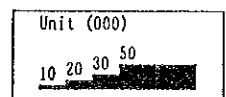
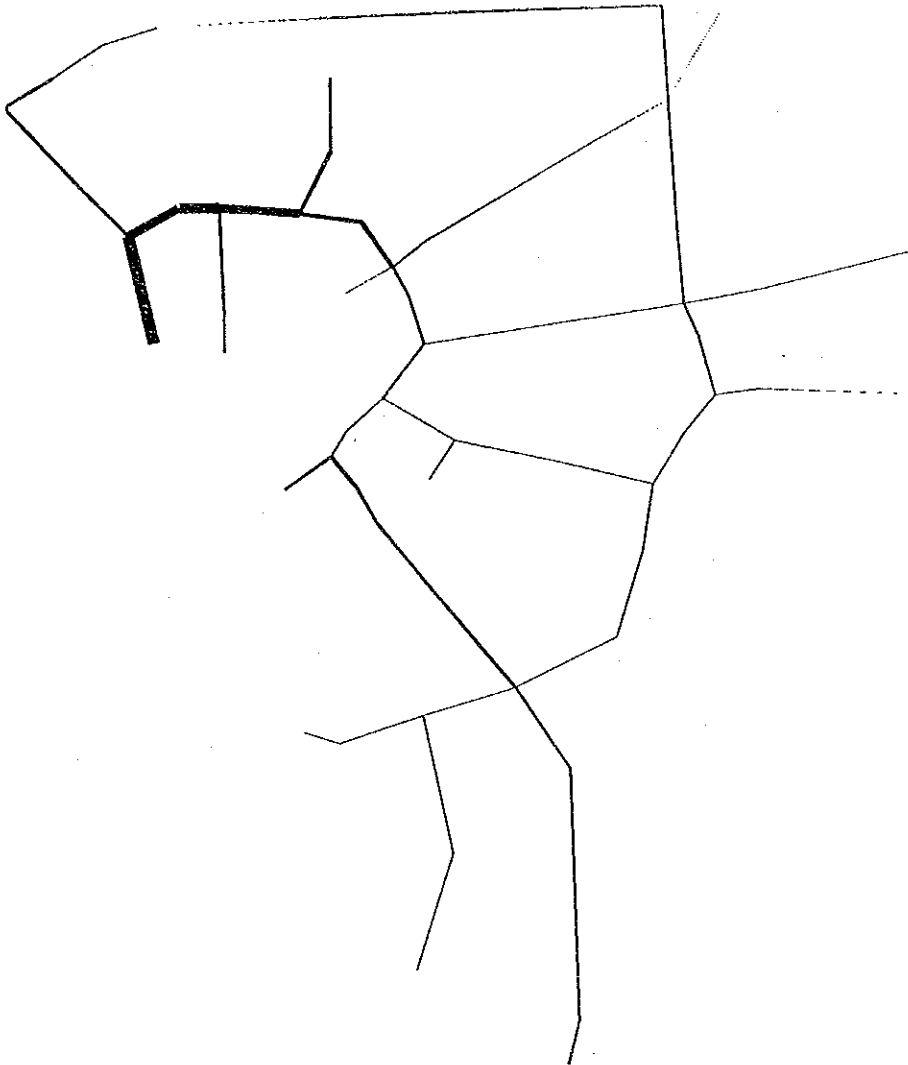


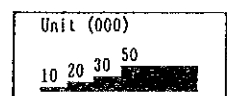
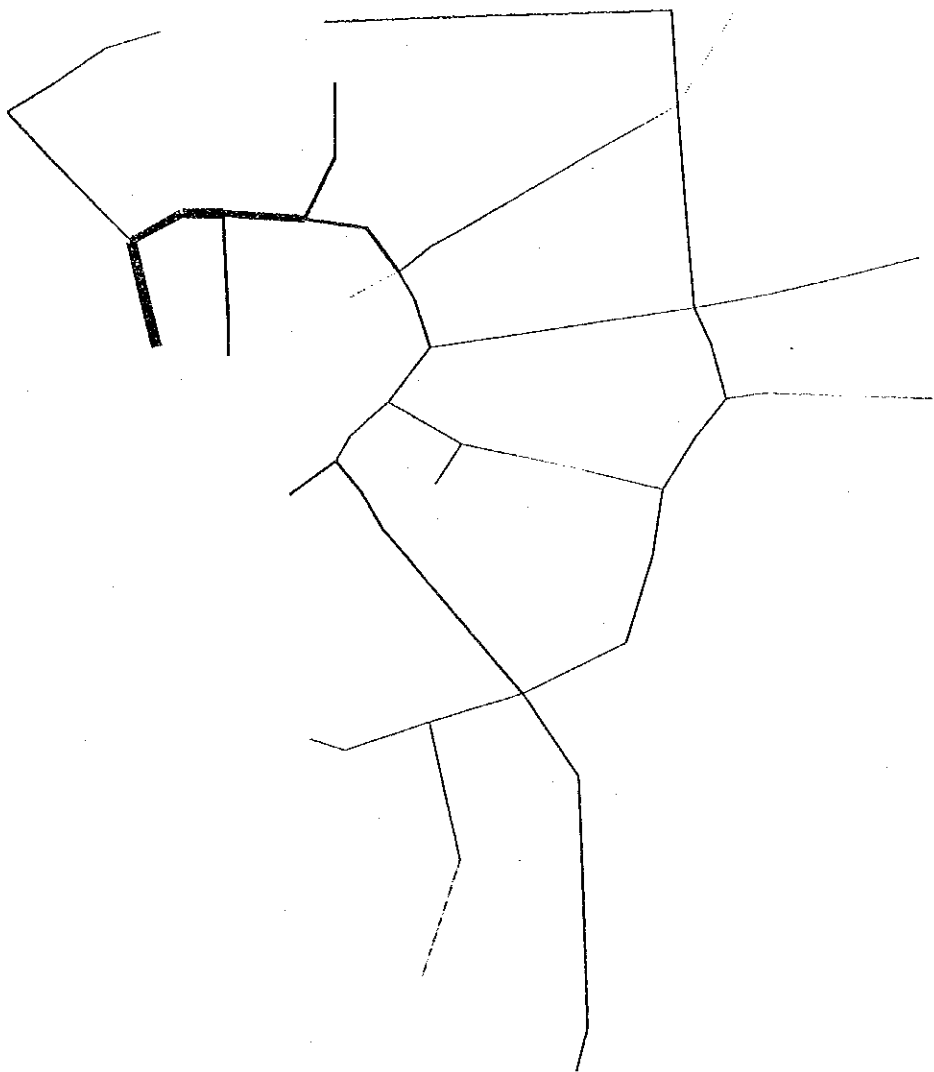
Appendix B-21 Volume from/to Port in 2010 (M1)



Appendix B-22 Volume from/to Port in 2010 (M1)



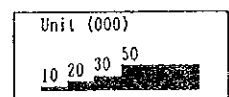
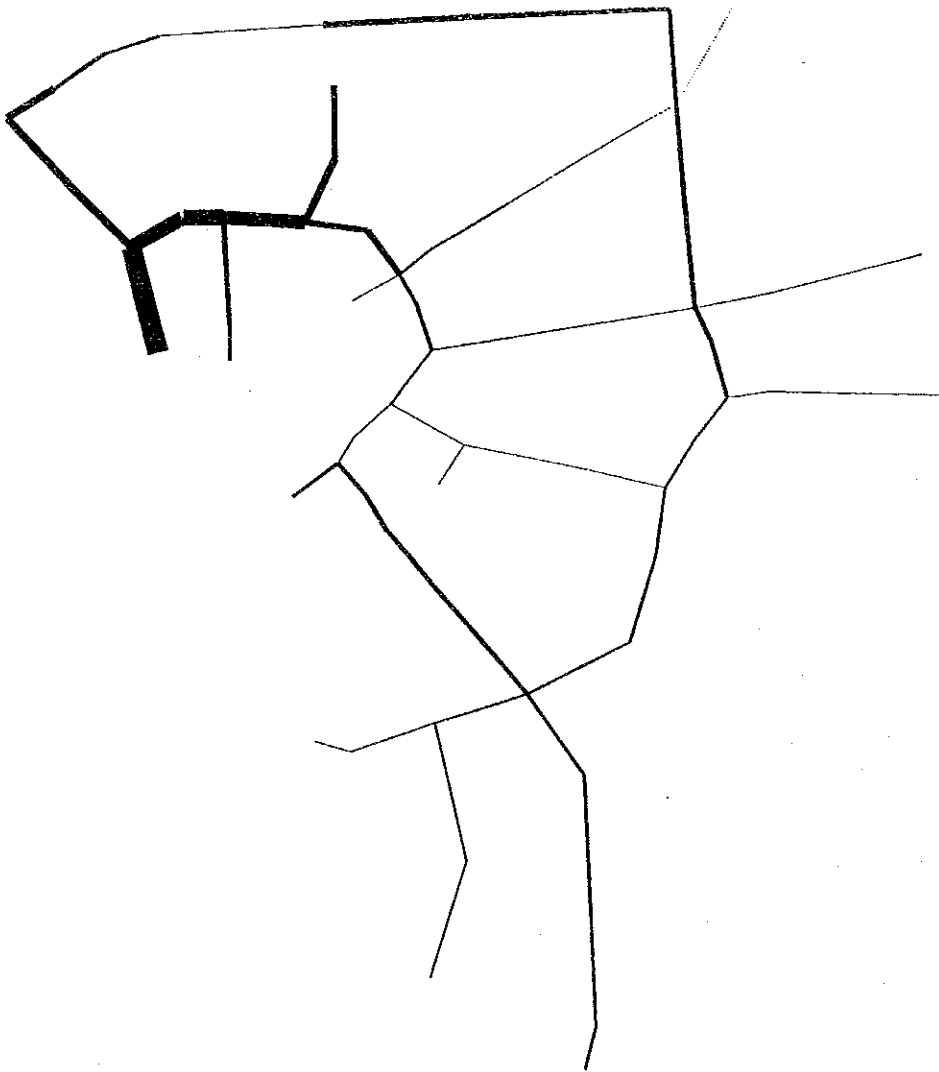
Appendix B-23 Volume from/to Port in 2010 (M2)



Appendix B-24 Volume from/to Port in 2010 (M2)



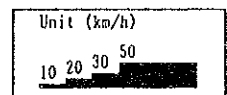
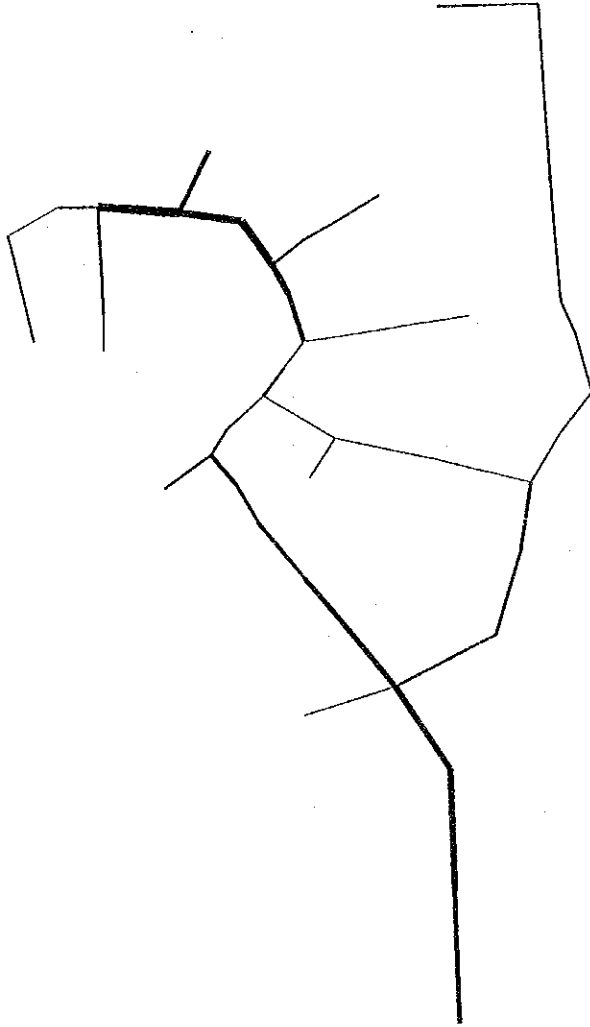
Appendix B-25 Volume from/to Port in 2010 (H1)



Appendix B-26 Volume from/to Port in 2010 (H1)



Appendix B-27 Speed from/to Port in 2010 (M1)

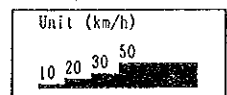
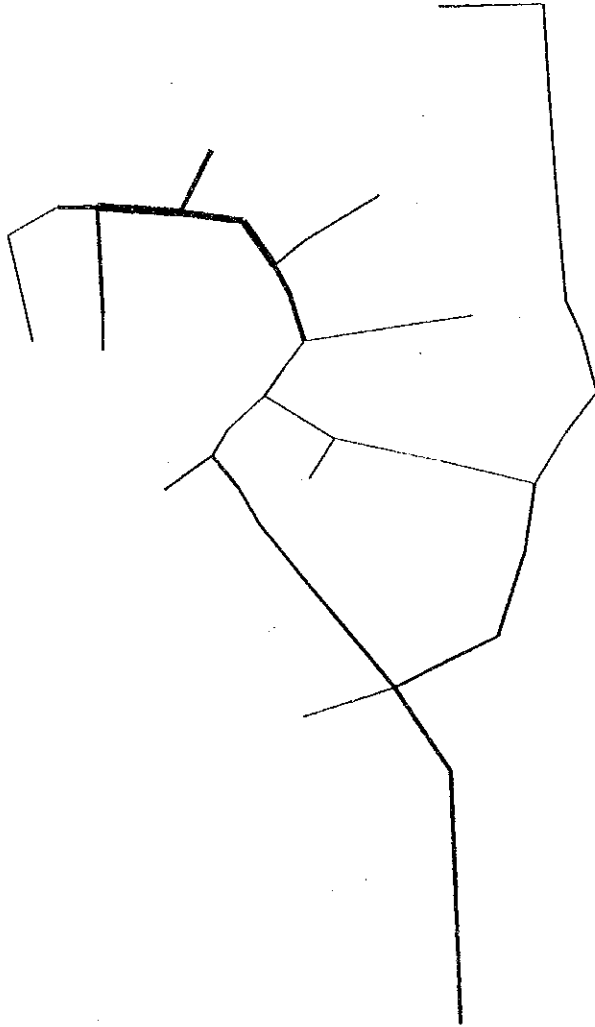


Appendix B-28 Speed from/to Port in 2010 (M1)

