	1
43-23D	4689	2720	919	637	8965
43-26A	2657	1481	36	542	4716
43-26B	2657	1481	36	542	4716
43-27A	4338	1720	272	655	6985
43-27B	2290	1199	41	463	3993
43-28A	554	495	1	65	1115
43-28B	2694	1045	247	271	4257
43-29A	1	0	0	0	1
43-29B	1	0	0	0	1
43-31A	5433	2990	145	1041	9609
43-31B	5433	2990	145	1041	9609
43-31C	2670	2028	18	761	5477
43-32	2763	962	127	280	4132
44-02A	36778	7817	4547	5666	54808
44-02B	30476	3988	3732	4198	42394
44-02C	30476	3988	3732	4198	42394
44-02D	22737	2011	2780	2992	30520
44-11A	0	0	0	0	0
44-11B	8959	5310	850	2010	17129
44-11C	1397	1019	26	271	2713
44-11D	10252	3861	996	1905	17014
44-11E	97	47	11	9	164
44-11F	22834	2058	2790	3002	30684
44-11G	8968	1640	1549	2001	14158
44-11H	9230	4179	1963	2035	17407
44-11I	8246	1458	1502	1963	13169
44-11J	8246	1458	1502	1963	13169
44-21	8959	5310	850	2010	17129
44-23A	10736	4046	1011	2108	17901
44-23B	2670	2028	18	761	5477
44-24A	10349	3908	1007	1914	17178
44-24B	10498	3109	995	1771	16373
44-24C	10281	5524	1356	1741	18902
44-24D	2676	2478	215	631	6000
44-24E	1827	1982	158	404	4371
44-24F	1827	1982	158	404	4371
44-25	261	2540	414	34	3249
44-26B	261	2540	414	34	3249

APPENDIX 8.12 FUTURE TRAFFIC VOLUMES "With Project" - 2010

(7/8)

Link	Car	Jeepney	Bus	Truck	Total
44-26C	261	2540	414	34	3249
44-27A	102	89	3	148	342
44-27B	102	89	3	148	342
44-27C	102	89	3	148	342
44-29A	1293	1028	173	321	2815
44-29B	1293	1028	173	321	2815
44-31A	588	774	55	145	1562
44-31B	704	279	48	108	1139
44-32	108	21	14	10	153
45-11A	8246	1458	1502	1963	13169
45-11B	6664	3232	1535	2381	13812
45-11C	7296	3263	1544	2547	14650
45-11D	7296	3263	1544	2547	14650
45-11E	5944	1253	1448	1708	10353
45-11F	3544	689	1289	1434	6956
45-11G	3879	771	1426	1539	7615
45-11H	3715	1170	1408	1632	7925
45-11I	3715	1170	1408	1632	7925
45-11J	466	243	102	338	1149
45-11K	466	243	102	338	1149
45-21A	704	279	48	108	1139
45-21B	833	285	114	171	1403
45-21C	164	14	86	83	347
45-23	2160	635	215	800	3810
45-25A	497	544	59	844	1944
45-25B	1056	657	65	841	2619
45-25C	1125	669	68	956	2818
45-25D	1109	555	120	903	2687
45-27	102	89	3	148	342
45-28	1293	1028	173	321	2815
45-29	1130	563	169	271	2133
45-30B	769	628	171	301	1869
45-30C	769	628	171	301	1869
45-30D	318	204	63	70	655
45-30E	358	221	73	68	720
45-31	277	266	46	50	639
45-32A	0	0	0	0	0
45-32B	2819	1122	967	1122	6030
45-51A	401	97	138	168	804
45-51B	129	5	66	63	263
45-53A	2781	1123	941	1102	5947
45-53B	209	39	80	51	379
45-54	164	14	86	83	347
45-91	108	21	14	10	153
45-92	62	25	27	12	126
45-93	2819	1122	967	1122	6030
46-21A	9033	7980	937	1687	19637
46-21C	1587	1123	247	300	3257
46-22AX	9033	7980	937	1687	19637
46-22AY	94	23	12	23	152
46-22B	1661	1122	259	319	3361
46-22C	588	774	55	145	1562
46-22D	588	774	55	145	1562
46-22E	588	774	55	145	1562
46-25A	11252	14361	98	5141	30852
46-25B	108	21	14	10	153
46-25C	108	21	14	10	153
46-25D	108	21	14	10	153
46-25E	108	21	14	10	153
46-26A	1587	1123	247	300	3257
46-26B	1587	1123	247	300	3257
51-11A	2490	1340	966	892	5688
51-11B	2394	1521	944	853	5712
51-11C	2394	1521	944	853	5712
51-11D	2194	1010	771	503	4478
51-11E	2194	1010	771	503	4478
51-11F	2194	1010	771	503	4478
51-11G	1185	1047	393	378	3003
51-11H	1185	1047	393	378	3003

APPENDIX 8.12 FUTURE TRAFFIC VOLUMES "With Project" - 2010

(8/8)

Link	Car	Jeepney	Bus	Truck	Total
51-21A	165	388	54	71	678
51-22	165	388	54	71	678
51-23A	0	0	0	0	0
51-23B	165	388	54	71	678
51-24	165	388	54	71	678
51-25	380	198	186	245	1009
51-27A	1348	398	401	148	2295
51-27B	1579	1928	511	314	4332
51-28A	1579	1928	511	314	4332
51-28B	1579	1928	511	314	4332
51-28C	364	172	41	58	635
51-29	2	0	0	1	3
51-51	70	147	1	4	222
52-11A	466	243	102	338	1149
52-11B	466	243	102	338	1149
52-11CX	326	664	73	107	1170
52-11CY	174	1062	60	25	1321
53-11A	174	1062	60	25	1321
53-11B	2803	2248	942	1098	7091
53-11C	0	0	0	0	0
53-11D	0	0	0	0	0
53-11E	0	0	0	0	0
53-11F	2014	1579	763	740	5096
53-11G	2798	2212	948	1001	6959
53-11H	2798	2212	948	1001	6959
53-11I	2490	1340	966	892	5688
53-11J	2490	1340	966	892	5688
53-21	2970	2727	1001	1124	7822
53-22A	2819	1122	967	1122	6030
53-22B	2819	1122	967	1122	6030
53-24A	2970	2727	1001	1124	7822
53-24B	3699	4234	885	2082	10900
53-25A	807	679	191	265	1942
53-25B	807	679	191	265	1942
53-25C	364	172	41	58	635
53-27A	1171	851	232	322	2576
53-27B	1478	1030	320	412	3240
53-27C	209	133	4	44	390
53-28A	320	216	90	91	717
53-28B	152	109	40	44	345
53-29A	209	133	4	44	390
53-29B	5	1	0	1	7
53-30	359	242	55	89	745
53-52	1220	934	286	334	2774
53-53	471	325	131	135	1062
53-94A	152	109	40	44	345
53-94BX	152	109	40	44	345
53-94BY	214	134	5	45	398
53-96	359	242	55	89	745
54-11A	1185	1047	393	378	3003
54-11B	928	1006	356	430	2720
54-11C	624	1031	203	409	2267
54-11D	530	932	174	372	2008
54-11E	530	932	174	372	2008
54-11F	415	835	134	314	1698
54-11G	606	733	227	348	1914
54-11H	491	448	163	229	1331
54-11I	491	448	163	229	1331
54-21	422	631	53	148	1254
54-23	143	101	38	40	322
54-24A	94	99	30	36	259
54-24B	94	99	30	36	259
54-27	118	98	40	60	316
54-28	7	1	0	1	9
54-29A	94	99	30	36	259
54-29B	7	1	0	1	9
54-30	193	378	64	120	755
54-51	70	147	1	4	222
54-52	5	1	0	1	7
54-92	2	0	0	1	3

APPENDIX 8.13 FUTURE TRAFFIC VOLUMES "With Project" - 2020

(1/8)

Link	Car	Jeepney	Bus	Truck	Total
00-22B	51662	23961	8310	3553	87486
01-21A	939	1087	388	213	2627
01-21B	939	1087	388	213	2627
01-22A	817	765	193	91	1866
01-22B	817	765	193	91	1866
01-22C	644	643	90	56	1433
02-21	4963	112	1138	1114	7327
02-22	419	421	22	71	933
02-23A	1560	696	687	939	3882
02-23B	1560	696	687	939	3882
02-24A	2346	849	450	792	4437
02-24B	2346	849	450	792	4437
02-24CX	2346	849	450	792	4437
02-24CY	2415	603	451	595	4064
02-24D	1467	297	343	328	2435
02-25A	578	21	170	146	915
02-25B	578	21	170	146	915
02-25C	343	21	134	89	587
02-26 X	367	24	84	83	558
02-26 Y	1042	120	211	157	1530
02-27	190	405	54	31	680
03-21	730	932	236	150	2048
03-22A	198	148	53	45	444
03-22B	365	192	95	66	718
03-23	482	653	126	124	1385
03-24A	1467	297	343	328	2435
03-24B	1950	951	469	452	3822
03-24C	1950	951	469	452	3822
03-25	482	653	126	124	1385
04-21A	456	1390	56	173	2075
04-21B	198	148	53	45	444
04-21C	198	148	53	45	444
04-23A	11	32	1	0	44
04-23B	11	32	1	0	44
05-21A	730	932	236	150	2048
05-21B	875	1189	241	177	2482
05-21C	545	875	159	165	1744
05-21D	545	875	159	165	1744
05-22A	644	643	90	56	1433
05-22B	644	643	90	56	1433
05-23A	453	388	86	114	1041
05-23B	301	325	64	42	732
05-23C	301	325	64	42	732
05-27A	480	286	76	90	932
05-27B	480	286	76	90	932
05-27C	813	361	108	190	1472
05-51	813	361	108	190	1472
11-12A	3022	1428	1254	1062	6766
11-12B	3022	1428	1254	1062	6766
11-12C	3022	1428	1254	1062	6766
11-12D	2944	1934	1263	935	7076
11-12E	1876	1077	1078	784	4815
11-12F	1876	1077	1078	784	4815
11-12G	237	352	142	729	1460
11-12H	237	352	142	729	1460
11-12I	59	104	24	34	221
11-21A	1443	1111	197	351	3102
11-21B	813	361	108	190	1472
11-21C	813	361	108	190	1472
12-12A	3506	2461	1862	1375	9204
12-12B	3673	2305	1934	1407	9319
12-12C	3673	2305	1934	1407	9319
12-12D	3890	2281	1945	1461	9577
12-12E	3890	2281	1945	1461	9577
12-12F	3890	2281	1945	1461	9577
12-12G	3244	1885	1583	1263	7975
12-12H	3022	1428	1254	1062	6766
12-21A	673	1058	180	155	2066

APPENDIX 8.13 FUTURE TRAFFIC VOLUMES "With Project" - 2020

(2/8)

Link	Car	Jeepney	Bus	Truck	Total
12-21B	673	1058	180	155	2066
12-22	190	405	54	31	680
12-23	482	653	126	124	1385
12-29	939	1087	388	213	2627
13-12A	6814	795	2269	2089	11967
13-12B	3811	690	1538	1358	7397
13-12C	3811	690	1538	1358	7397
13-12D	4621	737	1894	2074	9326
13-12E	4433	2200	2592	2115	11340
13-12F	4433	2200	2592	2115	11340
13-12G	4433	2200	2592	2115	11340
13-12H	4885	3341	2567	2102	12895
13-12I	3506	2461	1862	1375	9204
13-12J	3506	2461	1862	1375	9204
13-12K	3506	2461	1862	1375	9204
13-21	4963	112	1138	1114	7327
13-22A	419	421	22	71	933
13-22B	419	421	22	71	933
13-22C	419	421	22	71	933
13-23A	1560	696	687	939	3882
13-23B	1560	696	687	939	3882
13-23C	1560	696	687	939	3882
13-24	2770	54	763	1099	4686
13-51	0	0	0	0	0
14-12A	6115	1235	1806	2089	11245
14-12B	6736	2113	2013	2101	12963
14-12C	6736	2113	2013	2101	12963
14-12D	6736	2113	2013	2101	12963
14-12E	6814	795	2269	2089	11967
14-21A	787	421	354	273	1835
14-21B	787	421	354	273	1835
14-21C	753	389	353	195	1690
14-21D	753	389	353	195	1690
14-21E	1011	605	512	382	2510
14-21F	1312	498	280	556	2646
14-21G	1916	1419	318	922	4575
14-22A	1186	775	234	409	2604
14-22B	1333	964	340	680	3317
14-22C	1333	964	340	680	3317
14-22D	1333	964	340	680	3317
14-24A	670	546	133	227	1576
14-24C	2770	54	763	1099	4686
14-25A	258	216	158	187	819
14-25B	832	549	164	329	1874
14-26A	34	32	0	78	144
14-27	34	32	0	78	144
14-28A	865	611	561	712	2749
14-28B	865	611	561	712	2749
14-28C	865	611	561	712	2749
14-29A	3523	3207	514	1426	8670
14-29B	2059	2022	236	809	5126
14-29C	477	232	144	293	1146
14-30A	1485	1188	402	623	3698
14-30B	1115	433	305	300	2153
14-31A	371	755	97	323	1546
14-31B	497	652	72	115	1336
14-32	2770	54	763	1099	4686
14-52	670	546	133	227	1576
14-57	1950	733	374	767	3824
21-11A	1240	401	765	359	2765
21-11B	1240	401	765	359	2765
21-11C	1309	1116	680	407	3512
21-11D	1145	472	686	777	3080
21-11E	1397	924	826	852	3999
21-11F	1397	924	826	852	3999
21-11G	260	338	193	290	1081
21-11H	260	338	193	290	1081
21-11I	260	338	193	290	1081

APPENDIX 8.13 FUTURE TRAFFIC VOLUMES "With Project" - 2020

(3/8)

Link	Car	Jeepney	Bus	Truck	Total
21-12A	59	104	24	34	221
21-12B	59	104	24	34	221
21-12C	269	134	126	315	844
21-12D	269	134	126	315	844
21-21A	1598	1661	437	892	4588
21-21B	569	1608	133	289	2599
21-21C	964	2379	305	376	4024
21-22A	269	134	126	315	844
21-22B	269	134	126	315	844
21-23B	114	163	51	377	705
21-24A	451	370	278	315	1414
21-24B	451	370	278	315	1414
21-30A	1741	1447	443	824	4455
21-30B	301	325	64	42	732
21-31	1731	1377	443	834	4385
21-32	748	1014	196	213	2171
21-52	395	771	172	86	1424
21-53	395	771	172	86	1424
21-91A	4	2	2	2	10
21-91B	4	2	2	2	10
22-11A	1827	986	726	1150	4689
22-11B	2191	1340	724	1156	5411
22-11C	2194	1431	343	959	4927
22-11D	1782	884	1090	455	4211
22-11E	1782	884	1090	455	4211
22-11F	1782	884	1090	455	4211
22-11G	2040	1040	1123	554	4757
22-11H	2040	1040	1123	554	4757
22-11I	1516	691	804	400	3411
22-11J	1516	691	804	400	3411
22-11K	1516	691	804	400	3411
22-11L	1240	401	765	359	2765
22-21	567	593	71	112	1343
22-22A	1802	1129	463	832	4226
22-22B	1814	1161	464	833	4272
22-22C	1814	1161	464	833	4272
22-23	11	32	1	0	44
22-25A	786	505	289	232	1812
22-25B	110	58	40	33	241
22-28A	275	290	38	41	644
22-28B	275	290	38	41	644
22-29A	1814	1161	464	833	4272
22-29B	1590	1268	405	792	4055
22-29C	1590	1268	405	792	4055
22-29D	1590	1268	405	792	4055
22-29E	1731	1377	443	834	4385
22-56	110	58	40	33	241
22-57A	82	27	42	35	186
22-57B	4	2	2	2	10
22-91	82	27	42	35	186
22-92	4	2	2	2	10
23-11A	1442	133	558	905	3038
23-11B	1919	365	702	1198	4184
23-11C	1919	365	702	1198	4184
23-11D	2824	2866	750	1189	7629
23-11E	2824	2866	750	1189	7629
23-11F	2824	2866	750	1189	7629
23-11G	2117	1920	743	1194	5974
23-11H	1827	986	726	1150	4689
23-21	456	1390	56	173	2075
23-22	477	232	144	293	1146
23-23	343	21	134	89	587
23-24A	60	27	24	36	147
23-24B	60	27	24	36	147
23-24C	60	27	24	36	147
23-24D	60	27	24	36	147
24-21AX	567	593	71	112	1343
24-21AY	284	189	85	199	757

APPENDIX 8.13 FUTURE TRAFFIC VOLUMES "With Project" - 2020

(4/8)

Link	Car	Jeepney	Bus	Truck	Total
24-21B	284	189	85	199	757
24-21C	284	189	85	199	757
24-21D	110	33	47	38	228
24-21E	110	33	47	38	228
24-23B	60	27	24	36	147
24-91	60	27	24	36	147
31-21A	8760	2256	1663	3157	15836
31-21B	4431	1376	1926	1702	9435
31-21C	4431	1376	1926	1702	9435
31-22A	5659	3204	2216	2780	13859
31-22B	5659	3204	2216	2780	13859
31-22C	5659	3204	2216	2780	13859
31-22D	5659	3204	2216	2780	13859
31-22E	2182	2470	3723	1820	10195
31-22F	2182	2470	3723	1820	10195
31-25B	874	415	384	291	1964
31-25C	20	18	23	12	73
31-51	20	18	23	12	73
31-52	34	29	48	16	127
32-01A	97174	12212	10003	16279	135668
32-01B	97174	12212	10003	16279	135668
32-01C	97174	12212	10003	16279	135668
32-01D	64621	8026	6757	10558	89962
32-01E	64621	8026	6757	10558	89962
32-11A	33999	3532	2375	5418	45324
32-11B	13093	2397	1530	3196	20216
32-11C	13093	2397	1530	3196	20216
32-11D	10634	3627	1538	2949	18748
32-11E	10634	3627	1538	2949	18748
32-11F	5667	59	1538	2965	10229
32-12A	0	0	0	0	0
32-12B	0	0	0	0	0
32-12C	0	0	0	0	0
32-12D	0	0	0	0	0
32-12E	0	0	0	0	0
32-12F	0	0	0	0	0
32-12G	0	0	0	0	0
32-25	214	30	18	34	296
32-26A	3097	1817	34	536	5484
32-26B	158	48	21	34	261
32-27A	158	48	21	34	261
32-27B	158	48	21	34	261
33-11A	5667	59	1538	2965	10229
33-11B	9402	1656	1964	4607	17629
33-11C	7799	1600	1953	3061	14413
33-11D	4664	1308	1764	1877	9613
33-11E	4664	1308	1764	1877	9613
33-11F	4664	1308	1764	1877	9613
33-11G	4664	1308	1764	1877	9613
33-11H	3764	995	1352	1556	7667
33-11I	3764	995	1352	1556	7667
33-11J	1442	133	558	905	3038
33-11K	1442	133	558	905	3038
33-21A	3936	288	431	1770	6425
33-21B	3936	288	431	1770	6425
33-23A	2087	1899	14	1320	5320
33-23B	2087	1899	14	1320	5320
33-23C	2087	1899	14	1320	5320
33-24A	876	1106	136	432	2550
33-24B	876	1106	136	432	2550
33-24C	452	338	136	169	1095
33-24D	371	357	115	150	993
33-25	93	16	47	37	193
33-29A	1115	433	305	300	2153
33-29B	1115	433	305	300	2153
33-29C	1115	433	305	300	2153
33-29D	1115	433	305	300	2153
33-30A	497	652	72	115	1336

APPENDIX 8.13 FUTURE TRAFFIC VOLUMES "With Project" - 2020

(5/8)

Link	Car	Jeepney	Bus	Truck	Total
33-30B	497	652	72	115	1336
33-56A	251	188	82	61	582
33-56B	251	188	82	61	582
34-01A	64621	8026	6757	10558	89962
34-01B	64621	8026	6757	10558	89962
34-01C	9932	1344	2455	3742	17473
34-12A	0	0	0	0	0
34-12B	0	0	0	0	0
34-12C	0	0	0	0	0
34-12D	45083	14236	4433	7667	71419
34-12E	17268	12720	2846	3183	36017
34-12F	2068	2006	50	444	4568
34-12G	12000	3350	2504	4186	22040
34-21A	8760	2256	1663	3157	15836
34-21B	8760	2256	1663	3157	15836
34-21C	8760	2256	1663	3157	15836
34-22A	54198	6805	4986	9442	75431
34-22B	13492	3950	1344	2715	21501
34-22C	13492	3950	1344	2715	21501
34-22D	13705	3980	1362	2749	21796
34-22E	3936	288	431	1770	6425
34-22F	3936	288	431	1770	6425
34-27	214	30	18	34	296
34-31B	9932	1344	2455	3742	17473
35-12A	12000	3350	2504	4186	22040
35-12B	12000	3350	2504	4186	22040
35-12C	11617	3251	2462	4070	21400
35-12D	6320	990	2043	2260	11613
35-12E	6320	990	2043	2260	11613
35-12F	6320	990	2043	2260	11613
35-12G	6115	1235	1806	2089	11245
35-12H	6115	1235	1806	2089	11245
35-21	757	227	143	201	1328
35-22A	2087	1899	14	1320	5320
35-22B	2087	1899	14	1320	5320
35-23A	3796	373	779	1536	6484
35-23B	3796	373	779	1536	6484
35-23C	865	611	561	712	2749
35-24A	1111	79	837	222	2249
35-24B	1111	79	837	222	2249
35-24C	1950	733	374	767	3824
36-21A	4431	1376	1926	1702	9435
36-21B	2958	627	1375	185	5145
36-22A	1921	1065	625	363	3974
36-22B	787	421	354	273	1835
36-23	757	227	143	201	1328
36-51	20	18	23	12	73
41-21	93	16	47	37	193
41-22	371	357	115	150	993
41-23A	466	228	120	365	1179
41-23B	423	220	105	348	1096
41-24	110	33	47	38	228
41-51	202	17	107	94	420
41-91	110	1	61	57	229
41-92	82	27	42	35	186
42-11A	27470	2486	3363	3572	36891
42-11B	10951	2010	1879	2378	17218
42-21A	19224	2424	1565	2077	25290
42-21B	13140	3453	1018	1869	19480
42-21C	13140	3453	1018	1869	19480
42-21D	8497	2497	1273	2660	14927
42-21E	8497	2497	1273	2660	14927
42-21F	8497	2497	1273	2660	14927
42-21G	10341	4253	1386	2987	18967
42-22A	3337	1130	351	534	5352
42-22B	3337	1130	351	534	5352
42-22C	3337	1130	351	534	5352
42-22D	1	0	0	0	1