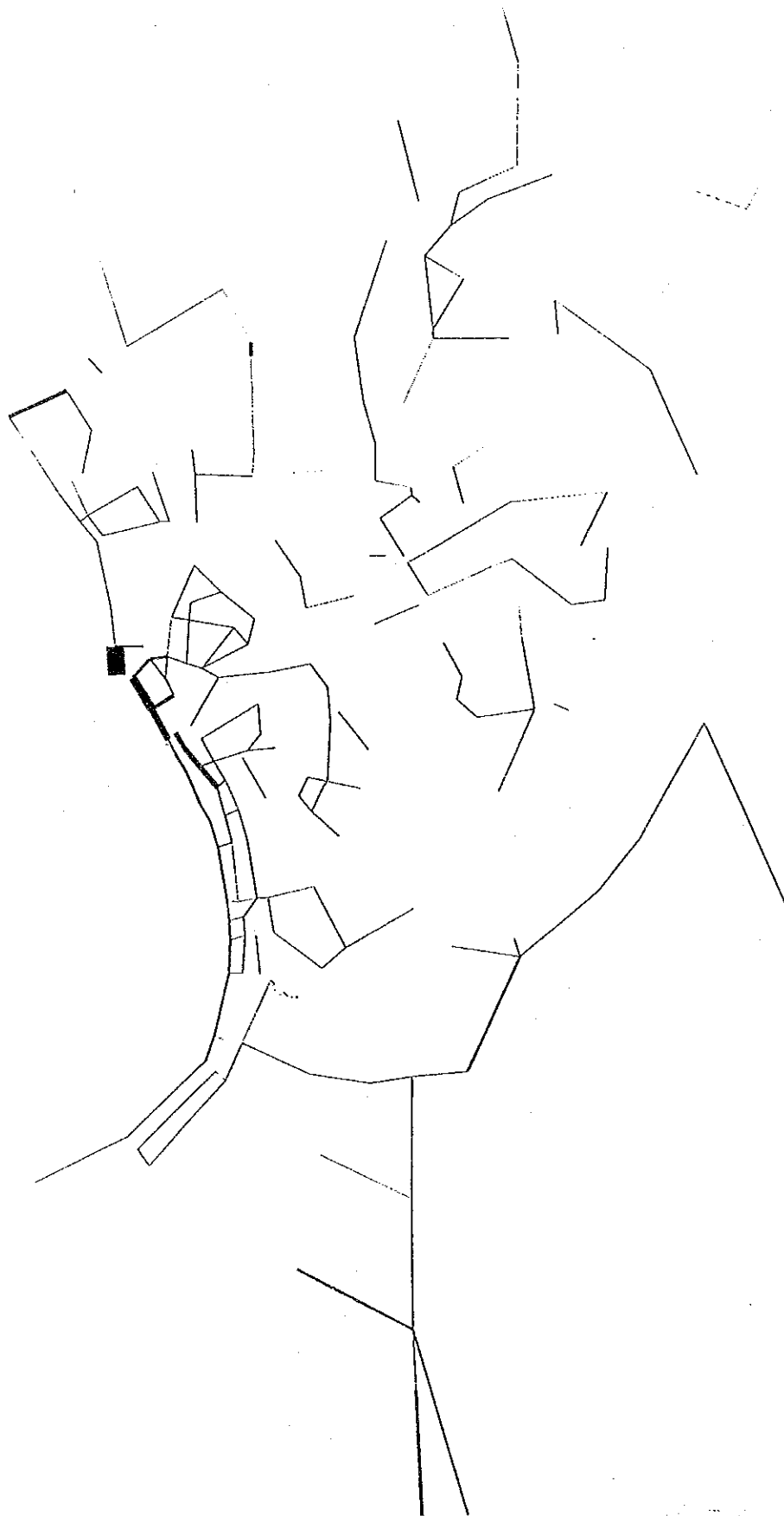




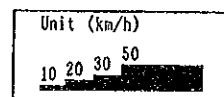
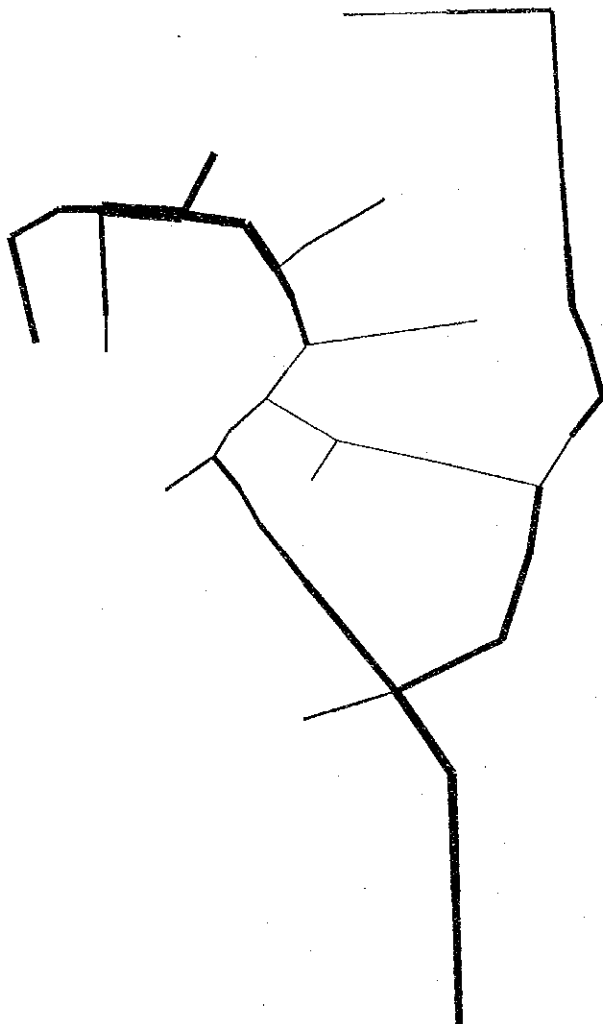
Appendix B-29 Speed from/to Port in 2010 (M2)



Appendix B-30 Speed from/to Port in 2010 (M2)



Appendix B-31 Speed from/to Port in 2010 (H1)



Appendix B-32 Speed from/to Port in 2010 (H1)

Appendix B-33 Links of Speed down and Volume up  
Year 2010 Medium Case 1

Node		(A)->(B)			(B)->(A)		
(A)	(B)	Speed(km/h)	Volume	Speed(km/h)	Volume	Speed(km/h)	Volume
		Orgnl.	Down	Up	Orgnl.	Down	Up
103	358	68.77	17.89	10140	56.76	29.59	10786
1010	1014	79.81	18.91	9453	66.89	18.10	9051
1011	1014	66.89	18.10	9051	80.00	17.26	9436
104	421	26.83	15.60	6333	18.48	13.16	6801
1009	1010	55.26	13.51	5199	50.37	15.24	4356
1008	1009	55.15	13.30	5154	50.27	15.21	4356
105	421	26.83	19.60	8573	18.48	5.42	2262
105	106	29.08	12.28	5052	25.03	12.64	5876
1007	1008	41.31	11.41	2764	39.03	12.28	2979
1065	1066	32.59	9.65	2341	48.31	12.77	3176
1064	1065	32.51	9.63	2341	48.19	12.74	3176
1006	1007	24.80	10.32	2764	23.92	9.97	2979
1063	1064	50.38	10.67	3213	68.44	8.01	4008
1066	1067	41.33	9.35	2265	51.19	9.27	3066
372	373	13.59	6.83	2090	19.79	11.48	3444
1063	1070	69.01	7.96	4004	52.76	7.80	3210
1002	1061	59.82	6.94	3470	63.34	8.71	4355
1062	1070	61.97	6.38	3210	76.66	7.96	4004
371	372	7.05	2.03	621	18.99	11.70	3521
1010	1093	76.19	9.39	4694	80.00	4.31	4255
331	333	53.95	6.97	2091	52.83	6.52	1958
370	371	7.08	2.03	621	16.46	11.46	3521
103	126	23.10	5.40	918	24.03	5.40	918
104	127	51.97	4.95	4316	52.28	5.14	4490
1025	1026	55.90	2.89	1447	40.28	6.89	1670
1026	1027	58.54	2.89	1447	43.23	6.89	1670
107	108	11.78	6.20	4224	13.02	3.15	2148
1011	1012	80.00	1.85	10375	80.00	7.24	10184
1035	1036	73.69	3.18	1591	69.34	5.68	2844
1033	1034	76.30	3.18	1591	71.62	5.67	2844
1034	1035	73.51	3.18	1591	69.17	5.67	2844
1032	1033	64.13	3.17	1591	57.68	5.67	2844
1004	1005	16.04	3.15	1940	18.82	5.47	2245
1030	1031	54.75	4.13	2064	53.17	4.32	2160
1008	1086	65.06	3.53	1763	75.22	4.85	2424
1086	1087	64.87	3.52	1763	75.01	4.84	2424
1011	1095	80.00	1.24	3687	77.18	6.98	3492
157	418	69.65	4.67	2630	63.89	3.48	1958
1031	1032	56.56	3.19	1591	51.89	4.81	2167
1061	1062	71.97	6.42	3210	80.00	1.45	4004
108	109	13.95	3.83	2588	17.18	3.98	2111
127	300	46.10	4.01	3517	48.21	3.80	3334
1024	1025	54.32	1.67	831	39.37	5.90	1431
106	107	8.94	4.01	4224	9.34	3.15	2148
188	344	22.01	3.38	675	22.56	3.53	707
338	344	22.82	3.54	707	22.26	3.37	675
112	113	21.04	3.20	1325	43.84	3.52	1461
1002	1003	65.45	1.84	922	29.37	4.69	1140
272	419	47.94	3.01	2703	49.43	3.45	3101
113	114	21.42	3.19	1305	34.89	2.93	1198
111	337	14.85	2.53	1707	25.32	3.46	1418
1029	1030	54.87	2.36	1184	53.68	3.46	1729
1001	1002	79.65	.0	2660	79.65	5.26	3763
110	111	16.77	3.28	1724	27.73	1.89	779
114	115	32.31	3.35	1372	49.29	1.21	1021
1013	1096	79.84	.0	12226	79.84	4.47	12869
109	110	35.62	3.52	1920	50.93	.77	862
1024	1064	32.59	3.21	832	13.65	1.03	872
154	352	5.29	.0	0	13.67	3.27	294
118	374	35.05	3.11	906	16.48	.0	0

Appendix B-34 Links of Speed down and Volume up  
Year 2010 Medium Case 2

Node		(A)->(B)			(B)->(A)		
(A)	(B)	Speed(km/h)	Volume	Speed(km/h)	Volume	Speed(km/h)	Volume
		Orgnl.	Down	Up	Orgnl.	Down	Up
103	358	68.77	17.15	9719	56.76	28.98	10620
1010	1014	79.81	16.19	8091	66.89	17.88	8941
1011	1014	66.89	17.88	8941	80.00	14.55	8081
104	421	26.83	14.44	5671	18.48	13.08	6755
1009	1010	55.26	10.08	4365	50.37	14.44	4161
1008	1009	55.15	9.68	4273	50.27	14.41	4161
105	421	26.83	19.14	8306	18.48	3.91	1382
105	106	29.08	10.10	4158	25.03	12.19	5569
1007	1008	41.31	9.43	2286	39.03	10.12	2454
1006	1007	24.80	9.39	2286	23.92	9.32	2454
103	126	23.10	8.58	1414	24.03	10.02	1611
372	373	13.59	4.74	1453	19.79	11.54	3463
1065	1066	32.59	7.30	1771	48.31	8.54	2149
1064	1065	32.51	7.28	1771	48.19	8.52	2149
1063	1064	50.38	7.28	2391	68.44	5.70	2853
1010	1093	76.19	9.56	4780	80.00	3.25	3726
371	372	7.05	.92	283	18.99	11.86	3570
370	371	7.08	.92	283	16.46	11.46	3570
1066	1067	41.33	7.21	1747	51.19	5.02	2036
1002	1061	59.82	5.40	2697	63.34	6.54	3272
104	127	51.97	5.97	5209	52.28	5.77	5034
1062	1070	61.97	4.75	2389	76.66	5.67	2852
1063	1070	69.01	5.67	2852	52.76	4.75	2389
1011	1095	80.00	1.77	3951	77.18	7.70	3850
1011	1012	80.00	.58	9739	80.00	8.27	10700
1026	1027	58.54	2.02	1008	43.23	6.55	1588
1025	1026	55.90	2.01	1008	40.28	6.55	1588
331	333	53.95	4.48	1344	52.83	4.05	1217
1008	1086	65.06	3.98	1986	75.22	4.01	2007
127	300	46.10	4.10	3596	48.21	3.88	3404
1086	1087	64.87	3.96	1986	75.01	4.01	2007
1031	1032	56.56	2.33	1162	51.89	5.17	2253
1035	1036	73.69	2.32	1162	69.34	4.93	2466
1034	1035	73.51	2.32	1162	69.17	4.92	2466
1033	1034	76.30	2.32	1162	71.62	4.91	2466
1032	1033	64.13	2.31	1162	57.68	4.91	2466
107	108	11.78	5.03	3427	13.02	2.10	1434
1024	1025	54.32	.95	474	39.37	6.10	1480
1030	1031	54.75	2.32	1162	53.17	4.50	2248
1028	1029	46.59	2.88	699	48.49	3.91	1105
1004	1005	16.04	2.05	1061	18.82	4.60	1552
106	107	8.94	4.01	3427	9.34	2.10	1434
188	344	22.01	2.93	584	22.56	3.04	607
338	344	22.82	3.04	607	22.26	2.92	584
108	109	13.95	3.02	2038	17.18	2.90	1382
272	419	47.94	2.18	1963	49.43	3.50	3143
1029	1030	54.87	2.02	1011	53.68	3.64	1820
157	418	69.65	2.92	1646	63.89	2.53	1426
270	304	37.90	2.67	1096	26.19	2.57	1055
1061	1062	71.97	4.78	2389	80.00	.0	2852
1001	1002	79.65	.0	2350	79.65	4.11	3185
154	352	5.29	.0	0	13.67	3.41	307
118	374	35.05	3.40	990	16.48	.0	0

Appendix B-35. Links of Speed down and Volume up  
Year 2010 High Case 1

Node		(A)->(B)			(B)->(A)		
(A)	(B)	Speed(km/h)	Volume	Speed(km/h)	Volume	Speed(km/h)	Volume
		Orgnl.	Down	Up	Orgnl.	Down	Up
103	358	68.77	30.88	14654	56.76	39.87	13613
1010	1014	79.81	31.30	15648	66.89	28.97	11888
1011	1014	66.89	28.97	11888	80.00	29.63	15620
1009	1010	55.26	18.47	6404	50.37	20.54	5645
1008	1009	55.15	18.24	6357	50.27	20.49	5642
1013	1096	79.84	15.17	20435	79.84	17.50	19396
104	421	26.83	18.78	8156	18.48	13.48	7709
1007	1008	41.31	15.00	3636	39.03	15.42	3740
1064	1065	32.51	12.14	2951	48.19	17.91	4432
1065	1066	32.59	12.17	2951	48.91	17.67	4363
1011	1012	80.00	16.44	17668	80.00	12.74	12934
105	106	29.08	14.59	6118	25.03	13.98	6785
105	421	26.83	20.50	9095	18.48	7.89	3697
1010	1093	76.19	12.48	6243	80.00	14.28	9243
1066	1067	41.33	11.97	2901	51.19	14.34	4295
1030	1031	54.75	11.31	4482	53.17	14.56	4859
1031	1032	56.56	9.41	4483	51.89	15.94	4863
1063	1064	50.38	14.34	4103	68.44	10.08	5044
1028	1029	46.59	10.60	2576	48.49	12.20	3120
1006	1007	24.80	11.40	3636	23.92	10.92	3740
331	333	53.95	11.02	3306	52.83	10.89	3268
1063	1070	69.01	10.02	5038	52.76	11.43	4097
1026	1027	58.54	6.45	3223	43.23	14.84	3597
1025	1026	55.90	6.44	3223	40.28	14.84	3597
1032	1033	64.13	8.93	4484	57.68	12.04	5481
1029	1030	54.87	8.49	3830	53.68	12.46	4482
1012	1013	80.00	13.70	17248	80.00	6.77	12616
1035	1036	73.69	8.97	4484	69.34	10.96	5482
1034	1035	73.51	8.95	4484	69.17	10.94	5482
1033	1034	76.30	8.95	4484	71.62	10.93	5482
372	373	13.59	7.01	2146	19.79	12.37	3715
1002	1061	59.82	8.84	4419	63.34	10.37	5189
1062	1070	61.97	8.15	4097	76.66	10.01	5038
1024	1025	54.32	4.93	2464	39.37	13.02	3156
1011	1095	80.00	3.89	5013	77.18	12.03	6015
104	127	51.97	7.75	6758	52.28	7.26	6339
371	372	7.05	2.05	1609	18.99	12.59	3793
370	371	7.08	2.08	1609	16.46	11.46	3793
127	300	46.10	7.39	5147	48.21	5.47	4799
272	419	47.94	7.84	7055	49.43	4.67	4198
188	344	22.01	5.40	1078	22.56	6.37	1275
338	344	22.82	6.38	1275	22.26	5.39	1078
1061	1062	71.97	8.19	4097	80.00	3.52	5038
105	129	20.66	9.53	1259	11.18	1.89	145
157	418	69.65	6.65	3745	63.89	4.58	2577
108	109	13.95	6.26	4226	17.18	4.94	2759
103	126	23.10	5.42	922	24.03	5.42	922
107	108	11.78	6.31	4305	13.02	4.09	2789
1008	1086	65.06	4.45	2223	75.22	5.74	2869
1086	1087	64.87	4.43	2223	75.01	5.73	2869
1004	1005	16.04	3.53	2241	18.82	4.91	1794
106	107	8.94	4.01	4305	9.34	4.08	2789
112	113	21.04	3.70	1536	43.84	4.39	1822
1003	1004	49.32	5.61	1659	53.11	2.43	1212
1002	1003	65.45	2.94	1476	29.37	4.98	1212
111	337	14.85	2.98	2012	25.32	4.85	1990
113	114	21.42	3.61	1478	34.89	3.96	1617
282	283	36.08	3.61	630	41.25	3.75	1126
156	161	23.05	1.55	534	21.11	5.62	1927
1001	1002	79.65	. 0	3860	79.65	6.46	4366
110	111	16.77	3.42	1822	27.73	2.99	1233
1023	1024	80.00	. 0	1810	77.10	6.37	3185
1094	1095	80.00	6.37	4738	80.00	. 0	3842
1006	1081	72.26	3.80	1907	75.30	2.34	1172
128	129	30.45	3.15	1415	11.44	2.98	1810
115	116	42.90	3.97	1624	56.97	1.91	1610
114	115	32.31	3.69	1510	49.29	2.17	1444
118	374	35.05	3.05	887	16.48	2.19	650
109	110	35.62	3.68	2004	50.93	1.36	1528
1024	1064	32.59	3.10	802	13.65	1.58	1343
133	372	20.39	3.11	747	16.18	. 75	181
1036	1037	80.00	. 0	6394	80.00	3.63	6741
154	352	5.29	. 0	0	13.67	3.18	286

APPENDIX B-36 Design Traffic Volume

1. Design Traffic Volume in Medium Case.

Design Traffic Volume (vehicle/hour)  
Medium Case

	Present (1991)		Medium Case (2010)		Ratio of 40 Foot Boxes	Number of Boxes	Cargo Volume per Truck	(N) Traffic Volume	(D) Annual Working Day	(a) Monthly Variation	(b) Daily Variation	(c) Related Vehicle Rate	(d) Real Load Rate	(e) Hourly Variation	W/D *a*b*(1+c)/d *e	Design Traffic Volume per Hour per Day
	#1,000 MT or #1,000 Person	TEUs	#1,000 MT or #1,000 Person	TEUs												
North Harbor																
General Cargo	3,510		4,050				5.97	714,300	300	1.20	1.40	0.40	0.75	0.09	*	2,380
Container Cargo Existing	6,950	407,362	22,910	1,342,000	40	1,073,600		352,000	300	1.20	1.40	0.40	0.75	0.09	*	1,170
Breakwater	0	407,362	7,510	440,020	40	721,600		721,600	300	1.20	1.40	0.40	0.75	0.09	\$	2,410
Passenger Existing	3,170	---	10,690	Taxi (34%)					330	1.00	1.50	0.06	0.06	0.09	*	7,690
Breakwater	0	---	8,270	2,811,800	2,563,700	915,896	1,563,232	2,537,000	330	1.00	1.50	0.06	0.06	0.09	\$	2,250
MCT			2,420	822,800	750,200	268,013	457,439	742,400	330	1.00	1.50	0.06	0.06	0.09		
				Bus (35%)												
				2,894,500		57,890										
				847,000		16,940										
Container Cargo Existing	3,883	464,583	17,800	2,123,000	70	1,380,000		797,500	300	1.20	1.40	0.40	0.75	0.11	*	2,660
Breakwater			10,290	1,226,860	70	797,500		582,500	300	1.20	1.40	0.40	0.75	0.11	\$	1,940
Existing Breakwater			7,510	896,140	70	582,500										
South Harbor																
General Cargo	1,646		2,820						300	1.20	1.40	0.40	0.75	0.11	*	1,040
Container Cargo	1,119	166,566	4,440	658,000	70	427,700	9.03	427,700	300	1.20	1.40	0.40	0.75	0.11	*	1,430
<b>Total</b>								<b>7,187,300</b>							<b>5,540</b>	<b>22,970</b>



## 2. Design Traffic Volume in High Case.

Design Traffic Volume (vehicle/hour) High Case	Present (1991)		High Case (2010)		Ratio of 40 Foot TEUs Person	Number of Boxes	Volume per Truck	(N) Traffic Volume	(D) Annual Working Days	(a) Monthly Variation	(b) Daily Variation	(c) Related Vehicle Rate	(d) Veh Load Rate	(e) Hourly Variation	V/D *a*b*(1+c)/d * #	Design Traffic Volume per Hour per Day	Number of Vehicle per Day
	*1,000 MT TEUs or *1,000 Person	*1,000 MT TEUs or *1,000 Person															
North Harbor																	
General Cargo	3,510	5,600	1,874,000	40	1,499,200	5.67	987,700	300	1.20	1.40	0.40	0.75	0.09	*	930	3,290	
Container Cargo	6,950	32,000	1,874,000	40	1,499,200			300	1.20	1.40	0.40	0.75	0.09	*	340	1,220	
Existing	6,950	7,780	456,140	40	384,900		364,900	300	1.20	1.40	0.40	0.75	0.09	\$	700	2,470	
Breakwater	0	15,800	924,710	40	785,800		394,500	300	1.20	1.40	0.40	0.75	0.09	!	370	1,320	
New Recla.	0	8,420	493,150	40	394,500			300	1.20	1.40	0.40	0.75	0.09				
Passenger	3,170	16,900	Taxi (34%)	Car (31%)	Taxi (3.07) Car (1.64)			330	1.00	1.50	0.06	0.06	0.09	*	1,510	10,550	
Existing	3,170	11,350	3,859,000	3,518,500	1,257,003	2,145,427	3,481,900	330	1.00	1.50	0.06	0.06	0.09	\$	740	5,160	
Breakwater	0	5,550	1,887,000	1,720,500	614,658	1,049,085	1,702,600	330	1.00	1.50	0.06	0.06	0.09				
			Bus (35%)		79,450												
			1,942,500		38,850										*	320	
MCT																	
Container Cargo	3,883	20,570	2,454,600	70	1,595,500		797,800	300	1.20	1.40	0.40	0.75	0.11	*	920	2,560	
Existing	10,290	10,290	1,227,310	70	797,800		797,700	300	1.20	1.40	0.40	0.75	0.11	\$	920	2,560	
Breakwater	10,280	10,280	1,227,280	70	797,700												
Existing															\$	2,360	
Breakwater																	
South Harbor															*	1,570	
General Cargo	1,646	4,000	622,050	70	404,300	9.03	443,000	300	1.20	1.40	0.40	0.75	0.11	*	510	1,480	
Container Cargo	1,119	4,210	622,050	70	404,300		404,300	300	1.20	1.40	0.40	0.75	0.11	*	460	1,350	
Container Cargo		6,220	799,550	70	519,700		519,700	300	1.20	1.40	0.40	0.75	0.11	*	600	1,730	
Container Cargo															8,000	8,000	33,890
							Total	10,633,900									

APPENDIX C: Vessel Calls

APPENDIX C-1 Classified Number of Vessel Size at Port of Manila

1. MICT

Classification of vessels size at MICT in December, 1992

Class	Degree	MICT, December 92	
1.0	0.0	4.2	22.8
1.5	0.0	22.2	22.7
2.0	0.0	22.8	8.8
2.5	0.0	17.5	9.0
3.0	0.0	22.2	21.4
3.5	4.0	19.4	22.2
4.0	0.0	14.7	17.5
4.5	6.0	26.4	13.6
5.0	5.0	13.6	22.2
5.5	2.0	4.4	23.0
6.0	1.0	12.6	4.4
6.5	2.0	11.1	19.4
7.0	0.0	13.3	7.2
7.5	2.0	17.8	6.0
8.0	0.0	16.9	8.7
8.5	0.0	4.6	24.5
9.0	11.0	10.5	16.9
9.5	0.0	22.6	3.2
10.0	0.0	9.8	5.3
10.5	0.0	22.2	17.8
11.0	5.0	17.5	8.8
11.5	3.0	22.2	4.6
12.0	0.0	13.6	10.5
12.5	0.0	23.5	27.7
13.0	3.0	14.0	14.1
13.5	1.0	4.4	22.2
14.0	6.0	20.4	14.8
14.5	1.0	7.2	22.8
15.0	3.0	22.8	26.4
15.5	1.0	6.0	14.7
16.0	0.0	3.2	4.4
16.5	0.0	16.7	12.6
17.0	5.0	8.7	13.6
17.5	5.0	4.6	11.0
18.0	4.0	22.5	8.7
18.5	0.0	9.8	22.8
19.0	0.0	10.5	9.0
19.5	2.0	17.9	3.2
20.0	0.0	22.2	10.5
20.5	1.0	5.7	4.6
21.0	0.0	17.5	22.7
21.5	3.0	13.6	17.5
22.0	0.0	22.2	27.7
22.5	10.0	21.2	22.2
23.0	10.0		8.8
23.5	0.0	17.8	
24.0	1.0	24.5	
24.5	2.0	21.4	
25.0	0.0	4.4	
25.5	0.0	12.6	
26.0	0.0	16.6	
26.5	2.0	11.0	
27.0	0.0	8.8	
27.5	0.0	40.1	
28.0	2.0	5.3	
28.5	0.0	3.2	
29.0	0.0	15.2	
29.5	0.0	10.5	
30.0	0.0	4.6	
	1.0	16.9	
Num. of Vess	104.0	867.5	662.3
		Total	1,529.8
Average Vessel Size ( DWT )			14,709.3

## 2. South Harbor (Container)

Classification of vessels size at South harbor in December, 1992 (Container)

Class	Degree	Pier 3	Pier 5	Pier 9	Pier 13	Pier 15
1.0	0.0	24.94	7.80		9.26	
1.5	2.0	6.75	6.68			
2.0	0.0	11.54	4.03			
2.5	0.0	13.30	6.11			
3.0	0.0	7.80	4.42			
3.5	0.0	4.63	7.44			
4.0	3.0	6.75	3.97			
4.5	7.0	11.54	3.97			
5.0	6.0	25.01	6.06			
5.5	1.0	8.71	4.42			
6.0	0.0	7.80	6.68			
6.5	3.0	6.75	4.42			
7.0	10.0	11.54	4.03			
7.5	4.0	5.06	7.44			
8.0	4.0	12.63	6.61			
8.5	0.0	4.63	4.42			
9.0	1.0	25.55	6.68			
9.5	1.0	24.94	3.97			
10.0	0.0	11.54	11.01			
10.5	0.0	6.75	7.44			
11.0	0.0	6.03	4.42			
11.5	2.0	7.80				
12.0	6.0	1.40				
12.5	0.0	25.55				
13.0	1.0	6.75				
13.5	1.0	4.87				
14.0	0.0	11.54				
14.5	0.0	4.63				
15.0	0.0	11.15				
15.5	0.0	4.87				
16.0	0.0	1.49				
16.5	0.0	6.75				
17.0	0.0	7.80				
17.5	0.0	11.54				
18.0	0.0	4.87				
18.5	0.0					
19.0	0.0					
19.5	0.0					
20.0	0.0					
20.5	0.0					
21.0	0.0					
21.5	0.0					
22.0	0.0					
22.5	0.0					
23.0	0.0					
23.5	0.0					
24.0	0.0					
24.5	0.0					
25.0	2.0					
25.5	1.0					
26.0	2.0					
26.5	0.0					
27.0	0.0					
27.5	0.0					
28.0	0.0					
28.5	0.0					
29.0	0.0					
29.5	0.0					
30.0	0.0					
	0.0					
Num. of Ves	57.00	355.20	121.30	0.00	9.26	0.00
		Sub Total	485.76			
		Average Vessel Size (DWT)	8,522.11			

3. South Harbor (Conventional)

Classification of vessels size at South harbor in December, 1992 (Conventional)

Class	Degree	Pier 3	Pier5	Pier9	Pier13	Pier15
1.0	3.0	5.97	7.48	5.08	5.17	6.84
1.5	2.0		1.00	5.31	24.46	8.13
2.0	4.0		6.18	6.08	9.80	6.92
2.5	2.0		7.03		3.94	6.46
3.0	1.0		7.43		6.97	4.63
3.5	0.0		0.83		1.74	7.96
4.0	3.0		5.34		5.02	6.08
4.5	0.0		5.84		6.65	10.19
5.0	1.0		34.70		3.99	15.02
5.5	5.0		45.47		1.60	1.76
6.0	2.0		2.15		9.80	
6.5	4.0		21.39		23.62	
7.0	4.0		1.36		1.75	
7.5	4.0		0.21		1.20	
8.0	2.0		7.00		2.36	
8.5	1.0		10.01		18.24	
9.0	0.0		9.84		3.82	
9.5	0.0		18.73			
10.0	4.0		9.80			
10.5	2.0		7.86			
11.0	0.0		2.53			
11.5	0.0					
12.0	0.0					
12.5	0.0					
13.0	0.0					
13.5	0.0					
14.0	0.0					
14.5	0.0					
15.0	0.0					
15.5	1.0					
16.0	0.0					
16.5	0.0					
17.0	0.0					
17.5	0.0					
18.0	0.0					
18.5	1.0					
19.0	1.0					
19.5	0.0					
20.0	0.0					
20.5	0.0					
21.0	0.0					
21.5	1.0					
22.0	0.0					
22.5	0.0					
23.0	0.0					
23.5	0.0					
24.0	1.0					
24.5	1.0					
25.0	0.0					
25.5	0.0					
26.0	0.0					
26.5	0.0					
27.0	0.0					
27.5	0.0					
28.0	0.0					
28.5	0.0					
29.0	0.0					
29.5	0.0					
30.0	0.0					
	2.0					
Num. of Vess	52.00	5.97	212.26	16.47	130.13	73.99
		Sub Total	438.82			
Average Vessel Size (DWT)			8.438.95			

4. South Harbor (Combo)

Classification of vessels size at South harbor in December, 1992 (Combo)						
Class	Degree	Pier 3	Pier5	Pier9	Pier13	Pier15
1.0	0.0	5.06	5.06		6.56	6.27
1.5	0.0	4.87	7.21		6.98	6.27
2.0	1.0	5.87	6.62		6.89	
2.5	0.0	5.06	7.71			
3.0	0.0	4.87	7.19			
3.5	0.0	7.21	4.20			
4.0	0.0	4.87	8.02			
4.5	1.0	6.00	6.20			
5.0	5.0	4.87	8.01			
5.5	3.0	4.87	7.72			
6.0	3.0	6.00	7.71			
6.5	3.0	12.63	11.01			
7.0	4.0	1.56	7.19			
7.5	4.0		7.71			
8.0	4.0					
8.5	2.0					
9.0	0.0					
9.5	0.0					
10.0	0.0					
10.5	0.0					
11.0	0.0					
11.5	1.0					
12.0	0.0					
12.5	0.0					
13.0	1.0					
13.5	0.0					
14.0	0.0					
14.5	0.0					
15.0	0.0					
15.5	0.0					
16.0	0.0					
16.5	0.0					
17.0	0.0					
17.5	0.0					
18.0	0.0					
18.5	0.0					
19.0	0.0					
19.5	0.0					
20.0	0.0					
20.5	0.0					
21.0	0.0					
21.5	0.0					
22.0	0.0					
22.5	0.0					
23.0	0.0					
23.5	0.0					
24.0	0.0					
24.5	0.0					
25.0	0.0					
25.5	0.0					
26.0	0.0					
26.5	0.0					
27.0	0.0					
27.5	0.0					
28.0	0.0					
28.5	0.0					
29.0	0.0					
29.5	0.0					
30.0	0.0					
	0.0					
Num. of Vess	32.00	73.74	181.56	0.00	20.35	12.54
		Sub Total	288.19			
Average Vessel Size (DWT)			6.505.94			

5. South Harbor (Total)

Classification of vessels size at South harbor in December, 1992 (Total)						
Class	Degree	Pier 3	Pier5	Pier9	Pier13	Pier15
1.0	3.0	5.01	7.10		6.56	6.84
1.5	4.0	24.90	7.48	5.08	5.17	8.13
2.0	5.0	6.70	5.06	6.10	24.46	6.90
2.5	2.0	11.50	6.68		9.88	6.27
3.0	1.0	13.30	4.93		6.97	6.46
3.5	0.0	5.90	7.21		5.02	4.83
4.0	6.0	4.90	6.18		6.65	7.96
4.5	8.0	7.80	6.11		3.99	6.88
5.0	12.0	4.60	4.42		9.88	10.19
5.5	10.0	6.70	7.03		6.90	6.27
6.0	5.0	11.54	7.44		23.62	15.02
6.5	9.0	5.90	7.43		18.20	1.76
7.0	18.0	5.10	6.62		6.89	
7.5	12.0	25.01	3.97		9.26	
8.0	10.0	4.90	5.34		3.94	
8.5	3.0	7.20	7.71		1.74	
9.0	1.0	8.70	5.84		1.60	
9.5	1.0	7.80	7.19		1.75	
10.0	4.0	6.70	5.06		1.20	
10.5	2.0	11.50	34.70		2.36	
11.0	0.0	5.10	4.20		3.82	
11.5	0.0	12.60	4.40			
12.0	1.0	4.90				
12.5	0.0	4.60	6.68			
13.0	2.0	6.00	8.02			
13.5	1.0	25.60	6.20			
14.0	0.0	4.90	4.40			
14.5	0.0	24.90	45.50			
15.0	0.0	11.50	4.03			
15.5	1.0	6.70	7.44			
16.0	0.0	4.90	21.39			
16.5	0.0	6.03	8.01			
17.0	0.0	7.80	6.61			
17.5	0.0	6.00	7.72			
18.0	0.0	25.60	7.71			
18.5	1.0	6.70	4.42			
19.0	1.0	4.90	6.68			
19.5	0.0	11.50	7.08			
20.0	0.0	4.60	10.01			
20.5	0.0	11.20	9.84			
21.0	0.0	4.90	11.01			
21.5	1.0	12.60	11.01			
22.0	0.0	6.70	18.73			
22.5	0.0	7.80	7.19			
23.0	0.0	11.50	7.44			
23.5	0.0	4.90	9.80			
24.0	1.0	1.40	7.86			
24.5	1.0	1.50	4.40			
25.0	2.0	1.60	7.70			
25.5	1.0		1.00			
26.0	2.0		0.83			
26.5	0.0		3.97			
27.0	0.0		2.15			
27.5	0.0		1.36			
28.0	0.0		0.21			
28.5	0.0		3.97			
29.0	0.0		2.53			
29.5	0.0					
30.0	0.0					
	2.0					
Num. of Vess	141.00	434.59	434.10	16.35	159.70	86.51
		Sub Total	1,131.25			
Average Vessel Size (DWT)			8,023.05			