APPENDIX 8.13 FUTURE TRAFFIC VOLUMES "With Project" - 2020

(6/8)

Link	Car	Jeepney	Bus	Truck	Total
42-23B	3224	2919	208	25	6376
42-23C	3224	2919	208	25	6376
42-23D	833	2614	44	583	4074
42-23E	833	2614	44	583	4074
42-23F	833	2614	44	583	4074
42-23G	833	2614	44	583	4074
42-24A	5201	1510	475	562	7748
42-24B	5201	1510	475	562	7748
42-24C	3361	1177	155	330	5023
42-25A	2525	404	523	251	3703
42-25B	2525	404	523	251	3703
42-25C	2525	404	523	251	3703
42-29C	1861	1778	115	333	4087
42-30A	1861	1778	115	333	4087
42-30B	2605	777	260	905	4547
42-31	40	10	14	12	76
42-33	232	241	38	54	565
42-36	3224	2919	208	25	6376
42-37A	3339	1130	351	534	5354
42-91	1	0	0	0	1
43-21A	9242	4984	2943	924	18093
43-21B	9242	4984	2943	924	18093
43-21C	7183	4691	2653	792	15319
43-21D	7183	4691	2653	792	15319
43-21E	8393	4452	1272	1262	15379
43-21F	3337	1130	351	534	5352
43-21G	3337	1130	351	534	5352
43-22A	21455	14557	5137	3052	44201
43-22B	21455	14557	5137	3052	44201
43-23A	2950	938	1300	546	5734
43-23B	1	0	0	0	1
43-23D	5799	3381	1145	738	11063
43-26A	3318	1864	45	632	5859
43-26B	3318	1864	45	632	5859
43-27A	5377	2157	335	764	8633
43-27B	2844	1498	52	538	4932
43-28A	682	613	1	80	1376
43-28B	3329	1308	303	321	5261
43-29A	1	0	0	0	1
43-29B	1	0	0	0	1
43-31A	6624	3664	177	1202	11667
43-31B	6624	3664	177	1202	11667
43-31C	3264	2487	22	872	6645
43-32	3361	1177	155	330	5023
44-02A	44553	9629	5503	6933	66618
44-02B	36620	4800	4480	5085	50985
44-02C	36620	4800	4480	5085	50985
44-02D	27356	2430	3351	3562	36699
44-11A	0	0	0	0	0
44-11B	11251	6693	1068	2479	21491
44-11C	1745	1283	32	318	3378
44-11D	12322	4662	1183	2328	20495
44-11E	114	55	13	10	192
44-11F	27470	2486	3363	3572	36891
44-11G	10951	2010	1879	2378	17218
44-11H	11265	5008	2370	2418	21061
44-11I	10118	1797	1828	2336	16079
44-11J	10118	1797	1828	2336	16079
44-21	11251	6693	1068	2479	21491
44-23A	12931	4907	1201	2568	21607
44-23B	3264	2487	22	872	6645
44-24A	12436	4718	1196	2338	20688
44-24B	12589	3738	1182	2184	19693
44-24C	12327	6584	1608	2148	22667
44-24D	3252	2973	256	727	7208
44-24E	2220	2368	187	451	5226
44-24F	2220	2368	187	451	5226
44-25	314	2997	491	40	3842
44-26B	314	2997	491	40	3842

APPENDIX 8.13 FUTURE TRAFFIC VOLUMES "With Project" - 2020

(7/8)

Link	Car	Jeepney	Bus	Truck	Total
44-26C	314	2997	491	40	3842
44-27A	124	107	3	181	415
44-27B	124	107	3	181	415
44-27C	124	107	3	181	415
44-29A	1555	1229	205	387	3376
44-29B	1555	1229	205	387	3376
44-31A	692	905	65	168	1830
44-31B	859	347	58	123	1387
44-32	118	25	16	12	171
45-11A	10118	1797	1828	2336	16079
45-11B	8147	3997	1862	2809	16815
45-11C	8914	4035	1871	3000	17820
45-11D	8914	4035	1871	3000	17820
45-11E	7188	1542	1742	2016	12488
45-11F	4286	842	1545	1697	8370
45-11G	4690	939	1712	1818	9159
45-11H	4498	1404	1689	1909	9500
45-11I	4498	1404	1689	1909	9500
45-11J	572	291	124	395	1382
45-11K	572	291	124	395	1382
45-21A	859	347	58	123	1387
45-21B	1018	353	141	195	1707
45-21C	202	17	107	94	420
45-23	2605	777	260	905	4547
45-25A	602	667	71	1018	2358
45-25B	1278	786	78	1013	3155
45-25C	1362	802	81	1153	3398
45-25D	1339	665	143	1089	3236
45-27	124	107	3	181	415
45-28	1555	1229	205	387	3376
45-29	1407	699	207	315	2628
45-30B	982	790	213	346	2331
45-30C	982	790	213	346	2331
45-30D	394	254	76	81	805
45-30E	446	274	90	80	890
45-31	369	351	60	59	839
45-32A	0	0	0	0	0
45-32B	3430	1351	1170	1330	7281
45-51A	478	116	168	195	957
45-51B	159	6	83	72	320
45-53A	3382	1352	1138	1305	7177
45-53B	255	47	98	60	460
45-54	202	17	107	94	420
45-91	118	25	16	12	171
45-92	80	34	34	14	162
45-93	3430	1351	1170	1330	7281
46-21A	11054	9780	1147	2142	24123
46-21C	1832	1304	294	358	3788
46-22AX	11054	9780	1147	2142	24123
46-22AY	110	28	14	28	180
46-22B	1919	1303	309	381	3912
46-22C	692	905	65	168	1830
46-22D	692	905	65	168	1830
46-22E	692	905	65	168	1830
46-25A	14013	17977	117	6494	38601
46-25B	118	25	16	12	171
46-25C	118	25	16	12	171
46-25D	118	25	16	12	171
46-25E	118	25	16	12	171
46-26A	1832	1304	294	358	3788
46-26B	1832	1304	294	358	3788
51-11A	3051	1641	1183	1068	6943
51-11B	2940	1862	1157	1024	6983
51-11C	2940	1862	1157	1024	6983
51-11D	2695	1238	942	590	5465
51-11E	2695	1238	942	590	5465
51-11F	2695	1238	942	590	5465
51-11G	1438	1282	478	439	3637
51-11H	1438	1282	478	439	3637

APPENDIX 8.13 FUTURE TRAFFIC VOLUMES "With Project" - 2020

(8/8)

Link	Car	Jeepney	Bus	Truck	Total
51-21A	195	470	64	80	809
51-22	195	470	64	80	809
51-23A	0	0	0	0	0
51-23B	195	470	64	80	809
51-24	195	470	64	80	809
51-25	467	244	228	287	1226
51-27A	1660	485	493	176	2814
51-27B	1931	2381	630	365	5307
51-28A	1931	2381	630	365	5307
51-28B	1931	2381	630	365	5307
51-28C	440	211	49	64	764
51-29	2	0	0	1	3
51-51	79	174	1	4	258
52-11A	572	291	124	395	1382
52-11B	572	291	124	395	1382
52-11CX	397	835	89	125	1446
52-11CY	214	1330	74	29	1647
53-11A	214	1330	74	29	1647
53-11B	3414	2767	1141	1302	8624
53-11C	0	0	0	0	0
53-11D	0	0	0	0	0
53-11E	0	0	0	0	0
53-11F	2455	1937	927	873	6192
53-11G	3426	2724	1157	1181	8488
53-11H	3426	2724	1157	1181	8488
53-11I	3051	1641	1183	1068	6943
53-11J	3051	1641	1183	1068	6943
53-21	3618	3374	1215	1332	9539
53-22A	3430	1351	1170	1330	7281
53-22B	3430	1351	1170	1330	7281
53-24A	3618	3374	1215	1332	9539
53-24B	4579	5296	1079	2498	13452
53-25A	999	844	237	313	2393
53-25B	999	844	237	313	2393
53-25C	440	211	49	64	764
53-27A	1438	1054	286	377	3155
53-27B	1807	1269	392	479	3947
53-27C	256	165	5	52	478
53-28A	385	260	109	104	858
53-28B	183	131	49	51	414
53-29A	256	165	5	52	478
53-29B	6	1	0	1	8
53-30	436	296	67	103	902
53-52	1504	1153	348	389	3394
53-53	568	391	157	156	1272
53-94A	183	131	49	51	414
53-94BX	183	131	49	51	414
53-94BY	262	165	6	53	486
53-96	436	296	67	103	902
54-11A	1438	1282	478	439	3637
54-11B	1126	1237	432	494	3289
54-11C	761	1264	249	472	2746
54-11D	645	1142	212	429	2428
54-11E	645	1142	212	429	2428
54-11F	507	1025	164	361	2057
54-11G	740	900	279	401	2320
54-11H	601	552	201	265	1619
54-11I	601	552	201	265	1619
54-21	513	780	66	165	1524
54-23	172	122	45	47	386
54-24A	116	122	37	43	318
54-24B	116	122	37	43	318
54-27	143	119	48	69	379
54-28	9	2	0	2	13
54-29A	116	122	37	43	318
54-29B	9	2	0	2	13
54-30	233	462	78	136	909
54-51	79	174	1	4	258
54-52	6	1	0	1	8
54-92	2	0	0	1	3

APPENDIX FOR CHAPTER 10

APPENDIX 10.1

**LIST OF PROVINCIAL CAPITALS
AND MAJOR ACTIVITY CENTERS**



PROVINCIAL CAPITALS AND MAJOR ACTIVITY CENTERS

City/Municipality	Conformity to Criteria for Major Activity Center			
	1990	1990	Provincial	
	Population	Population Density	Capital	Population & Density
				City
				Port
				Airport
				Railway
				Station
				RIC
				Tourism
CAGAYAN				
Aparri	51635	188		*
Santa Ana	17614	116		*
Tuguegarao	94767	611	*	*
ISABELA				
Cauayan	83591	220	*	*
Ilagan	99120	71	*	*
NUEVA VIZCAYA				
Bagabag	26028	101		*
Bayombong	39886	249	*	
QUIRINO				
Cabarroguis	21793	91	*	
BATAAN				
Bagac	18241	79		*
Balanga	51512	311		
Dinalupihan	58172	1304	*	
Limay	32629	315		*
Mariveles	60761	395		*
BULACAN				
Baliuag	89719	1989		*
Bocaue	67243	832		*
Calumpit	59042	1321		*
Malolos	125178	1492		*
Marilao	56361	2348	*	*
Meycauayan	123982	5188		*
Plaridel	52954	1217		*
San Jose del Monte	142047	1671		*
Sta. Maria	91468	1161		*
NUEVA ECIJA				
Cabanatuan City	173065	898		*
Gapan	70489	525	*	*
Guimba	73363	776	*	*
Palayan City	20393	573	*	*
San Jose City	82836	459	*	*
Talavera	77256	691	*	*

PROVINCIAL CAPITALS AND MAJOR ACTIVITY CENTERS

Conformity to Criteria for Major Activity Center								
City/Municipality	1990		Provincial Capital	Population & Density	City	Port Airport Railway Station	RIC	Tourism
	Population	Density						
PAMPANGA								
Angeles City	236685	3925		*	*			
Apalit	62373	1014		*				
Arayat	73189	543		*				
Bacolor	67259	938		*				
Floridablanca	66146	529		*				
Guagua	88290	1417		*				
Lubao	99705	640		*				
Mabalacat	121115	794		*				
Macabebe	55505	1261		*				
Mexico	69441	591		*				
San Fernando	157851	1944	*	*				
TARLAC								
Paniqui	64949	555		*				
Tarlac	208722	560	*	*				
ZAMBALES								
Candelaria	18539	42						*
Iba	29221	190	*			*		*
Masinloc	32375	126						*
Olongapo City	193327	1872		*	*			*
Santa Cruz	41273	100						*
Subic	46929	168				*		
AURORA								
Baler	24689	184	*					
BATANGAS								
Batangas City	184970	654	*	*	*	*	*	*
Bauan	59258	890		*				
Lemery	53932	531		*				
Lipa City	160117	765		*				
Santo Tomas	58209	639		*				
Tanauan	92754	865		*				

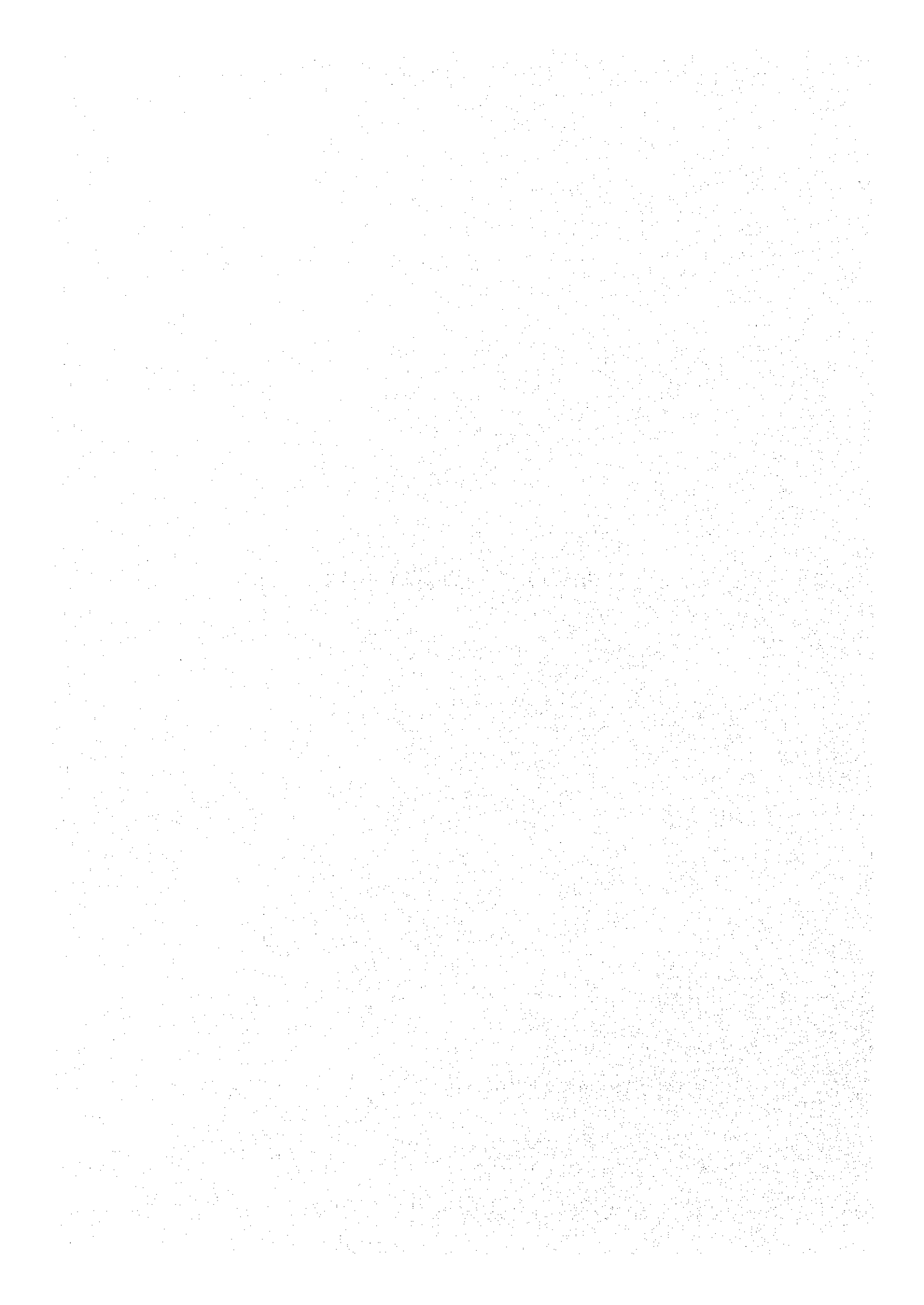
PROVINCIAL CAPITALS AND MAJOR ACTIVITY CENTERS

City/Municipality	1990		Provincial		Conformity to Criteria for Major Activity Center					
	Population	Population Density	Capital	Population & Density	City	Port	Airport	Railway Station	RIC	Tourism
CAVITE										
Bacoor	159685	3793		*					*	
Cavite City	91641	7766		*	*				*	
Dasmariñas	136556	1657		*						
Gen. Alvarez	65977	7019		*						
Imus	92125	950		*						
Kawit	47755	3564		*					*	
Naic	51629	600		*					*	
Noveleta	20409	3644		*					*	
Rosario	45405	12613		*					*	
Silang	93790	900		*						*
Tagaytay City	23739	321		*	*				*	
Tanza	61785	642		*						*
Ternate	11981	275		*					*	
Trece Martires City	15686	401		*	*				*	
LAGUNA										
Binan	134553	3093		*						
Cabuyao	66975	792		*						
Calamba	173453	1198		*						
Los Banos	66211	1172		*						
Pagsanjan	25024	948		*						*
San Pablo City	161630	755		*	*				*	
San Pedro	156486	6924		*					*	
Santa Cruz	76603	1985		*						
Santa Rosa	94719	2422		*						
QUEZON										
Lucena City	150624	2215		*	*				*	
Plaridel	7473	226		*		*				
Tagkawayan	40221	63		*					*	
Tiaong	60662	523		*						
RIZAL										
Antipolo	207842	679		*					*	
Binangonan	127561	1755		*					*	
Cainta	126839	12435		*					*	
San Mateo	82310	1268		*					*	
Taytay	112403	2897		*					*	

PROVINCIAL CAPITALS AND MAJOR ACTIVITY CENTERS

City/Municipality	Conformity to Criteria for Major Activity Center									
	1990	1990	Provincial	1990	1990					
	Population	Population Density	Capital	Population & Density	City	Port	Airport	Railway Station	RIC	Tourism
ALBAY										
Daraga	83928	708	*	*	*	*	*	*	*	*
Legaspi City	121116	788	*	*	*	*	*	*	*	*
Polangui	61556	424	*	*	*	*	*	*	*	*
Tabaco	85697	736	*	*	*	*	*	*	*	*
CAMARINES NORTE										
Daet	66477	326	*	*	*	*	*	*	*	*
CAMARINES SUR										
Del Gallego	17047	59						*	*	*
Iriga City	74269	621		*	*	*	*	*	*	*
Libmanan	77565	231		*	*	*	*	*	*	*
Nabua	60885	633		*	*	*	*	*	*	*
Naga City	115329	1488		*	*	*	*	*	*	*
Pasacao	31960	214			*	*	*	*	*	*
Pili	52481	416	*	*	*	*	*	*	*	*
Ragay	41438	152			*	*	*	*	*	*
Sipocot	49501	234			*	*	*	*	*	*
SORSOGON										
Bulan	66450	338			*	*	*	*	*	*
Matnog	25957	160			*	*	*	*	*	*
Sorsogon	72871	387	*	*	*	*	*	*	*	*

APPENDIX FOR CHAPTER 12



APPENDIX 12.1 MINIMUM DESIGN STANDARD PHILIPPINE HIGHWAYS

ADT AVERAGE DAILY TRAFFIC ON OPENING	UNDER 200		200-400		400-1000		1000-2000		MORE THAN 2000		
	MINIMUM	DESIRABLE	MINIMUM	DESIRABLE	MINIMUM	DESIRABLE	MINIMUM	DESIRABLE	MINIMUM	DESIRABLE	
DESIGN SPEED (km/h)											
FLAT TOPOGRAPHY	60	70	70	90	80	95	90	100	90	100	
ROLLING TOPOGRAPHY	40	50	60	80	60	80	70	90	70	90	
MOUNTAINOUS TOPOGRAPHY	30	40	40	50	50	60	60	70	60	70	
RADIUS (metre)											
FLAT TOPOGRAPHY	120	160	160	280	220	320	260	350	260	350	
ROLLING TOPOGRAPHY	55	85	120	220	120	220	160	280	160	280	
MOUNTAINOUS TOPOGRAPHY	30	50	50	80	80	120	180	160	180	160	
GRADE (PERCENT)											
FLAT TOPOGRAPHY	6.0	6.0	5.0	3.0	4.0	3.0	4.0	3.0	4.0	3.0	
ROLLING TOPOGRAPHY	8.0	7.0	6.0	5.0	5.0	5.0	5.0	4.0	5.0	4.0	
MOUNTAINOUS TOPOGRAPHY	10.0	9.0	8.0	6.0	7.0	6.0	7.0	5.0	7.0	5.0	
PAVEMENT WIDTH (m)	4.0	5.5; 6.0	6.10	6.70	6.70	6.70	6.70	7.30	6.70	7.30	
SHOULDER WIDTH (m)	0.50	1.00	1.50	2.00	2.50	3.00	3.00	3.00	3.00	3.00	
RIGHT-OF-WAY WIDTH (m)	20	30	30	30	30	30	60	60	30	60	
SUPERELEVATION (m/m)	0.10 (max.)		0.10 (max.)		0.10 (max.)		0.10 (max.)		0.10 (max.)		
NON PASSING SIGHT DISTANCE (metre)											
FLAT TOPOGRAPHY	70	90	90	135	115	150	135	160	135	160	
ROLLING TOPOGRAPHY	40	60	70	115	70	115	90	135	90	135	
MOUNTAINOUS TOPOGRAPHY	40	40	40	60	60	70	70	90	70	90	
PASSING SIGHT DISTANCE (metre)											
FLAT TOPOGRAPHY	420	490	490	615	560	645	615	675	615	675	
ROLLING TOPOGRAPHY	270	350	420	560	420	560	490	615	490	615	
MOUNTAINOUS TOPOGRAPHY	190	270	270	350	360	420	420	490	420	490	
TYPE OF SURFACING											
	GRAVEL, CRUSHED GRAVEL OR CRUSHED STONE BIT PRESERVATIVE TREATMENT, SINGLE OR DOUBLE BIT. SURFACE TREATMENT BITUMINOUS MACADAM PAVEMENT			BITUMINOUS MACADAM PAVEMENT, DENSE OR OPEN GRADED PLANT MIX SURFACE COURSE. BITUMINOUS CONCRETE SURFACE COURSE			BITUMINOUS CONCRETE SURFACE COURSE			BITUMINOUS CONCRETE SURFACE COURSE, PORTLAND CEMENT CONCRETE PAVEMENT	