6. North Harbor (General Cargo)

Classification of Vessel Size at North Harbor in December, 1992 (General Cargo)								
Class	Degree	Pier 2(G)	Pier 4(G)	Pier 6(G)	Pier 8(G)	Pier 10(G)	Pier 12(G)	Pier 16(G)
0.5	2.0	3.3	6.4	1.8	2.6	1.0	2.0	2.0
1.0	24.0	2.3	5.9	1.4	3.8	3.4	1.8	2.0
1.5	10.0	2.3	7.2	6.3	1.9	0.1	2.3	1.7
2.0	27.0	2.3	6.4	0.6	2.3	12.5	2.0	2.0
2.5	34.0	5.3	3.2	4.7	0.9	4.3	2.0	3.3
3.0	7.0	2.3	12.3	3.0	2.1	3.2	1.8	4.3
3.5	15.0	3.3	5.9	2.5	1.4	12.5	2.0	2.2
4.0	3.0	2.3	6.4	0.7	0.9	3.4	2.0	1.8
4.5	17.0	5.3	7.3	1.9	0.9	1.6	1.8	3.3
5.0	3.0	2.3	3.2	2.3	2.0	4.3	4.3	5.3
5.5	8.0	2.3	5.9	5.2	7.7	12.5	2.0	2.9
6.0	6.0	5.3	6.4	5.0	0.6	1.5	2.0	5.3
6.5	7.0	2.3	12.3	1.5	4.4	3.2	4.3	2.6
7.0	0.0	2.3	5.9	2.1	2.1	0.8		2.1
7.5	2.0	2.3	3.2	1.1	0.9	12.5		4.3
8.0	2.0		6.4	0.6	2.6	4.3		2.2
8.5	0.0			2.3	0.9			4.3
9.0	0.0			6.0	3.8			3.3
9.5	0.0			2.2	0.9			1.8
10.0	1.0			1.9	2.3			3.3
10.5	0.0			2.5	4.1			2.2
11.0	0.0			4.4	2.2			2.3
11.5	0.0			2.5	0.9			3.3
12.0	0.0			1.1	2.0			2.1
12.5	6.0			2.2	1.1			2.6
13.0	0.0			6.2	4.4			5.3
13.5	0.0			1.8	0.9			
14.0	0.0			0.8	1.8			
14.5	0.0			4.7	0.1			
15.0	0.0			1.8	0.9			
15.5	0.0			1.7	0.9			
16.0	0.0			1.2	1.4			
16.5	0.0			4.5	0.6			
17.0	0.0			1.9	2.6			
17.5	0.0			0.8	3.8			
18.0	0.0			1.5	2.3			
18.5	0.0			5.2	0.9			
19.0	0.0			2.1	2.2			
19.5	0.0			4.5	4.1			
20.0	0.0			6.0	0.9			
20.5	0.0			0.7				
21.0	0.0			1.4				
21.5	0.0			8.0				
22.0	0.0			2.5				
22.5	0.0			3.0				
23.0	0.0			4.4				
23.5	0.0			1.9				
24.0	0.0			4.5				
24.5	0.0							
25.0	0.0							
25.5	0.0							
26.0	0.0							
26.5	0.0							
27.0	0.0							
27.5	0.0							
28.0	0.0							
28.5	0.0							
29.0	0.0							
29.5	0.0							
30.0	0.0							
	0.0							
	0.0							
	0.0							
	0.0							
	0.0							
	0.0							
	0.0							
	0.0							
Num. of Vess	174.0	45.6	104.1	144.6	83.0	81.0	29.8	75.8
		Sub total		563.9				
Average Vessel Size		3,240.5						

7. North Harbor (Passenger)

Classification of Vessel Size at North Harbor in December, 1992 (Passenger)

Class	Degree	Pier 2(P)	Pier 4(P)	Pier 8(P)	Pier 10(P)	Pier 12(P)	Pier 14(P)	Pier 16(P)
0.5	0.0	2.4	2.1	0.6	2.4	4.7	5.8	3.8
1.0	9.0	7.9	4.5	0.6	4.4	1.5	2.0	8.0
1.5	14.0	4.3	2.1	0.6	2.4	1.1	6.5	4.7
2.0	14.0	2.7	4.5	0.6	4.4	13.7	4.3	8.0
2.5	34.0	2.4	2.1	0.6	2.4	1.0	2.5	4.7
3.0	9.0	7.9	2.1	0.6	2.4	3.5	1.9	8.0
3.5	10.0	2.7	4.5	2.4	4.4	3.8	6.5	4.7
4.0	3.0	4.3	4.5	0.6	2.4	13.7	6.5	8.0
4.5	22.0	2.4	4.5	0.6	2.4	1.5	4.3	4.7
5.0	15.0	7.9	2.1	2.4	4.4	3.4	2.0	6.0
5.5	0.0	4.3	4.5	0.6	2.4	1.1	2.5	4.7
6.0	5.0	2.9	2.1		2.4	13.7	6.5	
6.5	9.0	2.4	4.4			1.0	5.8	
7.0	12.0	7.9	4.5			3.5	2.0	
7.5	0.0	2.7	2.1			3.4	6.8	
8.0	14.0	4.3	4.5			13.7	6.5	
8.5	0.0	2.4	2.1			1.5	4.3	
9.0	0.0	7.9	4.5			3.4	2.5	
9.5	0.0	4.3				1.1	6.5	
10.0	0.0	2.9				13.7	2.0	
10.5	0.0	2.3				1.0	6.5	
11.0	0.0	7.9				3.5	4.3	
11.5	0.0	2.9				13.7	2.0	
12.0	0.0	4.3				1.5	6.5	
12.5	0.0	2.4				3.4	5.8	
13.0	0.0	7.9				1.1	2.0	
13.5	0.0	2.4				13.7	6.8	
14.0	9.0	4.3				1.0	8.5	
14.5	0.0	2.9				3.5	4.3	
15.0	0.0	2.4				3.4	2.5	
15.5	0.0	7.9				13.7	6.5	
16.0	0.0	2.9				1.5	6.5	
16.5	0.0	4.3				3.4	4.3	
17.0	0.0	2.8				13.7	2.0	
17.5	0.0	7.9				1.1	2.5	
18.0	0.0						2.0	
18.5	0.0						1.9	
19.0	0.0						6.5	
19.5	0.0						5.8	
20.0	0.0						8.8	
20.5	0.0						2.0	
21.0	0.0						6.5	
21.5	0.0						4.3	
22.0	0.0						2.5	
22.5	0.0						6.5	
23.0	0.0						6.5	
23.5	0.0						4.3	
24.0	0.0						2.0	
24.5	0.0						1.9	
25.0	0.0						2.5	
25.5	0.0						3.7	
26.0	0.0						6.5	
26.5	0.0						5.8	
27.0	0.0						6.8	
27.5	0.0						2.0	
28.0	0.0						6.5	
28.5	0.0						4.3	
29.0	0.0							
29.5	0.0							
30.0	0.0							
	0.0							
	0.0							
	0.0							
	0.0							
	0.0							
Num. of Vess	179.0	152.4	61.4	10.3	36.4	183.0	253.7	67.3
		Sub Total	764.5					
Average Vessel Size			4,271.2					



APPENDIX C-2 List of CISO Member's Vessels

1. Container Vessel

CARGO/CONTAINER							
Name of Vessel	GRT	DWT	LOA	DRAFT	BEAM	CAP. TEU	CAP. PASS.
A. SUPERCONTAINER I	4,733.30	7,218.30	115.05	8.75	17.20	320.00	NA
A. SUPERCONTAINER II	2,997.62	5,852.60	101.97	8.15	16.31	249.00	NA
A. SUPERCONTAINER III	3,792.70	5,392.20	105.57	8.40	16.33	332.00	NA
A. MEGACARRIER I	7,258.00	12,247.00	139.67	8.50	19.20	582.00	NA
A. MEGACARRIER II	7,287.84	12,687.00	132.00	8.50	21.20	467.00	NA
LORENZO CONTAINER XI	1,866.34	3,191.99	79.00	5.80	12.70	101.00	NA
LORCON LUZON	8,359.79	12,478.00	143.00	8.30	21.57	413.00	NA
LORCON MINDANAO	8,351.87	12,478.00	144.00	8.30	21.57	413.00	NA
CAGAYAN DE ORO EXP.	2,311.15	2,996.20	87.09	8.04	14.05	109.00	NA
ST PETER	2,664.69	4,293.00	92.53	7.10	14.40	140.00	NA
JOHN THE APOSTLE	2,918.38	4,382.56	87.00	7.00	15.00	154.00	NA
SAN SEBASTIAN	2,749.70	4,431.70	87.21	7.20	15.00	200.00	NA
CONNIE II	1,428.05	2,050.01	66.04	5.80	11.40	80.00	NA
SULPICIO CONTAINER II	3,505.56	4,002.99	105.18	7.70	15.00	130.00	NA
SULPICIO CONTAINER III	1,145.47	1,900.00	62.88	6.70	10.40	50.00	NA
SULPICIO CONTAINER IV	2,834.50	5,950.00	94.80	7.30	14.50	145.00	NA
SULPICIO CONTAINER V	2,677.59	4,175.00	83.40	6.20	14.04	100.00	NA
SULPICIO CONTAINER XV	2,933.44	4,903.00	98.00	7.50	15.30	135.00	NA
SULPICIO CONTAINERVII	1,030.54	2,021.00	65.84	4.72	11.00	47.00	NA
SULPICIO CONT. VIII	921.00	2,000.00	71.20	5.60	10.00	48.00	NA
SULPICIO CONTAINER IX	915.29	1,759.00	63.00	4.50	10.60	47.00	NA
SULPICIO CONTAINER XI	2,637.74	3,500.00	84.50	8.35	14.80	120.00	NA
SULPICIO CONTAINERXII	4,585.43	7,000.00	101.41	7.56	17.03	205.00	NA
SULPICIO CONTAINERXIV	3,826.54	6,611.72	106.80	7.50	17.00	205.00	NA
WILCON I	4,210.00	3,274.00	107.40	5.30	16.00	148.00	NA
WILCON II	2,249.00	2,105.00	89.70	5.70	12.80	111.00	NA
WILCON IV	3,463.00	4,876.00	102.30	5.80	16.00	100.00	NA
WILCON V	1,858.00	3,742.00	76.70	5.10	15.30	132.00	NA
WILCON VI	2,063.00	3,500.00	103.00	7.50	13.50	102.00	NA
WILCON VIII	3,638.00	4,644.00	92.26	6.30	16.00	152.00	NA
WILCON X	3,742.00	6,204.00	106.44	7.05	16.30	225.00	NA
WILCON XI	4,566.00	8,500.00	112.56	9.00	18.60	275.00	NA
TOTAL	109,521.53	170,356.27	3,107.30	225.22	490.90	6,043.00	
AVERAGE	3,422.55	5,323.63	97.10	7.04	15.34	188.84	N=32

2. RO/RO Vessel

RO/RO TYPE							
Name of Vessel	GRT	DWT	LOA	DRAFT	BEAM	CAP. TEU	CAP. PASS.
A. SUPERFERRY I	4,757.55	2,988.00	132.40	8.00	20.00	86.00	2,988.00
A. SUPERFERRY II	7,312.35	2,947.32	138.60	8.20	22.10	100.00	2,947.32
A. SUPERFERRY III	5,885.99	2,069.06	118.00	8.00	20.40	70.00	2,069.06
OUR LADY OF LOURDES	2,366.00	1,356.02	101.50	6.20	19.20	70.00	1,824.00
O/L OF SACRED HEART	4,388.70	2,101.21	123.00	5.80	18.00	90.00	2,000.00
OUR LADY OF FATIMA	2,366.00	1,481.25	101.50	6.20	19.20	70.00	1,824.00
OUR LADY OF HOPE	2,347.87	3,249.06	99.00	7.50	17.20	139.00	NA
OUR LADY OF PEACE	4,937.92	3,903.97	107.50	9.00	18.00	NA	NA
STA. FLORENTIA	4,343.30	1,700.00	118.86	7.75	20.60	60.00	1,840.00
PRINCESS OF NEGROS	4,494.54	1,700.00	109.65	6.00	20.60	NA	2,900.00
SAN PAOLO	5,908.00	1,800.00	107.00	7.00	20.00	NA	2,100.00
STA. ANA	7,909.65	3,088.11	112.00	8.00	20.40	75.00	1,840.00
MALIGAYA	2,222.50	2,286.64	98.60	4.40	16.20	NA	NA
PRINCESS OF THE ORIENT	13,734.21	8,170.00	195.81	8.00	24.00	NA	3,912.00
FILIPINA PRINCESS	13,705.23	9,533.23	180.60	9.00	22.80	200.00	3,500.00
MANILA PRINCESS	4,149.22	1,658.14	NA	NA	NA	NA	1,744.00
COTABATO PRINCESS	7,977.00	2,494.60	149.10	7.30	22.80	120.00	2,145.00
TACLOBAN PRINCESS	3,079.49	1,276.09	110.33	5.35	19.20	100.00	2,000.00
CEBU PRINCESS	1,097.87	616.87	69.00	6.50	15.20	NA	1,000.00
SUGBU	6,524.55	3,322.00	137.50	6.80	20.20	150.00	2,600.00
MAYNILAD	6,835.00	2,500.00	140.50	6.30	20.50	150.00	2,511.00
MASBATE I	6,496.60	1,315.00	104.50	4.80	20.00	41.00	1,328.00
ZAMBONGA	5,747.99	2,082.00	117.00	7.19	19.00	112.00	1,875.00
TOTAL	128,589.13	63,558.57	2,677.95	150.79	435.60	1,633.00	44,882.38
AVERAGE	5,590.83	2,763.42	121.73	6.85	22.93	102.06	2,244.12

N=23

3. Passenger Vessels

PASSENGER/CONTAINER							
Name of Vessel	GRT	DWT	LOA	DRAFT	BEAM	CAP. TEU	CAP. PASS.
LEGASPI	2,047.61	2,080.33	87.80	7.65	12.50	15.00	1,084.00
DON CLAUDID	2,863.60	1,982.30	86.44	8.40	14.40	7.00	950.00
DON JULIO	2,381.25	1,424.50	90.10	7.50	13.00	NA	994.00
PHILIPPINE PRINCESS	4,717.55	2,843.57	150.80	8.10	16.80	76.00	1,633.00
IROIRO PRINCESS	3,935.21	1,741.14	111.45	8.89	15.20	54.00	1,091.00
DIPLOG PRINCESS	3,786.81	1,797.76	111.19	8.68	15.20	46.00	1,261.00
SURIGAO PRINCESS	1,035.71	1,000.00	74.70	4.70	14.20	34.00	812.00
PALAWAN PRINCESS	1,497.27	2,000.00	87.96	6.79	11.96	33.00	630.00
DONA VIRGINIA	4,295.00	2,470.00	143.40	6.50	16.80	69.00	2,003.00
CEBU CITY	2,452.00	1,024.00	98.00	5.70	13.80	33.00	805.00
MISANIS OCCIDENTAL	1,998.00	1,453.00	88.10	5.00	13.50	33.00	850.00
TACLOBAN CITY	2,041.70	1,164.00	91.10	5.20	12.80	23.00	988.00
TOTAL	33,051.71	20,980.60	1,219.12	83.11	170.96	423.00	13,109.00
AVERAGE	2,754.31	1,748.38	101.59	6.93	14.25	38.45	1,092.42

N=12

4. Conventional Vessels

GENERAL CARGO							
Name of Vessel	GRT	DWT	LOA	DRAFT	BEAM	CAP. TEU	CAP. PASS.
MABUHAY	1,833.73	4,085.00	88.25	5.10	14.20	NA	NA
POLESTAR	2,671.43	4,436.11	93.50	6.20	15.00	NA	NA
SPARKLES	2,730.00	3,840.51	89.87	5.68	15.00	NA	NA
SOLID UNO	986.88	2,003.74	65.35	4.50	11.00	NA	NA
SOLID DOS	1,479.38	2,615.82	77.85	5.00	11.80	NA	NA
TOTAL	9,701.42	16,981.18	408.82	26.48	67.00		
AVERAGE	1,940.28	3,396.24	81.76	5.30	13.40		

N=5

SOURCE: LIST OF CISO MEMBERS VESSELS  
CALLING ON THE PORT OF MANILA (NORTH HARBOR)  
NOVEMBER 22, 1993

5. Average Vessel Size by Type

AVERAGE VESSEL SIZE BY TYPE (LINER ONLY)							
Name of Vessel	GRT	DWT	LOA	DRAFT	BEAM	CAP. TEU	CAP. PASS.
CARGO/CONTAINER (32)	3,422.55	5,323.63	97.10	7.04	15.34	188.84	NA
RO/RO/CARGO (23)	5,590.83	2,763.42	121.73	6.85	22.93	102.06	2,244.12
PASSENGER/CARGO (12)	2,754.31	1,748.38	101.59	6.93	14.25	38.45	1,092.42
GENERAL/CARGO (5)	1,940.28	3,396.24	81.76	5.30	13.40	0.00	NA





APPENDIX D: Basic Data for Berth Requirement

APPENDIX D-1 Productivity of Container handling at South Harbor and MICT

DATE	(1) NUMBER OF VESSELS	(2) AVERAGE STAYING TIME (HRS)	(3) AVERAGE SERVICE TIME (HRS)	CONTAINER THROUGHPUT		GROSS PRODUCTIVITY (5)/(1) x (2)	NET PRODUCTIVITY (5)/(1) x (3)
				(4) TEU	(5) UNIT		
Nov. 1992	34	12.70	10.47	10,889	7,522	17.42	21.13
Nov. 1990	100	14.22	12.99	36,382	26,382	18.55	20.31
Dec. 1990	101	15.07	13.95	38,781	27,356	17.97	19.42

MARINA CO., LTD, and ICISI

APPENDIX D-2 Ratio of Each Size Container at North Harbor in TEU

Number of Container at North Harbor

	1988	1989	1990	1991
NORTH(Domestic) at berth				
TEU(Total)	303,357.00	346,452.00	387,196.00	407,362.00
5 Foot	3,374.00	5,519.00	4,505.00	3,913.00
10 Foot	66,613.00	68,037.00	69,472.00	79,985.00
20 Foot	195,112.00	238,137.00	278,631.00	288,522.00
40 Foot	26,992.00	30,572.00	33,372.00	34,188.00
45 Foot	324.00	554.00	853.00	754.00
Others	10,942.00	3,633.00	362.00	0.00

Ratio of Each Size Container at North Harbor

Unit: %

	1988	1989	1990	1991
NORTH(Domestic) at berth				
TEU(Total)	100.00	100.00	100.00	100.00
5 Foot	1.11	1.59	1.16	0.96
10 Foot	21.96	19.64	17.94	19.63
20 Foot	64.32	68.74	71.96	70.83
40 Foot	8.80	8.82	8.62	8.39
45 Foot	0.11	0.16	0.22	0.19
Others	3.61	1.05	0.09	0.00

APPENDIX D-3 Present Data for Calculation

1 Container(Foreign)

\* Average vessel size in 2010

	2010 year	1991 year
MICT :	30,000(DWT)	15,540 (DWT)
SOUTH:	130,000(DWT)	8,870 (DWT)

Note: Data of South is used as pier No 3(ave. 7,700DWT)

\* Number of average handling containers per vessel in 2010

	2010 year	1991 year
MICT :	810(TEU) / vessel	418(TEU) / vessel
SOUTH:	470(TEU) / vessel	320(TEU) / vessel

Note: Data of South is on November,1992

\* Average loaded weight per container in 2010

	2010 year	1991 year
MICT :	10.3(MT) / unit	10.26(MT) / unit
SOUTH:	9.3(MT) / unit	9.25(MT) / unit

\* Average ratio of 40 Feet (TEU) in 2010

	2010 year	1991 year
MICT :	70%	59.32%
SOUTH:	70%	65.05%

\* Average ratio of Loaded Container(TEU) in 2010

	2010 year	1991 year
MICT :	81.40%	81.40%
SOUTH:	72.60%	72.60%

\* Average berth occupancy ratio in 2010

	2010 year	1992 year
MICT :	50%	50%
SOUTH:	50%	43%

\* Average service time per vessel in 2010

	2010 year	1991 year
MICT :	12.3(hrs) / vessel	12.99(hrs) / vessel

SOUTH: 12.9(hrs) / vessel      10.47(hrs) / vessel

Note: Data of South is from November,1992

Data of MICT is from November,1990

MICT ;Gantry crane 2 unit/berth

SOUTH;Gantry crane 1 unit/berth

Considering the ratio of 40 feet containers(TEU),  
the actual number of handling vans per vessel is  
567 and 365 units respectively in MICT and South  
harbor.

\* Average productivities per hour in 2010

2010 year                      1991 year

MICT : 25(unit) / hrs              20.31(unit) / hrs

SOUTH: 25(unit) / hrs              21.13(unit) / hrs

Note: Data of South is on November,1992

Data of MICT is on November,1990

## 2 Conventional(Foreign)

\* Average vessel size in 2010

2010 year                      1992 year

SOUTH: 10,000(DWT)              8,476 (DWT)

(Convo 6,505 DWT)

Note: Data of South is on December,1992

\* Average cargo volume per vessel in 2010

2010 year                      1992 year

SOUTH: 2,700 (MT)/ vessel      2,269(MT)/ vessel

(Convo 1,718 MT)

Note: Data of South is on December,1992

\* Average berth occupancy ratio in 2010

2010 year                      1991 year

SOUTH: 50%                      43%

\* Average staying time per vessel in 2010

2010 year                      1992 year

SOUTH: 27(hrs) / vessel      107.5(hrs) / vessel  
(Convo 40.3 hrs)

Note: Data of South is on December, 1992



APPENDIX D-4 Ratio of Cargo Volume by Vessels Type

1. Ratio of Cargo Volume by Vessel Type (North Harbor)  
(Pier 2 - 16)

Cargo Volume by Vessel Type

	Cargo Volume			Nos. Vessel
	General	Container	Total	
RO/RO TYPE	5,824	42,067	47,891	17
CONTAIER TYPE	5,712	45,161	50,873	15
CONVENTIONAL TYPE	9,470	0	9,470	7
Total	21,006	87,228	108,234	39

2. Ratio of Cargo Transported by Vessel Type  
(Pier 2 - 16)

Ratio of Cargo Volume by Vessel Type (%)

	Cargo Volume			Nos. Vessel
	General	Container	Total	
RO/RO TYPE	28	48	44	17
CONTAIER TYPE	27	52	47	15
CONVENTIONAL TYPE	45	0	9	7
Total	100	100	100	39

### 3. Calling Vessel Data, April 24 to 30, 1994

RO/RO Type Calling North Harbor  
Data From PPA, April 24 to 30, 1994

	GRT	General	Container	Box	Total	Remarks
LADY OF PANIMA	2,367	495	1,314	169	1,809	
LADY OF HOPE	2,347	161	4,373	478	4,534	
SALVE JULIANA	619	268	0	0	268	
KIMELODY CRISTY	491	50	0	0	50	
KIMELODY CRISTY	491	218	0	0	218	
TACLOBAN CITY	2,042	87	1,657	83	1,744	
CEBU CITY	2,452	129	1,461	95	1,590	
SACRED HEART	4,388	1,330	2,478	357	3,808	
LADY OF PEACE	4,937	0	2,778	257	2,778	
DONA VIRGINIA	4,295	201	2,373	110	2,574	
Sub Total	24,429	2,939	16,434	1,549	19,373	
AVERAGE	2,443	294	1,643	155	1,937	n=10
A. SUPER FERRY III	5,886	1,250	1,622	120	2,872	
SUGBU	6,524	205	5,213	226	5,418	
A. SUPER FERRY II	7,312	19	2,766	145	2,785	
MAYNILAND	6,835	215	5,764	279	5,979	
MASBATE I	6,496	93	1,527	126	1,620	
OUR LADY OF AKITA	--	389	2,078	181	2,467	
ZAMBONGA	5,748	215	2,957	128	3,172	
COTOBATO PRINCES	7,977	495	2,533	238	3,028	
A. SUPER FERRY III	5,886	4	1,173	113	1,177	
Sub Total	52,664	2,885	25,633	1,556	28,518	
AVERAGE	7,523	412	3,662	222	4,074	n=7
GRAND TAOTAL	77,093	5,824	42,067	3,105	47,891	
AVERAGE	4,535	343	2,475	183	2,817	n=17
Ratio of Small Size (%)		50	39		40	
Under 5,000 GRT (Draft -5.6m)						

LO/LO Type Calling North Harbor  
Data From PPA, April 24 to 30, 1994

	DWT	General	Container	Box	Total	
SULCON XI	3,500	28	4,626	213	4,654	
SULCON III	1,900	159	2,569	156	2,728	
WILCON I	3,274	111	2,570	280	2,681	
MINDANAO	12,478	678	8,391	507	9,069	
WILCON II	2,105	0	655	72	655	
THE APOSTLE	4,382	305	4,407	237	4,712	
WILCON V	3,742	181	1,190	138	1,371	
SUPER CON-1	7,218	15	2,145	246	2,160	
SUPER CON-2	5,852	9	4,668	333	4,677	
SULCON VII	2,021	0	1,282	64	1,282	
PALAWN PRINCES	2,000	44	636	46	680	
SOLID DOS	2,615	398	2,222	201	2,620	
SPEAKERS	3,840	1,610	4,173	293	5,783	
MABUHAY	4,085	1,774	4,260	287	6,034	
SOLID UNO	2,003	400	1,367	120	1,767	
Total	61,015	5,712	45,161	3,193	50,873	
AVERAGE	4,068	381	3,011	213	3,392	n=15
Ratio of Small Size (%)			8731	19.3		
Under 3,000 DWT (Draft -5.7m)						

Conventional Type Calling North Harbor  
Data From PPA, April 24 to 30, 1994

	DWT	General	Container	Box	Total	
MENTE SOL		708	0	0	708	
TALA NEGROS		4,600	0	0	4,600	
JOSE CANDANO		1,600	0	0	1,600	
ROMBLON BAY		36	0	0	36	
KUMANDER		1,100	0	0	1,100	
CONSOLACION		1,400	0	0	1,400	
ROMLON BAY		26	0	0	26	
Total		9,470	0	0	9,470	
AVERAGE		1,353			1,353	n=7

APPENDIX D-5 Ratio of Loaded Container and Weight per Container

Ratio of Loaded Containers and Weight per Container

MICT(Foreign) at berth	1988	1989	1990	1991
Total Volume	1,541,900.00	2,455,330.00	3,190,856.00	3,887,630.00
Containerized Volume	1,533,564.00	2,449,097.00	3,182,363.00	3,881,645.00
TEU(Total)	196,233.00	329,560.00	424,720.00	464,583.00
TEU(Empty)	44,065.00	85,329.00	102,277.00	86,403.00
Ratio of Loaded C. %	77.54	74.11	75.92	81.40
Volume(MT)/TEU(Load)	10.08	10.03	9.87	10.26
Volume(MT)/TEU(Total)	7.82	7.43	7.49	8.36
Number of Vessels	460.00	815.00	1,015.00	1,111.00
Num. of Con. /Vessel	426.59	404.37	418.44	418.17
SOUTH(Foreign) at berth				
Total Volume	3,298,547.00	3,897,211.00	3,717,947.00	2,763,505.00
Containerized Volume	2,241,785.00	1,931,280.00	1,432,612.00	1,118,951.00
TEU(Total)	258,380.00	274,382.00	220,203.00	166,566.00
TEU(Empty)	25,858.00	43,748.00	50,188.00	45,640.00
Ratio of Loaded C. %	89.99	84.06	77.21	72.60
Volume(MT)/TEU(Load)	9.64	8.37	8.43	9.25
Volume(MT)/TEU(Total)	8.68	7.04	6.51	6.72
MICT+SOUTH at berth				
Total Volume	4,840,447.00	6,352,541.00	6,908,803.00	6,651,135.00
Containerized Volume	3,775,349.00	4,380,377.00	4,614,975.00	5,000,596.00
TEU(Total)	454,613.00	603,942.00	644,923.00	631,149.00
TEU(Empty)	69,923.00	129,077.00	152,465.00	132,043.00
Ratio of Loaded C. %	84.62	78.63	76.36	79.08
Volume(MT)/TEU(Load)	9.81	9.22	9.37	10.02
Volume(MT)/TEU(Total)	8.30	7.25	7.16	7.92
NORTH(Domestic) at berth	1988	1989	1990	1991
Total Volume	9,634,445.00	10,552,484.00	10,621,240.00	10,454,654.00
Containerized Volume	4,781,442.00	5,702,530.00	6,492,453.00	6,946,332.00
TEU(Total)	303,357.00	346,452.00	387,196.00	407,362.00
TEU(Empty)	24,153.00	36,259.00	55,931.00	71,183.00
Ratio of Loaded C. %	92.04	89.53	85.55	82.53
Volume(MT)/TEU(Load)	17.13	18.38	19.60	20.66
Volume(MT)/TEU(Total)	15.76	16.46	16.77	17.05

APPENDIX D-6 Data for Short-Term Plan (Medium Case)

1. Port of Manila

1) Foreign Container Cargo, Number of Required Berths and Vessels in Each Year Container Vessel

Year	Container Vessel for Container Cargo MCT: 30,000 DWT, LOA 237m, Draft 11.6 m					Foreign Container South: 17,000 DWT, LOA 153m, Draft 8.4 m					Ratio of 40 Foot MCT (%)	
	Cargo volume MT(1000)	Nos. Berth	Nos. Vessel	Cargo volume MT(1000)	Nos. Berth	Nos. Vessel	Cargo volume MT(1000)	Nos. Berth	Nos. Vessel	Total		
1991	3,883	459	137	1,119	165	734	5,002	628	867	434	379	1,021
1992	4,210	514	152	1,220	180	693	6,010	694	752	494	382	1,076
1993	4,790	571	173	1,340	198	666	6,660	768	779	528	384	1,152
1994	5,320	634	197	1,460	216	639	7,370	850	793	566	371	1,221
1995	5,910	704	219	1,600	236	614	8,110	941	827	606	374	1,285
1996	6,560	782	242	1,740	257	589	9,020	1,040	933	703	374	1,351
1997	7,280	868	266	1,910	282	568	10,000	1,151	1,068	785	375	1,425
1998	8,090	964	291	2,080	309	546	11,060	1,272	1,186	864	384	1,504
1999	8,980	1,071	316	2,280	337	526	12,260	1,408	1,350	956	381	1,584
2000	9,930	1,180	341	2,490	368	504	13,470	1,559	1,425	1,052	389	1,665
2001	10,930	1,295	364	2,720	398	481	14,650	1,716	1,560	1,150	395	1,750
2002	11,970	1,416	387	2,970	426	456	15,940	1,880	1,735	1,247	400	1,847
2003	13,160	1,544	410	3,240	451	431	17,400	2,050	1,885	1,347	404	1,951
2004	14,500	1,678	433	3,530	473	406	18,960	2,220	2,031	1,451	408	2,059
2005	15,990	1,818	456	3,840	493	381	20,610	2,390	2,212	1,554	412	2,176
2006	17,630	1,964	479	4,170	511	357	22,360	2,560	2,389	1,655	416	2,291
2007	19,430	2,116	502	4,520	527	332	24,210	2,730	2,562	1,751	420	2,411
2008	21,390	2,274	525	4,890	541	307	26,160	2,900	2,739	1,842	424	2,536
2009	23,510	2,438	548	5,280	553	282	28,210	3,070	2,922	1,927	428	2,665
2010	25,790	2,607	571	5,690	562	257	30,480	3,240	3,085	2,004	432	2,796

2) Foreign Non-containerized Cargo, Number of Required Berths and Vessels in Each Year Conventional Vessel

Year	Conventional Vessel for General Cargo Conv: 10,000 DWT, LOA 137m			Foreign Non-containerized Cargo Conv: 10,000 DWT, LOA 137m		
	Cargo volume MT(1000)	Nos. Berth	Nos. Vessel	Cargo volume MT(1000)	Nos. Berth	Nos. Vessel
1991	1,946	23	510	1,946	23	510
1992	1,730	22	641	1,730	22	641
1993	1,810	6.5	670	1,810	6.5	670
1994	1,900	6.8	704	1,900	6.8	704
1995	1,880	7.2	737	1,880	7.2	737
1996	2,030	7.5	774	2,030	7.5	774
1997	2,190	7.9	811	2,190	7.9	811
1998	2,300	8.3	852	2,300	8.3	852
1999	2,410	8.7	893	2,410	8.7	893
2000	2,530	9.1	937	2,530	9.1	937
2001	2,640	9.1	941	2,640	9.1	941
2002	2,750	9.2	944	2,750	9.2	944
2003	2,870	9.2	948	2,870	9.2	948
2004	2,980	9.2	952	2,980	9.2	952
2005	3,090	9.3	959	3,090	9.3	959
2006	3,200	9.3	974	3,200	9.3	974
2007	3,310	9.3	989	3,310	9.3	989
2008	3,420	9.3	1,011	3,420	9.3	1,011
2009	3,530	10.0	1,028	3,530	10.0	1,028
2010	3,640	10.1	1,044	3,640	10.1	1,044