APPENDIX 12.2 LAND ACQUISITION COSTS (1)

Group No.	Link Length (km)	Type of Project	R.O.W. (m)	Areas (m ²)	Unit Cost (P/m ²)	R.O.W. Cost (₱)
2	57.252	WO2	6.0	343,512	5.00	1,717,560
3	65.850	WO2	6.0	395,100	5.00	1,975,500
7	19.150	WO2	6.0	114,900	5.00	574,500
8	48.106	WO2	6.0	288,636	5.00	1,443,180
9	46.420	WO2	6.0	278,520	5.00	1,392,600
10	20.350	WO2	6.0	122,100	5.00	610,500
11	64.188	WO2	6.0	385,128	5.00	1,925,640
12	27.188	WO2	6.0	163,128	5.00	815,640
13	72.025	WO2	6.0	432,150	5.00	2,160,750
14	39.100	WO2	6.0	234,600	5.00	1,173,000
15	42.820	WO2	6.0	256,920	5.00	1,284,600
16	0.300	WO2	6.0	1,800	5.00	9,000
17	100.469	WO2	6.0	602,814	5.00	3,014,070
18	23.905	WO2	6.0	143,430	5.00	717,150
19	35.565	WO2	6.0	213,390	5.00	1,066,950
20	1.242	WO2	6.0	7,452	5.00	37,260
21	28.100	WO2	6.0	168,600	5.00	843,000
	23.000	NO2	30.0	690,000	5.00	3,450,000
22	19.200	WO2	6.0	115,200	5.00	576,000
	47.000	NO2	30.0	1,410,000	5.00	7,050,000
23	104.964	WO2	11.0	1,154,604	20.00	23,092,080
24	3.381	WO4	11.0	37,191	200.00	7,438,200
26	55.268	WO4	11.0	607,948	20.00	12,158,960
	6.141	WO4	11.0	67,551	200.00	13,510,200
					Sub-Total:	88,036,340

APPENDIX 12.2 LAND ACQUISITION COSTS (2)

Group No.	Link Length (km)	Type of Project	R.O.W. (m)	Areas (m ²)	Unit Cost (P/m ²)	R.O.W. Cost (P)
27	55.338	WO4	11.0	608,718	20.00	12,174,360
	2.912	WO4	11.0	32,032	200.00	6,406,400
28	46.851	WO2	6.0	281,106	5.00	1,405,530
	5.206	WO2	6.0	31,236	20.00	624,720
30	20.518	WO4	11.0	225,698	20.00	4,513,960
	2.280	WO4	11.0	25,080	200.00	5,016,000
31	18.135	WO4	11.0	199,485	20.00	3,989,700
	4.534	WO4	11.0	49,874	200.00	9,974,800
33	0.391	WO2	6.0	2,346	200.00	469,200
34	21.715	NE4	6.0	1,302,900	20.00	26,058,000
35	20.004	NE4	6.0	1,200,240	20.00	24,004,800
43	0.700	WO2	6.0	4,200	20.00	84,000
45	4.170	WO2	6.0	25,020	5.00	125,100
47	29.940	NO2	30.0	898,200	5.00	4,491,000
61	11.000	WO2	6.0	66,000	5.00	330,000
63	5.930	WO2	6.0	35,580	5.00	177,900
64	156.500	NO2	30.0	4,695,000	5.00	23,475,000
71	7.849	WO2	6.0	47,094	5.00	235,470
	47.500	NO2	30.0	1,425,000	5.00	7,125,000
72	4.992	NO2	6.0	29,952	5.00	149,760
73	107.974	NO2	30.0	3,239,220	5.00	16,196,100
74	40.000	NO2	30.0	1,200,000	5.00	6,000,000
78	7.3	WO2	6.0	43,800	10.00	438,000
79	23.500	NO2	30.0	705,000	5.00	3,525,000
	29.250	WO2	6.0	175,500	5.00	877,500
					Sub-Total:	157,867,300

APPENDIX 12.2 LAND ACQUISITION COSTS (3)

Group No.	Link Length (km)	Type of Project	R.O.W. (m)	Areas (m ²)	Unit Cost (P/m ²)	R.O.W. Cost (₱)
80	36.469	WO2	6.0	218,814	5.00	1,094,070
82	26.180	WO4	11.0	287,980	10.00	2,879,800
83	24.335	WO4	11.0	267,685	10.00	2,676,850
84	39.684	WO4	11.0	436,524	10.00	4,365,240
87	3.200	WO2	6.0	19,200	5.00	96,000
	34.900	NO2	30.0	1,047,000	5.00	5,235,000
90	13.062	NE4	60.0	783,720	35.00	27,430,200
91	31.085	NE4	60.0	1,865,100	20.00	37,302,000
93	21.161	WO4	11.0	232,771	35.00	8,146,985
	4.627	NO4	60.0	277,620	20.00	5,552,400
98	6.983	NO2	60.0	418,980	20.00	8,379,600
99	31.627	NO4	60.0	1,897,620	20.00	37,952,400
100	12.971	WO4	11.0	142,681	20.00	2,853,620
102	3.416	WO4	11.0	37,576	200.00	7,515,200
	21.513	NO4	60.0	1,290,780	20.00	25,815,600
104	6.232	WO4	11.0	68,552	20.00	1,371,040
	9.594	NO4	60.0	575,640	20.00	11,512,800
110	39.772	WO2	6.0	238,632	5.00	1,193,160
111	6.465	WO2	6.0	38,790	5.00	193,950
112	9.300	WO2	6.0	55,800	20.00	1,116,000
113	11.148	NO4	60.0	668,880	20.00	13,377,600
115	16.129	NO4	60.0	967,740	20.00	19,354,800
119	8.990	NO2	30.0	269,700	20.00	5,394,000
120	12.453	NO4	60.0	747,180	20.00	14,943,600
					Sub-Total:	245,751,915

APPENDIX 12.2 LAND ACQUISITION COSTS (4)

Group No.	Link Length (km)	Type of Project	R.O.W. (m)	Areas (m ²)	Unit Cost (P/m ²)	R.O.W. Cost (P)
121	17.772	NE4	60.0	1,066,320	20.00	21,326,400
122	21.291	NE4	60.0	1,277,460	20.00	25,549,200
123	10.425	NE4	60.0	625,500	20.00	12,510,000
124	11.196	NE4	60.0	671,760	20.00	13,435,200
127	48.965	NO2	30.0	1,468,950	5.00	7,344,750
130	1.364	NO2	30.0	40,920	20.00	818,400
131	3.030	NO2	30.0	90,900	20.00	1,818,000
133	52.420	WO2	6.0	314,520	20.00	6,290,400
134	56.306	WO2	6.0	337,836	20.00	6,756,720
135	89.910	NO2	30.0	2,697,300	5.00	13,486,500
	6.500	WO2	6.0	39,000	20.00	780,000
136	118.700	NO2	30.0	3,561,000	5.00	17,805,000
137	27.905	NE4	60.0	1,674,300	35.00	58,600,500
138	19.766	NE4	60.0	1,185,960	35.00	41,508,600
142	3.300	WO4	11.0	36,300	200.00	7,260,000
144	1.670	WO2	6.0	10,020	20.00	200,400
	40.300	NO2	30.0	1,209,000	5.00	6,045,000
148	6.137	WO2	6.0	36,822	5.00	184,110
149	5.637	WO2	6.0	33,822	20.00	676,440
	30.600	NO2	30.0	918,000	10.00	9,180,000
152	14.420	WO2	6.0	86,520	20.00	1,730,400
	29.300	NO2	30.0	879,000	20.00	17,580,000
154	10.105	NE4	60.0	606,300	35.00	21,220,500
155	16.633	WO4	11.0	182,963	200.00	36,592,600
					Sub-Total:	328,699,120

APPENDIX 12.2 LAND ACQUISITION COSTS (5)

Group No.	Link Length (km)	Type of Project	R.O.W. (m)	Areas (m ²)	Unit Cost (P/m ²)	R.O.W. Cost (P)
156	22.399	WO4	11.0	246,389	35.00	8,623,615
157	5.410	WO4	11.0	59,510	200.00	11,902,000
160	24.510	WO4	11.0	269,610	35.00	9,436,350
162	11.036	WO4	11.0	121,396	10.00	1,213,960
166	16.206	NO2	30.0	486,180	5.00	2,430,900
169	14.695	NE4	60.0	881,700	35.00	30,859,500
170	14.918	NE4	60.0	895,080	35.00	31,327,800
171	1.798	WO4	11.0	19,778	200.00	3,955,600
177	5.010	WO2	6.0	30,060	5.00	150,300
180	18.900	WO2	6.0	113,400	5.00	567,000
181	5.850	WO2	6.0	35,100	5.00	175,500
	36.000	NO2	30.0	1,080,000	5.00	5,400,000
182	37.100	NO4	60.0	2,226,000	35.00	77,910,000
183	12.432	NE4	60.0	745,920	35.00	26,107,200
	3.108	NE4	60.0	186,480	200.00	37,296,000
184	16.180	NE4	60.0	970,800	20.00	19,416,000
185	24.327	WO4	11.0	267,597	20.00	5,351,940
	3.603	NO4	60.0	216,180	5.00	1,080,900
186	12.579	WO4	11.0	138,369	5.00	691,845
	1.294	NO4	60.0	77,640	5.00	388,200
187	32.209	WO4	11.0	354,299	35.00	12,400,465
	20.478	NO4	60.0	1,228,680	5.00	6,143,400
190	12.000	WO2	6.0	72,000	20.00	1,440,000
191	10.900	WO2	6.0	65,400	10.00	654,000
					Sub-Total:	294,922,475