3) Domestic Container Cargo, Number of Required Berths and Vessels in Each Year.  
 Container Vessel for Container Cargo

Container Vessel for Container Cargo	Total									
	Large: 12,500 DWT, LOA 145m, Draft 8.3 m					Small: 3,300 DWT, LOA 107m, Draft 5.3 m				
	Cargo volume MT(1000) TEUs	No. Berth	No. Vessel	Cargo volume MT(1000) TEUs	No. Berth	No. Vessel	Cargo volume MT(1000) TEUs	No. Berth	No. Vessel	Cargo volume MT(1000) TEUs
1991	2,027	71,393	188,535	687	19,228	111,250	369	1,123	15	1,100
1992	2,121	187,755	201,031	372	42,363	171,149	983	1,197	15	1,100
1993	2,271	151,588	214,011	374	42,363	171,149	983	1,197	15	1,100
1994	2,342	201,103	249,171	415	48,651	214,011	1,015	1,275	15	1,100
1995	3,009	231,382	275,261	473	48,651	214,011	1,015	1,359	15	1,100
1996	4,422	292,451	355,890	670	39,233	38,753	1,123	1,370	10	84.0
1997	4,869	292,135	276,227	573	32,450	30,007	1,015	1,372	5	60.0
1998	5,405	321,183	289,064	476	1,136	1,177	2,091	1,366	0	85.0
1999	6,075	355,103	308,794	335	22,344	14,226	1,144	1,100	0	75.0
2000	6,574	363,151	325,015	372	20,113	11,121	1,133	1,100	0	70.0
2001	7,390	415,752	374,908	495	20,113	11,121	1,133	1,100	0	65.0
2002	7,662	448,651	358,929	235	8,219	1,225	1,015	1,100	0	60.0
2003	8,266	484,029	387,223	316	1,173	1,990	1,015	1,100	0	60.0
2004	8,865	519,221	415,777	411	1,259	1,292	1,015	1,100	0	60.0
2005	9,545	558,155	447,125	474	1,336	1,955	1,015	1,100	0	60.0
2006	10,352	608,345	477,063	538	9,252	1,401	1,015	1,100	0	60.0
2007	11,147	652,330	504,181	613	5,293	1,416	1,015	1,100	0	60.0
2008	11,991	702,152	531,221	706	3,212	1,416	1,015	1,100	0	60.0
2009	12,849	752,394	561,315	824	2,600	1,352	1,015	1,100	0	60.0
2010	13,746	804,210	593,335	951	1,073	1,352	1,015	1,100	0	60.0

RO/RO Vessel for Container Cargo

RO/RO Vessel for Container Cargo	Total									
	Large: 13,700 DWT, LOA 165m, Draft 8.3 m					Small: 3,000 DWT, LOA 112m, Draft 4.9 m				
	Cargo volume MT(1000) TEUs	No. Berth	No. Vessel	Cargo volume MT(1000) TEUs	No. Berth	No. Vessel	Cargo volume MT(1000) TEUs	No. Berth	No. Vessel	Cargo volume MT(1000) TEUs
1991	2,035	119,163	131,079	1,894	19,392	83,930	1,008	2,032	15	1,100
1992	2,170	127,058	139,774	2,009	1,387	89,340	1,117	2,126	15	1,100
1993	2,310	135,266	148,702	2,219	1,477	95,136	1,189	2,218	15	1,100
1994	2,473	144,235	158,618	2,481	1,572	101,384	1,267	2,318	15	1,100
1995	2,677	150,233	168,237	2,781	1,672	107,384	1,353	2,418	15	1,100
1996	2,904	174,133	179,309	3,072	1,770	113,307	1,442	2,518	15	1,100
1997	3,285	192,338	177,532	3,451	1,873	119,143	1,531	2,618	15	1,100
1998	3,581	208,520	187,665	3,829	1,977	125,013	1,620	2,718	15	1,100
1999	3,855	225,736	197,519	4,207	2,081	130,884	1,709	2,818	15	1,100
2000	4,113	240,841	204,718	4,585	2,185	136,755	1,808	2,918	15	1,100
2001	4,356	258,322	210,135	4,963	2,289	142,626	1,907	3,018	15	1,100
2002	4,612	276,063	215,051	5,341	2,393	148,497	2,006	3,118	15	1,100
2003	4,875	285,493	224,371	5,719	2,497	154,368	2,105	3,218	15	1,100
2004	5,138	303,265	242,611	6,097	2,601	160,239	2,204	3,318	15	1,100
2005	5,504	322,235	257,837	6,475	2,705	166,110	2,303	3,418	15	1,100
2006	5,783	338,603	270,907	6,853	2,809	172,000	2,402	3,518	15	1,100
2007	6,100	358,332	281,011	7,231	2,913	177,890	2,501	3,618	15	1,100
2008	6,493	380,408	301,165	7,609	3,017	183,780	2,600	3,718	15	1,100
2009	6,907	404,450	323,580	7,987	3,121	189,670	2,700	3,818	15	1,100
2010	7,351	429,278	343,423	8,365	3,225	195,560	2,800	3,918	15	1,100

4) Domestic Non-containerized Cargo, Number of Required Berths and Vessels in Each Year  
RO/RO and Conventional Vessel for General Cargo

Year	RO/RO and Conventional Vessel for General Cargo										Total		Cargo Ratio		
	RO/RO: 3,000 GRT, LOA 113m, Draft 4.9 m					Conventional: 4,100 DWT, LOA 88m, Draft 5.1 m					(General Cargo and Berth)		Transported by		
	Cargo volume		Nos. Berth		Nos. Vessel		Cargo volume		Nos. Berth		Nos. Vessel		RO/RO (%)		Convention (%)
MT (*1000)	Nos. Berth	Nos. Vessel	MT (*1000)	Nos. Berth	Nos. Vessel	MT (*1000)	Nos. Berth	Nos. Vessel	MT (*1000)	Nos. Berth	Nos. Vessel	(%)	(%)	(%)	(%)
1991	383	5.6	766	2,927	18.6	1,579	3,510	24.1	2,336	28.0	72.0				
1992	991	5.6	762	2,549	18.7	1,593	3,540	24.3	2,356	28.0	72.0				
1993	1,000	5.7	769	2,570	18.9	1,606	3,570	24.6	2,375	28.0	72.0				
1994	1,005	5.7	773	2,585	19.0	1,618	3,580	24.7	2,389	28.0	72.0				
1995	1,448	6.2	1,114	2,772	18.0	1,358	3,620	24.2	2,471	49.0	50.0				
1996	1,716	9.7	1,320	1,934	14.2	1,209	3,650	23.9	2,529	47.0	53.0				
1997	1,950	11.0	1,500	1,710	12.7	1,081	3,680	23.8	2,581	53.0	47.0				
1998	2,152	12.2	1,555	1,558	11.5	974	3,710	23.6	2,629	58.0	42.0				
1999	2,319	13.1	1,784	1,421	10.4	888	3,740	23.6	2,672	62.0	38.0				
2000	2,488	14.1	1,914	1,282	9.4	801	3,770	23.5	2,715	66.0	34.0				
2001	2,815	14.8	2,012	1,175	8.6	734	3,790	23.4	2,746	69.0	31.0				
2002	2,712	15.3	2,085	1,108	8.1	693	3,820	23.5	2,779	71.0	29.0				
2003	2,803	15.3	2,156	1,037	7.6	648	3,840	23.5	2,804	73.0	27.0				
2004	2,856	16.2	2,197	1,004	7.4	628	3,860	23.5	2,824	74.0	26.0				
2005	2,918	16.5	2,245	972	7.1	608	3,890	23.7	2,852	75.0	25.0				
2006	2,979	16.8	2,292	941	6.9	588	3,920	23.8	2,880	76.0	24.0				
2007	3,042	17.2	2,340	908	6.7	568	3,950	23.9	2,908	77.0	23.0				
2008	3,104	17.5	2,388	876	6.4	548	3,980	24.0	2,935	78.0	22.0				
2009	3,176	18.0	2,443	844	6.2	528	4,020	24.2	2,971	79.0	21.0				
2010	3,240	18.3	2,492	810	6.0	505	4,050	24.3	2,999	80.0	20.0				

2. Port of Batangas.

1) Foreign Container and Non-containerized Cargo, Number of Required Berths and Vessels in Each Year  
Conventional and Container Vessel

Year	Conventional and Container Vessel for General and Container Cargo				Port of Batangas ( Foreign )				Ratio of 40 Foot
	Conv.:10,000 DWT,LOA 137m		Cont.:13,000 DWT, LOA 153, Draft 8.4 m		Total				
	Draft 8.5 m		Draft 8.4 m		Total		Total		
	Cargo volume MT(+1000)	Nos. Berth	Nos. Vessel	Cargo volume MT(+1000)	Nos. Berth	Nos. Vessel	Cargo volume MT(+1000)	Nos. Berth	Nos. Vessel
1991	54	0.7	34	0	0.0	0	54	0	34
1992	60	0.7	38	0	0.0	0	60	0	38
1993	66	0.8	41	0	0.0	0	66	0	41
1994	72	0.9	45	0	0.0	0	72	0	45
1995	80	1.0	51	2	0.0	0	82	200	51
1996	88	1.2	59	6	0.0	0	94	889	59
1997	97	1.4	69	14	0.0	0	111	1,400	69
1998	107	1.3	67	34	0.1	30	141	2,074	67
1999	118	1.4	74	83	0.2	94	201	3,399	74
2000	130	0.5	48	200	0.6	227	330	8,298	48
2001	143	0.6	53	251	0.7	180	394	19,995	53
2002	157	0.6	53	314	0.9	234	471	25,093	53
2003	173	0.7	64	314	1.1	294	567	31,175	64
2004	191	0.8	71	434	1.3	366	635	46,506	71
2005	210	0.8	78	620	1.7	459	830	58,355	78
2006	216	0.9	80	647	1.1	215	863	73,166	80
2007	222	0.9	82	676	1.1	225	898	81,827	82
2008	228	0.9	84	706	1.2	233	934	95,826	84
2009	234	0.9	87	737	1.2	243	971	100,121	87
2010	240	1.0	89	770	1.3	252	1,010	104,565	89
							1,010	71,497	330
							114,044	74,129	341

2) Domestic Container Cargo, Number of Required Berths and Vessels in Each Year  
 Container and RO/RO Vessel

Year	Container Vessel for Container Cargo				RO/RO Vessel				Port of Batangas ( Domestic Container )				Cargo Ratio			
	Large: 5,500 DWT, LOA 112m, Draft 9.0 m		Small: 2,000 GRT, LOA 95m, Draft 4.4 m		Large: 5,500 DWT, LOA 112m, Draft 9.0 m		Small: 2,000 GRT, LOA 95m, Draft 4.4 m		Total		Total		Total		Total	
	Cargo volume MT(1000)	Nos. Berth	Nos. Vessel	Nos. Berth	Cargo volume MT(1000)	Nos. Berth	Nos. Vessel	Nos. Berth	Cargo volume MT(1000)	Nos. Berth	Nos. Vessel	Nos. Berth	Cargo volume MT(1000)	Nos. Berth	Nos. Vessel	Cargo Ratio
1991	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2001	1,157	2,021	1	0	15	15	1	0	117	135	1	0	117	135	1	100.0
2002	81	4,743	5,407	0.2	15	15	1	0	351	404	0	0	351	404	0	100.0
2003	164	9,603	10,947	0.2	15	15	1	0	878	1,010	0	0	878	1,010	0	100.0
2004	296	17,333	19,566	0.3	38	38	1	0	2,225	2,559	0	0	2,225	2,559	0	100.0
2005	500	29,278	32,206	0.6	87	87	1	0	5,445	6,262	0	0	5,445	6,262	0	100.0
2006	686	40,170	43,364	0.8	135	135	1	0	13,468	15,488	0	0	13,468	15,488	0	100.0
2007	802	46,862	48,840	0.8	271	271	1	0	17,626	20,270	0	0	17,626	20,270	0	100.0
2008	935	54,750	54,203	0.8	444	444	1	0	405	468	0	0	405	468	0	100.0
2009	1,105	64,705	59,529	1.0	736	736	1	0	548	631	0	0	548	631	0	100.0
2010	1,302	76,241	60,993	1.1	888	888	1	0	739	841	0	0	739	841	0	100.0

3) Domestic Non-containerized Cargo, Number of Required Berths and Vessels in Each Year  
 RO/RO Vessel

Year	Cargo volume MT(1000)	Nos. Berth	Nos. Vessel
1991	944	5.3	6,741
1992	980	5.5	9,074
1993	1,020	5.8	9,444
1994	1,060	6.0	9,815
1995	1,109	6.3	10,260
1996	1,154	6.5	10,685
1997	1,213	6.8	11,231
1998	1,261	7.1	11,754
1999	1,313	7.4	12,254
2000	1,360	7.7	12,731
2001	1,402	8.0	13,185
2002	1,440	8.3	13,616
2003	1,460	8.5	13,926
2004	1,480	8.7	14,214
2005	1,490	8.8	14,480
2006	1,500	8.9	14,724
2007	1,505	8.9	14,945
2008	1,510	8.9	15,141
2009	1,515	8.9	15,314
2010	1,520	8.9	15,474



APPENDIX E:

E-1

Project Cost of Manila South Harbor (medium case)

ITEM	Unit	Q'ty Peso	U.P. Peso	Amount M.Peso
A. Port Facilities				353.1
1. General Expenses and preparatory works				10.3
2. Marine Works				175.6
1)Dredging	cu.m	0		0
2)Reclamation/filling	cu.m	924,000	190	175.6
3. Civil Works				167.2
1)Pavement for container yard	sq.m	75,000	1,600	120.0
2)Utilities	ha	8	5,900*3	47.2
Other civil works				
B. Procurement				767.9
1)Straddle carrier	unit	15	30,000*3	450.0
2)Forklift	unit	12	2,700*3	32.4
3)Tractor	nos	48	3,250*3	156.0
4)Chasses	nos	74	1,750*3	129.5
C. Total construction cost				1,121.0
D. Indirect cost				303.2
1. Physical contingency	sum	1		112.1
2. Engineering Fee	sum	1		61.7
3. Value added tax	sum	1		129.4
E. Project Cost				1,424.2

## Project Cost of MICT ( medium case )

ITEM	Unit	Q'ty Peso	U.P. Peso	Amount M. Peso
A. Port Facilities				4,781.9
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1. General expenses and preparatory works	sum	1		136.1
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2. Marine works				3,422.2
1)Dredging	cu.m	3,480,000	133	462.8
2)Filling	cu.m	2,509,000	190	476.7
3)-13 m container berth	l.m	900	2,670,000	2,403.0
4)Revetment	l.m	670	115,000	77.1
5)Navigation aids	sum	1		2.6
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3. Civil Works				1,223.6
1)Pavement of yard	sq.m	302,250	1,600	483.6
2)Pavement of container stacking point	sq.m	48,495	2,250	119.1
3)Transfer crane lane	m	10,800	12,000	129.6
4)Lighting/utilities	berth	3	62,000*3	186.0
5)Truck scale	unit	3	5,180,000	15.5
6)Buildings	sq.m	27,000	11,100	299.7
7)Oter civil works	sum	1		19.7
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B. Procurement				2,890.0
1)Gantry crane P.P.	unit	2	280,000*3	560.0
2)Gantry crane Pana.	unit	4	230,000*3	920.0
3)Yard crane, etc.	berth	3	370,000*3	1,110.0
4)Tug boat	fleet	2	150,000*3	300.0
-----				
C. Total construction cost				7,671.9
-----				
D. Indirect Cost				2,075.2
1)Physical contingency				767.2
2)Engineering fee				422.0
3)Value Added Tax				886.0
-----				
E. Total Project Cost				9,747.1
=====				