APPENDIX 12.2 LAND ACQUISITION COSTS (6)

Group No.	Link Length (km)	Type of Project	R.O.W. (m)	Areas (m ²)	Unit Cost (P/m ²)	R.O.W. Cost (P)
192	13.700	WO2	6.0	82,200	10.00	822,000
193	60.282	WO2	6.0	361,692	10.00	3,616,920
194	15.962	WO2	6.0	95,772	5.00	478,860
195	29.770	WO2	6.0	178,620	5.00	893,100
196	6.900	WO2	6.0	41,400	5.00	207,000
	54.100	NO2	30.0	1,623,000	5.00	8,115,000
197	35.570	WO2	6.0	213,420	5.00	1,067,100
198	21.060	NO2	30.0	631,800	5.00	3,159,000
199	25.200	WO4	11.0	277,200	5.00	1,386,000
	41.960	NO4	60.0	2,517,600	5.00	12,588,000
200	1.500	WO2	6.0	9,000	20.00	180,000
	31.200	NO2	30.0	936,000	5.00	4,680,000
201	81.800	NO2	30.0	2,454,000	5.00	12,270,000
202	5.500	WO4	11.0	60,500	20.00	1,210,000
203	13.800	WO2	6.0	82,800	10.00	828,000
	44.700	NO2	30.0	1,341,000	5.00	6,705,000
204	37.200	NO4	60.0	2,232,000	10.00	22,320,000
205	0.695	NO2	30.0	20,850	20.00	417,000
206	18.930	WO4	11.0	208,230	1,500.00	312,345,000
211	42.100	WO2	6.0	252,600	10.00	2,526,000
	16.600	NO2	30.0	498,000	5.00	2,490,000
212	6.900	WO2	6.0	41,400	20.00	828,000
214	22.840	WO2	6.0	137,040	5.00	685,200
215	29.700	WO2	6.0	178,200	5.00	891,000
	20.000	NO2	30.0	600,000	5.00	3,000,000
					Sub-Total:	403,708,180

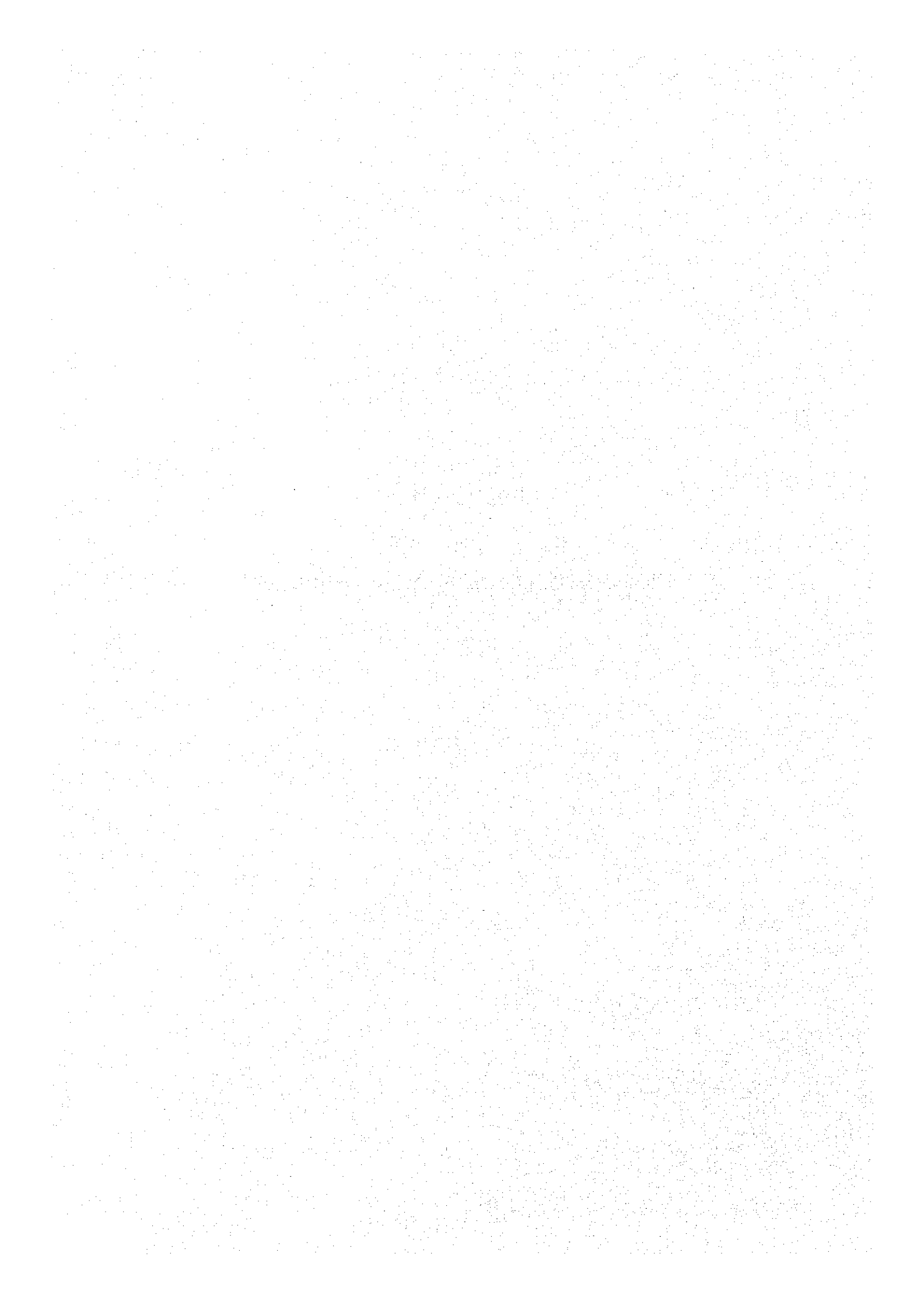
APPENDIX 12.2 LAND ACQUISITION COSTS (7)

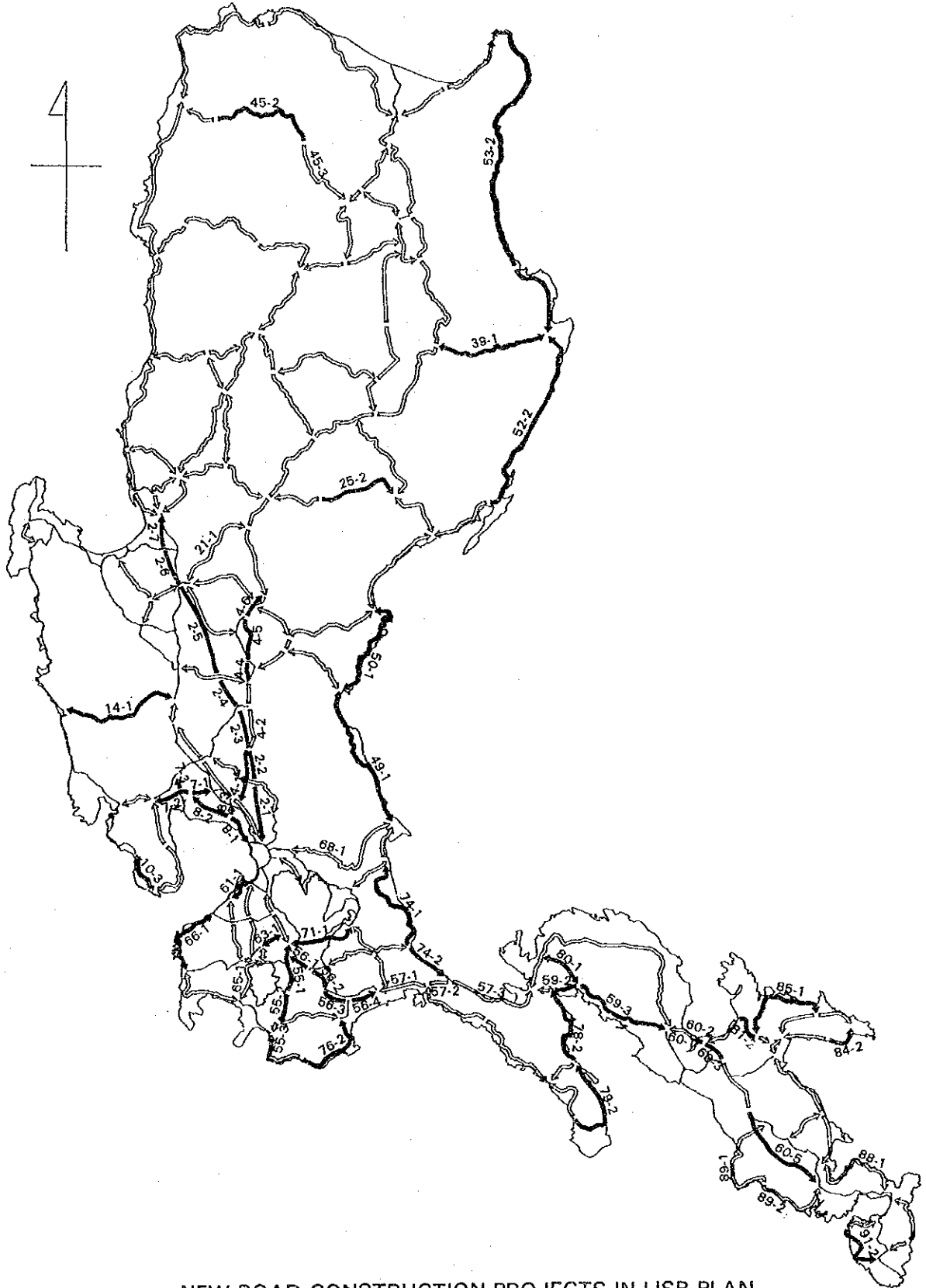
Group No.	Link Length (km)	Type of Project	R.O.W. (m)	Areas (m ²)	Unit Cost (P/m ²)	R.O.W. Cost (P)
216	21.983	WO2	6.0	131,898	5.00	659,490
217	57.534	NO4	60.0	3,452,040	20.00	69,040,800
219	31.851	WO4	11.0	350,361	20.00	7,007,220
220	12.935	WO4	11.0	142,285	20.00	2,845,700
222	6.113	NO4	60.0	366,780	20.00	7,335,600
223	19.821	WO2	6.0	118,926	20.00	2,378,520
224	2.400	WO2	6.0	14,400	20.00	288,000
228	48.000	WO2	6.0	288,000	5.00	1,440,000
229	8.600	WO2	6.0	51,600	5.00	258,000
230	63.000	NO2	30.0	1,890,000	5.00	9,450,000
231	36.725	WO2	6.0	220,350	5.00	1,101,750
232	32.730	WO2	6.0	196,380	5.00	981,900
233	15.000	NO2	30.0	450,000	5.00	2,250,000
234	20.000	NO2	30.0	600,000	5.00	3,000,000
241	20.032	WO2	6.0	120,192	20.00	2,403,840
242	19.100	WO2	6.0	114,600	10.00	1,146,000
243	15.808	WO2	6.0	94,848	5.00	474,240
245	22.726	NO2	30.0	681,780	5.00	3,408,900
						Sub-Total: 133,102,760
						Grand Total: 1,652,088,090

APPENDIX FOR CHAPTER 15

APPENDIX 15.1

INITIAL ENVIRONMENTAL ASSESSMENT





NEW ROAD CONSTRUCTION PROJECTS IN LISR PLAN

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 2 : New North Luzon Expressway				
Segment	Province	Length (km)	Terrain	Project Type
2-1	Metro Manila/Bulacan	33.7	Flat	New Construction of 186.6 km 4-lane Expressway
2-2	Bulacan	16.4	Flat	
2-3	Nueva Ecija	23.9	Flat	
2-4	Nueva Ecija	19.8	Flat	
2-5	Nueva Ecija/Pangasinan	53.1	Flat	
2-6	Pangasinan	20.9	Flat	
2-7	Pangasinan	18.8	Rolling	

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	D	Material covering Water spraying Minimizing Traffic	D	Plantation Buffer zones	
	Water Pollution	C		D	Management system Urban planning	
	Noise Pollution	D	Regulations Low-noise machinery	D	Low-noise surface Plantation Noise barriers	
	Vibration	D	Regulations Low-vibration machinery	D	Regulations	
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	D	Soft ground treatment and soil stabilization	C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	C		C		
Socio- economical Environment	Population Change	C		B		
	Resettlement	D	Compensation Relocation scheme	C		
	Ethnic Groups	C		C		
	Community Cohesion	C		D	Crossing facilities	
	Land-use Pattern	C		B		
	Industrial Activity	C		A		
	Employment & Income	B		A		
	Traffic Build-up	D	Management plan Detouring	A		
	Traffic Safety	D	Management plan Safety measures	A		
Archaeology	C		A			

Assessment: A : High Positive Impact C : No Impact D : Low Negative Impact
 B : Low Positive Impact E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 7 : Manila-Bataan Coastal Road, North				
Segment	Province	Length (km)	Terrain	Project Type
7-1	Bulacan	12.3	Flat	New Construction of 33.7 km 4-Lane Ordinary Road
7-2	Pampanga	21.5	Flat	
7-3	Pampanga	9.0	Flat	

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	D	Material covering Water spraying Minimizing Traffic	D	Plantation Buffer zones	
	Water Pollution	C		D	Management system Urban planning	
	Noise Pollution	D	Regulations Low-noise machinery	D	Low-noise surface Plantation	
	Vibration	D	Regulations Low-vibration machinery	D	Regulations	
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	C		C		
Socio- economical Environment	Population Change	C		B		
	Resettlement	D	Compensation Relocation scheme	C		
	Ethnic Groups	C		C		
	Community Cohesion	C		D	Crossing facilities	
	Land-use Pattern	C		A		
	Industrial Activity	C		B		
	Employment & Income	B		A		
	Traffic Build-up	C		B		
	Traffic Safety	D	Management plan Safety measures	B		
	Archaeology	C		C		

Assessment:

A : High Positive Impact
B : Low Positive Impact

C : No Impact

D : Low Negative Impact
E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 8 : Manila-Bataan Coastal Road, South				
Segment	Province	Length (km)	Terrain	Project Type
8-1	Metro Manila/Bulacan	19.0	Flat	New Construction of 44.7 km 4-Lane Ordinary Road
8-2	Bulacan	25.7	Flat	
8-3	Bulacan	7.0	Flat	

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	D	Material covering Water spraying Minimizing Traffic	D	Plantation Buffer zones	
	Water Pollution	C		D	Management system Urban planning	
	Noise Pollution	D	Regulations Low-noise machinery	D	Low-noise surface Plantation	
	Vibration	D	Regulations Low-vibration machinery	D	Regulations	
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	D	Soft ground treatment and soil stabilization	C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	C		C		
Socio-economical Environment	Population Change	C		A		
	Resettlement	D	Compensation Relocation scheme	C		
	Ethnic Groups	C		C		
	Community Cohesion	C		D	Crossing facilities	
	Land-use Pattern	C		A		
	Industrial Activity	C		A		
	Employment & Income	B		A		
	Traffic Build-up	C		B		
	Traffic Safety	D	Management plan Safety measures	B		
Archaeology	C		C			

Assessment:

A : High Positive Impact
B : Low Positive Impact

C : No Impact

D : Low Negative Impact
E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 10 : Dinalupihan-Mariveles-Bagac Road				
Segment	Province	Length (km)	Terrain	Project Type
10-1	Bataan	24.3		
10-2	Bataan	39.7		
* 10-3	Bataan	38.9	Rolling	New Construction of 34.9 km 2-Lane Ordinary Road
* Subject to Assessment				

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	D	Material covering Water spraying Minimizing Traffic	C		
	Water Pollution	C		C		
	Noise Pollution	D	Regulations Low-noise machinery	C		
	Vibration	C		C		
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	C		C		
Socio- economical Environment	Population Change	C		A		
	Resettlement	C		C		
	Ethnic Groups	C		C		
	Community Cohesion	C		C		
	Land-use Pattern	C		B		
	Industrial Activity	C		A		
	Employment & Income	B		A		
	Traffic Build-up	D	Management plan Detouring	C		
	Traffic Safety	D	Management plan Safety measures	B		
	Archaeology	C		C		

Assessment: A : High Positive Impact C : No Impact D : Low Negative Impact
 B : Low Positive Impact E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 14 : Capas-Botolan Road				
Segment	Province	Length (km)	Terrain	Project Type
14-1	Tarlac/Zambales	81.8	Mountainous/Rolling	New Construction of 49.0 km 2-Lane Ordinary Road

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	D	Material covering Water spraying Minimizing Traffic	C		
	Water Pollution	C		C		
	Noise Pollution	C		C		
	Vibration	C		C		
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	D	Protection plan	C		
Socio-economical Environment	Population Change	C		C		
	Resettlement	C		C		
	Ethnic Groups	D	Educational program Relocation scheme	D	Educational program Relocation scheme	
	Community Cohesion	C		C		
	Land-use Pattern	C		C		
	Industrial Activity	C		C		
	Employment & Income	B		B		
	Traffic Build-up	C		B		
	Traffic Safety	C		B		
Archaeology	C		C			

Assessment: A : High Positive Impact C : No Impact D : Low Negative Impact
 B : Low Positive Impact E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 21 : Rosales-Sta. Fe Road				
Segment	Province	Length (km)	Terrain	Project Type
21-1	Pangasinan/Nueva Vizcaya	76.0	Mountainous	New Construction of 29.9 km 2-Lane Ordinary Road

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	C		C		
	Water Pollution	C		C		
	Noise Pollution	C		C		
	Vibration	C		C		
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	C		C		
Socio- economical Environment	Population Change	C		B		
	Resettlement	C		C		
	Ethnic Groups	E	Educational program Relocation scheme	E	Educational program Relocation scheme	
	Community Cohesion	C		D	Crossing facilities	
	Land-use Pattern	C		B		
	Industrial Activity	C		C		
	Employment & Income	B		B		
	Traffic Build-up	C		B		
	Traffic Safety	C		B		
	Archaeology	C		B		

Assessment: A : High Positive Impact C : No Impact D : Low Negative Impact
 B : Low Positive Impact E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 39 : Naguilian-Palanan Road					
Segment	Province	Length (km)	Terrain	Project Type	
39-1	Isabela	79.0	Mountainous/Rolling	New Construction of 47.5 km 2-Lane Ordinary Road	

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	D	Material covering Water spraying Minimizing Traffic	C		
	Water Pollution	C		C		
	Noise Pollution	C		C		
	Vibration	C		C		
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	D	Protection plan	D	Protection plan	
Socio- economical Environment	Population Change	C		C		
	Resettlement	C		C		
	Ethnic Groups	C		C		
	Community Cohesion	C		C		
	Land-use Pattern	C		B		
	Industrial Activity	C		C		
	Employment & Income	B		B		
	Traffic Build-up	C		B		
	Traffic Safety	C		B		
Archaeology	C		C			

Assessment:
 A : High Positive Impact
 C : No Impact
 D : Low Negative Impact

 B : Low Positive Impact
 E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 45 : San Nicholas-Abbut Road						
Segment	Province	Length (km)	Terrain	Project Type		
45-1	Ilocos Norte	27.2	Mountainous	New Construction of 70.0 km 2-Lane Ordinary Road		
* 45-2	Kalinga-Apayao	70.9				
* 45-3	Kalinga-Apayao	103.0				
* Subject to Assessment						

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	C		C		
	Water Pollution	C		C		
	Noise Pollution	C		C		
	Vibration	C		C		
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	D	Protection plan	D	Protection plan	
Socio- economical Environment	Population Change	C		C		
	Resettlement	C		C		
	Ethnic Groups	C		C		
	Community Cohesion	C		C		
	Land-use Pattern	C		C		
	Industrial Activity	C		C		
	Employment & Income	B		B		
	Traffic Build-up	C		B		
	Traffic Safety	C		B		
Archaeology	C		B			

Assessment: A : High Positive Impact C : No Impact D : Low Negative Impact
 B : Low Positive Impact E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 49 : Infanta-Dingalan Road				
Segment	Province	Length (km)	Terrain	Project Type
49-1	Aurora/Quezon	101.5	Mountainous/Rolling	New Construction of 89.9 km 2-Lane Ordinary Road

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical	Air Pollution	C		C		
	Water Pollution	C		C		
	Noise Pollution	C		C		
	Vibration	C		C		
Environment	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	C		C		
Socio- economical Environment	Population Change	C		B		
	Resettlement	C		C		
	Ethnic Groups	C		C		
	Community Cohesion	C		C		
	Land-use Pattern	C		B		
	Industrial Activity	C		C		
	Employment & Income	B		B		
	Traffic Build-up	C		B		
	Traffic Safety	C		B		
Archaeology	C		B			

Assessment: A : High Positive Impact C : No Impact D : Low Negative Impact
 B : Low Positive Impact E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 50 : Dingalan-Baler Road				
Segment	Province	Length (km)	Terrain	Project Type
50-1	Aurora	118.7	Mountainous	New Construction of 2-Lane Ordinary Road

Check Item	During Construction		After Completion		Remarks
	Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	C		C	
	Water Pollution	C		C	
	Noise Pollution	C		C	
	Vibration	C		C	
	Soil Contamination	D	Waste disposal plan	C	
	Land Subsidence	C		C	
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C	
	Ecosystems	C		C	
Socio- economical Environment	Population Change	C		C	
	Resettlement	C		C	
	Ethnic Groups	C		C	
	Community Cohesion	C		C	
	Land-use Pattern	C		B	
	Industrial Activity	C		C	
	Employment & Income	B		B	
	Traffic Build-up	C		B	
	Traffic Safety	C		B	
	Archaeology	C		B	