E-3

## Project Cost of Manila North Harbor (medium case)

ITEM	Unit	Q'ty	U.P.	Amount
		Peso	Peso	M. Peso
A. Port Facilities				4,687.4
1. General Expenses	sum	1		136.5
2. Marine works				2,615.3
1) Dredging of				
-9.0, -10m	cu.m	4,200,000	133	558.6
2) Reclamation/Filling	cu.m	2,620,000	190	497.8
3) -10m Container Berth	m	1,080	1,000,000	1,080.0
4) -9m Ro/Ro Berth new	m	220	670,000	147.4
5) -9m existing Ro/Ro Berth	m	180	568,000	102.2
6) Revetment	l.m	600	128,750	77.2
7) Access road offshore	l.m	1,520	100,000	152.0
3. Civil works				1,935.6
1) Pavement of				
Container yard	sq.m	389,000	1,600	622.4
2) Port Road (W=38m)	l.m	950	91,100	86.5
3) Outdoor Lighting	ha	35	7,000,000	245.0
4) Track Scale	unit	6	5,180,000	31.0
5) Container Freight Station	sq.m	45,000	9,500	427.5
6) Maintenance shop	sq.m	4,800	12,500	60.0
7) Administration BLD	sq.m	9,600	17,000	163.2
8) Bridge at Pasig Riv.	l.m	200	1,500,000	300.0
B. Procurement				2,130.0
1) Gantry Crane	unit	6	180,000*3	1,080.0
2) Yard crane, etc.	berth	6	175,000*3	1,050.0
C. Total Construction Cost				6,817.4
D. Indirect Cost				1,844.1
1. Physical Contingency	sum	1		681.7
2. Engineering Fee	sum	1		375.0
3. Value Added Tax	sum	1		787.4
E. PROJECT COST				8,661.5

E-4

Project Cost of Batangas Port (medium case)

ITEM	Unit	Q'ty Peso	U.P. Peso	Amount M. Peso
A. Port Facilities				461.3
1. General Expenses	sqm	1		13.4
2. Marine Works				346.8
1) Dredging	cu.m	365,000	110	40.2
2) Reclamation	cu.m	74,000	164	12.1
3) -10m Container Berth	m	150	609,000	91.4
4) -10m Seawall	m	300	549,000	164.7
5) Revetment Av.-1m	m	200	90,000	18.0
6) Revetment Av.-3m	m	85	60,000	5.1
7) Artificial concrete block 9X2X200m	cu.m	3,600	4,250	15.3
3. Civil Works				101.1
1) Pavement of yard	sq.m	27,380	1,600	43.8
2) Port Road(W=22m)	sq.m	13,200	1,075	14.2
3) Outdoor Lighting	berth	1	15,750,000	15.8
4) Utilities	sum	1		14.7
5) Other civil works	sum	1		2.6
6) Warehouse	sq.m	800	12,500	10.0
B. Procurement				355.0
1) Quay side crane	unit	1	180,000,000	180.0
2) Yard crane	sum	1		175.0
C. Total Construction Cost				816.3
D. Indirect Cost				220.8
1. Physical contingency	sum	1		81.6
2. Engineering Fee	sum	1		44.9
3. Value added tax	sum	1		94.3
E. Project Cost				1,037.1

E-5

## Project Cost of Manila South Harbor (high case)

ITEM	Unit	Q'ty Peso	U.P. Peso	Amount M. Peso
A. Port Facilities				4,767.4
1. General Expenses	sum	1		138.9
2. Marine Works				3,442.1
1)Dredging	cu.m	5,300,000	133	704.9
2)Reclamation/Filling	cu.m	1,600,000	190	304.0
3)-13m Container Berth	l.m	900	2,160,000	1,944.0
4)Revetment	l.m	1,000	154,000	154.0
5)Offshore road	l.m	1,850	155,000	286.8
6)Demolish breakwater	m	1,100	44,000	48.4
3. Civil Works				1,186.4
1)Pavement of crane Zone	sq.m	48,495	2,250	109.1
2)Pavement of yard	sq.m	279,000	1,600	446.4
3)Transfer crane lane	l.m	10,800	12,000	129.6
4)Outdoor lighting Utilities	berth	3	62,000,000	186.0
5)Truck scale	unit	3	5,180,000	15.5
6)Container Freight Station etc	sq.m	27,000	11,100	299.7
B. Procurement				2,890.0
1)Gantry crane P.P	unit	2	280,000*3	560.0
2)Gantry crane P	unit	4	230,000*3	920.0
3)Yard crane	berth	3	370,000*3	1,110.0
3)Tug Boat	fleet	2	150,000,000	300.0
C. Total Construction Cost				7,657.4
D. Link road to highway	l.m	800	91,100	72.9
E. Land acquisition	sq.m	40,000	6,000	240.0
F. Relocation cost	sq.m	8,000	10,000	80.0
G. Total Construction Cost				8,050.2
H. Indirect Cost				2,071.3
1. Physical contingency	sum	1		765.7
2. Engineering Fee	sum	1		421.1
3. Value added tax	sum	1		884.4
J. PROJECT COST				10,121.4

## Project Cost of MICT (high case)

ITEM	Unit	Q'ty Peso	U.P. Peso	Amount M. Peso
A. Port Facilities				6,458.0
1. General Expenses and preparatory works				sum 188.1
2. Marine Works				4,650.9
1)Dredging	cu.m	5,020	133	667.7
2)Reclamation/Filling	cu.m	3,160	190	600.4
3)-13m Container Berth	m	1,200	2,670,000	3,204.0
4)Revetment	m	670	115,000	77.1
5)Breakwater	m	400	248,000	99.2
6)Navigation Aids	sum	1		2.6
3. Civil Works				1,619.0
1)Pavement of crane zone	sq.m	64,660	2,250	145.5
2)Pavement of yard	sq.m	395,200	1,600	632.4
3)Transfer crane lane	l.m	14,400	12,000	172.8
4)Outdoor lighting	berth	4	62,000,000	248.0
5)Container Freight Station	sq.m	36,000	11,100	399.6
6)Truck scale	unit	4	5,180,000	20.7
B. Procurement				3,720.0
1)Gantry crane (PostPANA)	unit	2	280,000*3	560.0
2)Gantry crane (PANAMAX)	unit	6	230,000*3	1,380.0
3)Yard crane	sum	1		1,480.0
4)Tug Boat	fleet	2	150,000,000	300.0
C. Total construction cost				9,140.2
D. Indirect cost				2,753.2
1. Physical contingency	sum	1		1,017.8
2. Engineering Fee	sum	1		560.0
3. Value added tax	sum	1		1,175.6
E. Project Cost				12,931.2

E-7

## Project Cost of Manila North Harbor (high case)

ITEM	Unit	Q'ty Peso	U.P. Peso	Amount M. Peso
A. Port Facilities				7,429.3
1. General Expenses and preparatory works	sum	1		216.4
2. Marine Works				4,062.2
1) Dredging	cu.m	8,630,000	133	1,147.8
2) Filling	cu.m	2,620,000	190	497.8
3) -10m Container Berth	m	1,800	1,000,000	1,800.0
4) -9m Ro/Ro new Berth	m	440	670,000	294.8
5) -9m Ro/Ro exist. B	m	180	568,000	102.2
6) Revetment	m	380	128,750	48.9
7) Access road offshore	m	1,520	100,000	152.0
8) Navigation aids	sum	1		18.6
3. Civil Works				3,150.7
1) Pavement of Container Yard	sq.m	577,800	1,600	924.5
2) Port Road	l.m	4,450	91,100	405.4
3) Outdoor lighting	ha	55	7,000,000	385.0
4) Truck scale	unit	10	5,180,000	51.8
7) Container Freight Station etc	sq.m	99,000	10,950	1,084.0
8) Bridge at Riv. Pasig	l.m	200	1,500,000	300.0
B. Procurement				3,850.0
1) Gantry crane	unit	10	180,000,000	1,800.0
2) Yard crane	berth	10		1,750.0
3) Tug Boat	fleet	2	150,000,000	300.0
C. Total Costruction Cost				11,279.3
D. Land acquisition cost	sq.m	361,600	6,000	2,169.6
E. Indirect cost				3,051.0
1. Physical contingency	sum	1		1,127.9
2. Engineering Fee	sum	1		620.4
3. Value added tax	sum	1		1,302.7
F. Project Cost				16,499.9

E-8

## Project Cost of Batangas Port (high case)

ITEM	Unit	Q'ty Peso	U.P. Peso	Amount M. Peso
A. Port Facilities				953.7
1. General Expenses and preparatory works				27.8
2. Marine Works				683.3
1) Dredging	cu.m	787,000	110	86.6
2) Reclamation/Filling	cu.m	313,000	164	51.3
3) -10m Container Berth	m	500	609,000	304.5
4) -5.5m General Cargo Berth	m	120	440,000	52.8
5) -10m Seawall	m	300	549,000	164.7
6) Revetment	m	260	90,000	23.4
3. Civil Works				242.6
1) Pavement of Yard	sq.m	54,760	1,600	87.6
2) Port Road	sq.m	18,700	1,075	20.1
3) Outdoor lighting	berth	4	15,750,000	63.0
4) Utilities	sum	1		44.1
5) Other civil works	sum	1		7.8
6) Warehouse	sq.m	1,600	12,500	20.0
B. Procurement				885.0
1) Gantry crane	unit	2	180,000,000	360.0
2) Yard crane	sum	3	175,000,000	525.0
C. Total Construction Cost				1,838.7
D. Indirect cost				497.4
1. Physical contingency				183.9
2. Engineering Fee				101.1
3. Value added tax				212.4
E. Project Cost				2,336.1



## Project Cost of NAIC/CAVITE (high case Alternative)

ITEM	Unit	Q'ty Peso	U.P. Peso	Amount M. Peso
=====				4,748.1
A. Port Facilities				
1. General Expenses and preparatory works	sum	1		138.3
-----				2,659.3
2. Marine Works				
1) Dredging	cu.m	5,650,000	110	621.5
2) Reclamation	cu.m	3,700,000	41	151.7
3) -13m Container Berth	m	900	908,000	817.2
4) Breakwater	m	2,020	271,500	548.4
5) Revetment	m	1,900	199,000	378.1
6) Access road offshore	m	1,300	102,000	132.6
7) Navigation Aids	sum	1		9.8
-----				1,950.5
3. Civil Works				
1) Pavement for crane zone	l.m	10,800	12,000	129.6
2) Pavement for container yard	sq.m	279,000	1,600	446.4
3) Pavement of container stacking area	sq.m	48,495	2,250	109.1
4) Port Road	sq.m	95,000	1,075	102.1
5) Outdoor lighting	berth	3	62,000,000	186.0
6) Truck scale	unit	3	5,180,000	15.5
7) Approach road	l.m	3,500	200,000	700.0
8) Container freight Station	sq.m	19,800	8,000	158.4
9) Maintenance shop	sq.m	2,400	11,000	26.4
10) Administration Bldg.	sq.m	4,800	16,000	76.8
-----				3,040.0
B. Procurement				
1) Gantry crane (Postmanamax)	unit	2	280,000*3	560.0
2) Gantry crane	unit	4	230,000*3	920.0
3) Yard crane	berth	3	370,000*3	1,110.0
4) Tug Boat	fleet	3	150,000,000	450.0
-----				7,788.1
C. Total Construction Cost				
D. Link road	l.m	14,000	100,000	1,400.0
-----				1.8
E. Land acquisition cost	ha	60	30,000	
-----				60.0
F. Relocation cost	sq.m	6,000	10,000	
-----				2,102.8
G. Indirect cost	sum	1		
-----				11,352.6
=====				
H. TOTAL PROJECT COST				
=====				

## Project Cost of Sangley Point (high case Alternative)

ITEM	Unit	Q'ty	U.P.	Amount
		Peso	Peso	M. Peso
A. Port Facilities				4,753.8
1. General Expenses and preparatory works				138.5
2. Marine Works				3,291.1
1)Dredging	cu.m	8,500,000	110	935.0
2)Reclamation	cu.m	500,000	41	20.5
3)-12m Container Berth	m	900	2,520,000	2,268.0
4)Revetment	m	300	199,000	59.7
5)Navigation Aids	sum	1		7.9
3. Civil Works				1,324.2
1)Pavement for crane zone	l.m	10,800	12,000	129.6
2)Pavement of yard	sq.m	279,000	1,600	446.4
3)Pavement of container stacking area	sq.m	48,495	2,250	109.1
4)Port Road	sq.m	163,400	1,075	175.7
5)Outdoor lighting	berth	3	62,000,000	186.0
6)Container Freight Station	sq.m	19,800	8,000	158.4
7)Maintenance shop	sq.m	2,400	11,000	26.4
8)Administration Bldg.	sq.m	4,800	16,000	76.8
9)Truck scale	unit	3	5,180,000	15.5
B. Procurement				3,040.0
1)Gantry crane (PostPanamax)	unit	2	280,000*3	560.0
2)Gantry crane (PANAMAX)	unit	4	230,000*3	920.0
3)Yard crane	berth	3	370,000*3	1,110.0
4)Tug Boat	fleet	3	150,000,000	450.0
C. Total Construction Cost				7,793.8
D. Link road	l.m	8,500	200,000	1,700.0
E. Land acquisition cost	ha	45	600,000	27.0
F. Relocation cost	sum	1		4,200.0
G. Indirect cost	sum	1		2,104.3
H. Project Cost				15,825.1

APPENDIX F: Demand Forecast

Appendix F-1 and Table 2-3 (continued)

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
DOMESTIC - BREAKBULK ( UNIT : TON )

COMMODITY	TOTAL				
	4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	4,396,639	943,575	3,453,020	0	44
Abaca	7,151	87	7,064	0	0
Animal Feeds	59,816	15,855	43,961	0	0
Copra	60,016	32,936	27,080	0	0
Corn	199,373	70,970	128,403	0	0
Fertilizer	145,050	19,742	125,308	0	0
Fish & Fish Prep.	82,604	13,652	68,952	0	0
Fruits & Vegetables	177,712	76,386	101,326	0	0
Live Animal	82,524	20,590	61,934	0	0
Logs	337,978	2,761	335,217	0	0
Lumber	68,223	4,300	63,923	0	0
Palay & Rice	181,072	97,805	83,267	0	0
Sugar	244,256	7,258	236,998	0	0
Transport Equipment	425,500	372,460	53,040	0	0
Wheat	39,936	8,321	31,615	0	0
SUM(Small Vol. Cargos)	120,688	1,701	118,987	0	0
Bottled Cargo	184,313	41,990	142,323	0	0
Dairy Products	5,673	1,561	4,112	0	0
Other Gen.Cargo	677,007	88,379	588,628	0	0
Mach. & Elect.EQUIPT.	36,976	1,726	35,206	0	44
Cement	115,546	34,584	80,962	0	0
Chemicals	118,064	1,161	116,903	0	0
Crude Minerals	42,481	14,817	27,664	0	0
Iron & Steel	595,478	2,613	592,865	0	0
Metaliferous Ores/Scrap	23,188	1,435	21,753	0	0
Mineral Fuel	33,735	2,570	31,165	0	0
Ref.Petroleum & Prod.	9,588	2,264	7,324	0	0
Furniture	10,797	1,083	9,714	0	0
Handicraft	0	0	0	0	0
Manufactured Metal	58,034	733	57,301	0	0
Paper & Pulp	37,437	75	37,362	0	0
Plywood & Veneer	175,855	1,145	174,710	0	0
Rattan	0	0	0	0	0
Textile Fiber	6,692	841	5,851	0	0
Textile & Garments Prod	16,810	255	16,555	0	0
Tobacco & Manufactures	17,066	1,519	15,547	0	0

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
DOMESTIC - BULK ( UNIT : TON )

COMMODITY	TOTAL				
	4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	55,298	0	55,298	0	0
Abaca	0	0	0	0	0
Animal Feeds	0	0	0	0	0
Copra	9,749	0	9,749	0	0
Corn	1,948	0	1,948	0	0
Fertilizer	0	0	0	0	0
Fish & Fish Prep.	0	0	0	0	0
Fruits & Vegetables	0	0	0	0	0
Live Animal	0	0	0	0	0
Logs	0	0	0	0	0
Lumber	0	0	0	0	0
Palay & Rice	0	0	0	0	0
Sugar	0	0	0	0	0
Transport Equipment	0	0	0	0	0
Wheat	0	0	0	0	0
SUM(Small Vol. Cargos)	-0	0	-0	0	0
Bottled Cargo	0	0	0	0	0
Dairy Products	0	0	0	0	0
Other Gen.Cargo	250	0	250	0	0
Mach. & Elect.Equipt.	0	0	0	0	0
Cement	0	0	0	0	0
Chemicals	30,939	0	30,939	0	0
Crude Minerals	5,549	0	5,549	0	0
Iron & Steel	0	0	0	0	0
Metaliferous Ores/Scrap	0	0	0	0	0
Mineral Fuel	6,859	0	6,859	0	0
Ref.Petroleum & Prod.	4	0	4	0	0
Furniture	0	0	0	0	0
Handicraft	0	0	0	0	0
Manufactured Metal	0	0	0	0	0
Paper & Pulp	0	0	0	0	0
Plywood & Veneer	0	0	0	0	0
Rattan	0	0	0	0	0
Textile Fiber	0	0	0	0	0
Textile & Garments Prod	0	0	0	0	0
Tobacco & Manufactures	0	0	0	0	0