Assessment: A : High Positive Impact C : No Impact D : Low Negative Impact
 B : Low Positive Impact E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 52 : Dinalongan-Palanan Road						
Segment	Province	Length (km)	Terrain	Project Type		
52-1	Aurora	56.3				
* 52-2	Isabela/Aurora	115.5	Mountainous/Rolling	New Construction of 108.0 km 2-Lane Ordinary Road		
* Subject to Assessment						

Check Item	During Construction		After Completion		Remarks
	Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical	Air Pollution	C		C	
	Water Pollution	C		C	
	Noise Pollution	C		C	
	Vibration	C		C	
Environment	Soil Contamination	D	Waste disposal plan	C	
	Land Subsidence	C		C	
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C	
	Ecosystems	D	Protection plan	D	Protection plan
Socio- economical Environment	Population Change	C		C	
	Resettlement	C		C	
	Ethnic Groups	C		C	
	Community Cohesion	C		C	
	Land-use Pattern	C		B	
	Industrial Activity	C		C	
	Employment & Income	B		B	
	Traffic Build-up	C		B	
	Traffic Safety	C		B	
	Archaeology	C		B	

Assessment:
 A : High Positive Impact
 C : No Impact
 D : Low Negative Impact

 B : Low Positive Impact

 E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 53 : Palanan-Sta. Ana Road				
Segment	Province	Length (km)	Terrain	Project Type
* 53-1	Isabela	50.0		
* 53-2	Cagayan	156.5	Mountainous/Rolling	New Construction of 196.5 km 2-Lane Ordinary Road
* Subject to Assessment				

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	C		C		
	Water Pollution	C		C		
	Noise Pollution	C		C		
	Vibration	C		C		
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	D	Protection plan	D	Protection plan	
Socio- economical Environment	Population Change	C		C		
	Resettlement	C		C		
	Ethnic Groups	C		C		
	Community Cohesion	C		C		
	Land-use Pattern	C		B		
	Industrial Activity	C		C		
	Employment & Income	B		B		
	Traffic Build-up	C		C		
	Traffic Safety	C		B		
	Archaeology	C		B		

Assessment:

A : High Positive Impact
B : Low Positive Impact

C : No Impact

D : Low Negative Impact
E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 61 : Manila-Cavite Expressway				
Segment	Province	Length (km)	Terrain	Project Type
61-1	Cavite	15.7	Flat	New Construction of 4-Lane Expressway

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	D	Material covering Water spraying Minimizing Traffic	D	Plantation Buffer zones	
	Water Pollution	C		C		
	Noise Pollution	D	Regulations Low-noise machinery	D	Low-noise surface Plantation Noise barriers	
	Vibration	D	Regulations Low-vibration machinery	D	Regulations	
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	C		C		
Socio- economical Environment	Population Change	C		B		
	Resettlement	D	Compensation Relocation scheme	C		
	Ethnic Groups	C		C		
	Community Cohesion	C		D	Crossing facilities	
	Land-use Pattern	C		B		
	Industrial Activity	C		A		
	Employment & Income	B		A		
	Traffic Build-up	D	Management plan Detouring	A		
	Traffic Safety	D	Management plan Safety measures	A		
Archaeology	C		A			

Assessment: A : High Positive Impact C : No Impact D : Low Negative Impact
 B : Low Positive Impact E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 65 : Talisay-Lemery Road				
Segment	Province	Length (km)	Terrain	Project Type
65-1	Batangas	42.2	Rolling	New Construction of 13.5 km 2-Lane Ordinary Road

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	D	Material covering Water spraying Minimizing Traffic	C		
	Water Pollution	C		C		
	Noise Pollution	D	Regulations Low-noise machinery	C		
	Vibration	D	Regulations Low-vibration machinery	C		
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	C		C		
Socio- economical Environment	Population Change	C		B		
	Resettlement	C		C		
	Ethnic Groups	C		C		
	Community Cohesion	C		C		
	Land-use Pattern	C		A		
	Industrial Activity	C		A		
	Employment & Income	B		A		
	Traffic Build-up	C		B		
	Traffic Safety	C		A		
Archaeology	C		A			

Assessment: A : High Positive Impact C : No Impact D : Low Negative Impact
 B : Low Positive Impact E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 68 : Marikina-Infanta Road				
Segment	Province	Length (km)	Terrain	Project Type
68-1	Quezon	103.7	Mountainous	New Construction of 36.0 km 2-Lane Ordinary Road

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	D	Material covering Water spraying Minimizing Traffic	C		
	Water Pollution	C		C		
	Noise Pollution	C		C		
	Vibration	C		C		
	Soil Contamination	D		C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	D	Protection plan	D	Protection plan	
Socio- economical Environment	Population Change	C		B		
	Resettlement	C		C		
	Ethnic Groups	C		C		
	Community Cohesion	C		C		
	Land-use Pattern	C		B		
	Industrial Activity	C		B		
	Employment & Income	B		A		
	Traffic Build-up	C		B		
	Traffic Safety	C		B		
Archaeology	C		B			

Assessment:

A : High Positive Impact
B : Low Positive Impact

C : No Impact

D : Low Negative Impact
E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 74 : Tiguayan-Atimonan Road					
Segment	Province	Length (km)	Terrain	Project Type	
74-1	Quezon	82.3	Mountainous	New Construction of 113.0 km 2-Lane Ordinary Road	
74-2	Quezon	32.7	Mountainous/Rolling		

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	C		C		
	Water Pollution	C		C		
	Noise Pollution	C		C		
	Vibration	C		C		
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	C		C		
Socio- economical Environment	Population Change	C		B		
	Resettlement	D	Compensation Relocation scheme	C		
	Ethnic Groups	C		C		
	Community Cohesion	C		C		
	Land-use Pattern	C		B		
	Industrial Activity	C		B		
	Employment & Income	B		B		
	Traffic Build-up	C		B		
	Traffic Safety	C		B		
	Archaeology	C		B		

Assessment:

A : High Positive Impact
B : Low Positive Impact

C : No Impact

D : Low Negative Impact
E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 76 : Batangas-San Juan Coastal Road				
Segment	Province	Length (km)	Terrain	Project Type
76-1	Batangas	40.2		
* 76-2	Batangas	47.0	Flat	New Construction of 29.3 km 2-Lane Ordinary Road
* Subject to Assessment				

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	D	Material covering Water spraying Minimizing Traffic	C		
	Water Pollution	C		C		
	Noise Pollution	C		C		
	Vibration	C		C		
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	C		C		
Socio- economical Environment	Population Change	C		B		
	Resettlement	C		C		
	Ethnic Groups	C		C		
	Community Cohesion	C		C		
	Land-use Pattern	C		B		
	Industrial Activity	C		B		
	Employment & Income	B		A		
	Traffic Build-up	C		B		
	Traffic Safety	C		B		
	Archaeology	C		A		

Assessment: A : High Positive Impact C : No Impact D : Low Negative Impact
 B : Low Positive Impact E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 78 : Mulanay-Panagon-Jinabaan Road				
Segment	Province	Length (km)	Terrain	Project Type
78-1	Quezon	29.8	Mountainous	New Construction of 44.7 km 2-Lane Ordinary Road
* 78-2	Quezon	58.5		
* Subject to Assessment				

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical	Air Pollution	D	Material covering Water spraying Minimizing Traffic	C		
	Water Pollution	C		C		
	Noise Pollution	C		C		
	Vibration	C		C		
Environment	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	C		C		
Socio- economical Environment	Population Change	C		B		
	Resettlement	C		B		
	Ethnic Groups	C		C		
	Community Cohesion	C		C		
	Land-use Pattern	C		B		
	Industrial Activity	C		C		
	Employment & Income	B		B		
	Traffic Build-up	C		B		
	Traffic Safety	C		B		
Archaeology	C		B			

Assessment: A : High Positive Impact C : No Impact D : Low Negative Impact
 B : Low Positive Impact E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 80 : San Miguel-Tagkawayan Road				
Segment	Province	Length (km)	Terrain	Project Type
80-1	Quezon	27.6	Mountainous	New Construction of 21.1 km 2-Lane Ordinary Road

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	C		C		
	Water Pollution	C		C		
	Noise Pollution	C		C		
	Vibration	C		C		
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	C		C		
Socio- economical Environment	Population Change	C		B		
	Resettlement	C		C		
	Ethnic Groups	C		C		
	Community Cohesion	C		C		
	Land-use Pattern	C		B		
	Industrial Activity	C		C		
	Employment & Income	B		B		
	Traffic Build-up	C		B		
	Traffic Safety	C		B		
Archaeology	C		C			

Assessment:

A : High Positive Impact
B : Low Positive Impact

C : No Impact

D : Low Negative Impact
E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 81 : Parigsa-Goa Road				
Segment	Province	Length (km)	Terrain	Project Type
81-1	Camarines Sur	22.4		
* 81-2	Camarines Sur	15.0	Mountainous	New Construction of 15.0 km 2-Lane Ordinary Road
81-3	Camarines Sur	10.1		
* Subject to Assessment				

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	C		C		
	Water Pollution	C		C		
	Noise Pollution	C		C		
	Vibration	C		C		
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	D	Protection plan	D	Protection plan	
Socio- economical Environment	Population Change	C		C		
	Resettlement	C		C		
	Ethnic Groups	D	Educational program Relocation scheme	D	Educational program Relocation scheme	
	Community Cohesion	C		C		
	Land-use Pattern	C		B		
	Industrial Activity	C		C		
	Employment & Income	B		B		
	Traffic Build-up	C		B		
	Traffic Safety	C		B		
Archaeology	C		C			

Assessment: A : High Positive Impact C : No Impact D : Low Negative Impact
 B : Low Positive Impact E : High Negative Impact

INITIAL ENVIRONMENTAL ASSESSMENT

Project - 89 : Mutacong-Putiao Road				
Segment	Province	Length (km)	Terrain	Project Type
89-1	Albay	76.6	Rolling	New Construction of 34.7 km 2-Lane Ordinary Road
89-2	Sorsogon	52.2	Flat	

Check Item		During Construction		After Completion		Remarks
		Assessment	Mitigating Measures	Assessment	Mitigating Measures	
Physical Environment	Air Pollution	D	Material covering Water spraying Minimizing Traffic	C		
	Water Pollution	C		C		
	Noise Pollution	C		C		
	Vibration	C		C		
	Soil Contamination	D	Waste disposal plan	C		
	Land Subsidence	C		C		
	Soil Erosion	D	Slope protection Stream protection Drainage/Vegetation	C		
	Ecosystems	C		C		
Socio- economical Environment	Population Change	C		B		
	Resettlement	C		B		
	Ethnic Groups	C		C		
	Community Cohesion	C		C		
	Land-use Pattern	C		B		
	Industrial Activity	C		C		
	Employment & Income	B		B		
	Traffic Build-up	C		B		
	Traffic Safety	C		B		
	Archaeology	C		B		

Assessment:

A : High Positive Impact
B : Low Positive Impact

C : No Impact

D : Low Negative Impact
E : High Negative Impact

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