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
DOMESTIC - CONTAINERIZED ( UNIT : TON )

COMMODITY	TOTAL				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	7,011,614	0	6,951,127	5,792	54,695
Abaca	15,072	0	14,666	406	0
Animal Feeds	191,213	0	191,000	213	0
Copra	39,610	0	39,610	0	0
Corn	465,749	0	465,749	0	0
Fertilizer	3,670	0	3,670	0	0
Fish & Fish Prep.	104,544	0	100,805	608	3,131
Fruits & Vegetables	426,586	0	418,022	199	8,365
Live Animal	138,100	0	138,100	0	0
Logs	3,744	0	3,744	0	0
Lumber	62,809	0	62,791	18	0
Palay & Rice	43,638	0	43,638	0	0
Sugar	236,836	0	236,836	0	0
Transport Equipment	28,534	0	28,534	0	0
Wheat	91,265	0	91,265	0	0
SUM(Small Vol. Cargos)	17,782	0	17,782	-0	-0
Bottled Cargo	534,335	0	534,335	0	0
Dairy Products	142,197	0	142,197	0	0
Other Gen.Cargo	3,217,693	0	3,196,222	2,022	19,449
Mach. & Elect.Equipt.	77,069	0	76,374	49	646
Cement	37,562	0	37,562	0	0
Chemicals	245,844	0	244,942	574	328
Crude Minerals	65,378	0	62,916	202	2,260
Iron & Steel	51,653	0	51,653	0	0
Metaliferous Ores/Scrap	44,208	0	44,154	54	0
Mineral Fuel	12,138	0	12,138	0	0
Ref.Petroleum & Prod.	72,766	0	72,766	0	0
Furniture	76,733	0	70,044	1,200	5,489
Handicraft	5,481	0	0	0	5,481
Manufactured Metal	307,420	0	307,272	148	0
Paper & Pulp	97,296	0	97,296	0	0
Plywood & Veneer	24,352	0	21,015	36	3,301
Rattan	4,078	0	0	0	4,078
Textile Fiber	19,314	0	17,147	0	2,167
Textile & Garments Prod	14,446	0	14,383	63	0
Tobacco & Manufactures	92,501	0	92,501	0	0

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
DOMESTIC - TOTAL CARGO ( UNIT : TON )

COMMODITY	TOTAL				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	11,463,551	943,575	10,459,445	5,792	54,739
Abaca	22,223	87	21,730	406	0
Animal Feeds	251,030	15,855	234,962	213	0
Copra	109,374	32,936	76,438	0	0
Corn	667,070	70,970	596,100	0	0
Fertilizer	148,720	19,742	128,978	0	0
Fish & Fish Prep.	187,148	13,652	169,757	608	3,131
Fruits & Vegetables	604,297	76,386	519,347	199	8,365
Live Animal	220,624	20,590	200,034	0	0
Logs	341,721	2,761	338,960	0	0
Lumber	131,032	4,300	126,714	18	0
Palay & Rice	224,710	97,805	126,905	0	0
Sugar	481,092	7,258	473,834	0	0
Transport Equipment	454,033	372,460	81,573	0	0
Wheat	131,202	8,321	122,881	0	0
SUM(Small Vol. Cargos)	138,470	21,738	136,769	-0	-0
Bottled Cargo	718,647	41,990	676,657	0	0
Dairy Products	147,870	1,561	146,309	0	0
Other Gen.Cargo	3,894,950	88,379	3,785,100	2,022	19,449
Mach. & Elect.Equipt.	114,045	1,726	111,580	49	690
Cement	153,108	34,584	118,524	0	0
Chemicals	394,847	1,161	392,784	574	328
Crude Minerals	113,407	14,817	96,128	202	2,260
Iron & Steel	647,132	2,613	644,519	0	0
Metaliferous Ores/Scrap	67,396	1,435	65,907	54	0
Mineral Fuel	52,732	2,570	50,162	0	0
Ref.Petroleum & Prod.	82,359	2,264	80,095	0	0
Furniture	87,530	1,083	79,758	1,200	5,489
Handicraft	5,481	0	0	0	5,481
Manufactured Metal	365,454	733	364,573	148	0
Paper & Pulp	134,732	75	134,657	0	0
Plywood & Veneer	200,207	1,145	195,725	36	3,301
Rattan	4,078	0	0	0	4,078
Textile Fiber	26,006	841	22,998	0	2,167
Textile & Garments Prod	31,256	255	30,938	63	0
Tobacco & Manufactures	109,568	1,519	108,049	0	0

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
FOREIGN - BREAKBULK ( UNIT : TON )

COMMODITY	TOTAL				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	1,300,166	56,027	0	1,238,155	5,984
Abaca	0	0	0	0	0
Animal Feeds	60	50	0	10	0
Copra	0	0	0	0	0
Corn	0	0	0	0	0
Fertilizer	46,619	46,600	0	19	0
Fish & Fish Prep.	121,501	0	0	121,501	0
Fruits & Vegetables	10,261	0	0	10,261	0
Live Animal	104,585	4,366	0	100,219	0
Logs	76,891	0	0	76,891	0
Lumber	171	0	0	171	0
Palay & Rice	15,383	0	0	15,383	0
Sugar	0	0	0	0	0
Wheat	1	0	0	1	0
SUM(Small Vol. Cargos)	544	6	0	538	0
Bottled Cargo	682	0	0	682	0
Dairy Products	769	0	0	769	0
Other Gen.Cargo	36,412	19	0	34,992	1,401
Mach. & Elect.Equipt.	71,274	0	0	68,990	2,284
Cement	51,565	0	0	51,565	0
Chemicals	26,286	0	0	26,286	0
Crude Minerals	9,040	0	0	9,040	0
Iron & Steel	595,839	0	0	595,839	0
Metaliferous Ores/Scrap	7,835	0	0	7,835	0
Mineral Fuel	7,456	0	0	7,456	0
Ref.Petroleum & Prod.	4,890	0	0	4,890	0
Furniture	0	0	0	0	0
Handicraft	0	0	0	0	0
Manufactured Metal	16,251	967	0	15,284	0
Paper & Pulp	7,846	0	0	7,846	0
Plywood & Veneer	102	0	0	102	0
Rattan	0	0	0	0	0
Textile Fiber	1,236	0	0	1,236	0
Textile & Garments Prod	11,350	0	0	11,350	0
Tobacco & Manufactures	4,665	4,017	0	648	0
Transport Equipment	70,652	2	0	68,351	2,299

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
FOREIGN - BULK ( UNIT : TON )

COMMODITY	TOTAL				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	407,739	0	0	407,739	0
Abaca	0	0	0	0	0
Animal Feeds	0	0	0	0	0
Copra	0	0	0	0	0
Corn	0	0	0	0	0
Fertilizer	0	0	0	0	0
Fish & Fish Prep.	0	0	0	0	0
Fruits & Vegetables	599	0	0	599	0
Live Animal	0	0	0	0	0
Logs	8,465	0	0	8,465	0
Lumber	0	0	0	0	0
Palay & Rice	0	0	0	0	0
Sugar	0	0	0	0	0
Wheat	0	0	0	0	0
SUM(Small Vol. Cargos)	5,028	0	0	5,028	0
Bottled Cargo	0	0	0	0	0
Dairy Products	0	0	0	0	0
Other Gen.Cargo	0	0	0	0	0
Mach. & Elect.Equipt.	0	0	0	0	0
Cement	40,776	0	0	40,776	0
Chemicals	0	0	0	0	0
Crude Minerals	222,179	0	0	222,179	0
Iron & Steel	0	0	0	0	0
Metaliferous Ores/Scrap	25,257	0	0	25,257	0
Mineral Fuel	94,616	0	0	94,616	0
Ref.Petroleum & Prod.	10,819	0	0	10,819	0
Furniture	0	0	0	0	0
Handicraft	0	0	0	0	0
Manufactured Metal	0	0	0	0	0
Paper & Pulp	0	0	0	0	0
Plywood & Veneer	0	0	0	0	0
Rattan	0	0	0	0	0
Textile Fiber	0	0	0	0	0
Textile & Garments Prod	0	0	0	0	0
Tobacco & Manufactures	0	0	0	0	0
Transport Equipment	0	0	0	0	0



CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
FOREIGN - CONTAINERIZED ( UNIT : TON )

COMMODITY	TOTAL				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	5,001,753	0	0	1,119,213	3,882,540
Abaca	45,720	0	0	8,071	37,649
Animal Feeds	27,155	0	0	10,212	16,943
Copra	73	0	0	37	36
Corn	21	0	0	0	21
Fertilizer	1,721	0	0	256	1,465
Fish & Fish Prep.	130,365	0	0	22,248	108,117
Fruits & Vegetables	276,729	0	0	39,397	237,332
Live Animal	539	0	0	539	0
Logs	295	0	0	0	295
Lumber	8,608	0	0	1,840	6,768
Palay & Rice	2,012	0	0	0	2,012
Sugar	13,523	0	0	0	13,523
Wheat	19,261	0	0	1,705	17,556
SUM(Small Vol. Cargos)	44,009	0	0	9,064	34,945
Bottled Cargo	22,300	0	0	13,274	9,026
Dairy Products	84,600	0	0	34,845	49,755
Other Gen.Cargo	762,132	0	0	318,672	443,460
Mach. & Elect.Equipt.	626,549	0	0	91,543	535,006
Cement	4,537	0	0	3,670	867
Chemicals	828,325	0	0	163,735	664,590
Crude Minerals	83,254	0	0	27,673	55,581
Iron & Steel	93,821	0	0	8,779	85,042
Metaliferous Ores/Scrap	61,985	0	0	10,089	51,896
Mineral Fuel	3,822	0	0	3,329	493
Ref.Petroleum & Prod.	7,823	0	0	3,854	3,969
Furniture	281,725	0	0	15,788	265,937
Handicraft	261,293	0	0	0	261,293
Manufactured Metal	178,723	0	0	22,937	155,786
Paper & Pulp	271,505	0	0	142,163	129,342
Plywood & Veneer	31,560	0	0	1,487	30,073
Rattan	1,972	0	0	0	1,972
Textile Fiber	34,077	0	0	16,273	17,804
Textile & Garments Prod	718,432	0	0	93,270	625,162
Tobacco & Manufactures	25,784	0	0	11,288	14,496
Transport Equipment	47,503	0	0	43,175	4,328

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
FOREIGN - TOTAL CARGO ( UNIT : TON )

COMMODITY	TOTAL				
	4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	6,709,658	56,027	0	2,765,107	3,888,524
Abaca	45,720	0	0	8,071	37,649
Animal Feeds	27,215	50	0	10,222	16,943
Copra	73	0	0	37	36
Corn	21	0	0	0	21
Fertilizer	48,340	46,600	0	275	1,465
Fish & Fish Prep.	251,866	0	0	143,749	108,117
Fruits & Vegetables	287,589	0	0	50,257	237,332
Live Animal	105,124	4,366	0	100,758	0
Logs	85,651	0	0	85,356	295
Lumber	8,779	0	0	2,011	6,768
Palay & Rice	17,395	0	0	15,383	2,012
Sugar	13,523	0	0	0	13,523
Wheat	19,262	0	0	1,706	17,556
SUM(Small Vol. Cargos)	49,581	6	0	14,630	34,945
Bottled Cargo	22,982	0	0	13,956	9,026
Dairy Products	85,369	0	0	35,614	49,755
Other Gen.Cargo	798,544	19	0	353,664	444,861
Mach. & Elect.Equipt.	697,823	0	0	160,533	537,290
Cement	96,878	0	0	96,011	867
Chemicals	854,611	0	0	190,021	664,590
Crude Minerals	314,473	0	0	258,892	55,581
Iron & Steel	689,660	0	0	604,618	85,042
Metaliferous Ores/Scrap	95,077	0	0	43,181	51,896
Mineral Fuel	105,894	0	0	105,401	493
Ref.Petroleum & Prod.	23,532	0	0	19,563	3,969
Furniture	281,725	0	0	15,788	265,937
Handicraft	261,293	0	0	0	261,293
Manufactured Metal	194,974	967	0	38,221	155,786
Paper & Pulp	279,351	0	0	150,009	129,342
Plywood & Veneer	31,662	0	0	1,589	30,073
Rattan	1,972	0	0	0	1,972
Textile Fiber	35,313	0	0	17,509	17,804
Textile & Garments Prod	729,782	0	0	104,620	625,162
Tobacco & Manufactures	30,449	4,017	0	11,936	14,496
Transport Equipment	118,155	2	0	111,526	6,627

CARGO STATISTICS BY COMMODITY CLASSIFICATION--BASE PORT AT BERTH  
DOMESTIC - BREAKBULK

COMMODITY	INWARD				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	3,108,096	562,159	2,545,893	0	44
Abaca	6,946	85	6,861	0	0
Animal Feeds	41,396	6,371	35,025	0	0
Copra	59,575	32,893	26,682	0	0
Corn	196,709	70,634	126,075	0	0
Fertilizer	122,413	233	122,180	0	0
Fish & Fish Prep.	80,660	13,295	67,365	0	0
Fruits & Vegetables	155,755	73,920	81,835	0	0
Live Animal	80,273	19,825	60,448	0	0
Logs	331,862	2,616	329,246	0	0
Lumber	66,623	3,758	62,865	0	0
Palay & Rice	111,095	92,814	18,281	0	0
Sugar	228,529	23	228,506	0	0
Transport Equipment	197,754	186,124	11,630	0	0
Wheat	24,952	69	24,883	0	0
SUM(Small Vol. Cargos)	115,514	20,152	115,399	0	0
Bottled Cargo	37,420	74	37,346	0	0
Dairy Products	688	80	608	0	0
Other Gen. Cargo	298,806	38,515	260,291	0	0
Mach. & Elect. Equipt.	12,868	409	12,415	0	44
Cement	74,851	2,569	72,282	0	0
Chemicals	73,791	102	73,689	0	0
Crude Minerals	35,193	14,169	21,024	0	0
Iron & Steel	471,872	390	471,482	0	0
Metaliferous Ores/Scrap	17,351	1,020	16,331	0	0
Mineral Fuel	30,955	448	30,507	0	0
Ref. Petroleum & Prod.	498	58	440	0	0
Furniture	5,157	188	4,969	0	0
Handicraft	0	0	0	0	0
Manufactured Metal	21,138	129	21,009	0	0
Paper & Pulp	18,315	34	18,281	0	0
Plywood & Veneer	170,028	1	170,027	0	0
Rattan	0	0	0	0	0
Textile Fiber	3,551	796	2,755	0	0
Textile & Garments Prod	11,692	32	11,660	0	0
Tobacco & Manufactures	3,867	370	3,497	0	0

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
DOMESTIC - BULK

COMMODITY	INWARD				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	55,048	0	55,048	0	0
Abaca	0	0	0	0	0
Animal Feeds	0	0	0	0	0
Copra	9,749	0	9,749	0	0
Corn	1,948	0	1,948	0	0
Fertilizer	0	0	0	0	0
Fish & Fish Prep.	0	0	0	0	0
Fruits & Vegetables	0	0	0	0	0
Live Animal	0	0	0	0	0
Logs	0	0	0	0	0
Lumber	0	0	0	0	0
Palay & Rice	0	0	0	0	0
Sugar	0	0	0	0	0
Transport Equipment	0	0	0	0	0
Wheat	0	0	0	0	0
SUM(Small Vol. Cargos)	-0	0	-0	0	0
Bottled Cargo	0	0	0	0	0
Dairy Products	0	0	0	0	0
Other Gen.Cargo	0	0	0	0	0
Mach. & Elect.EQUIPT.	0	0	0	0	0
Cement	0	0	0	0	0
Chemicals	30,939	0	30,939	0	0
Crude Minerals	5,549	0	5,549	0	0
Iron & Steel	0	0	0	0	0
Metaliferous Ores/Scrap	0	0	0	0	0
Mineral Fuel	6,859	0	6,859	0	0
Ref.Petroleum & Prod.	4	0	4	0	0
Furniture	0	0	0	0	0
Handicraft	0	0	0	0	0
Manufactured Metal	0	0	0	0	0
Paper & Pulp	0	0	0	0	0
Plywood & Veneer	0	0	0	0	0
Rattan	0	0	0	0	0
Textile Fiber	0	0	0	0	0
Textile & Garments Prod	0	0	0	0	0
Tobacco & Manufactures	0	0	0	0	0

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
DOMESTIC - CONTAINERIZED

COMMODITY	INWARD				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	3,318,702	0	3,258,861	5,792	54,049
Abaca	14,687	0	14,281	406	0
Animal Feeds	117,698	0	117,485	213	0
Copra	38,621	0	38,621	0	0
Corn	455,182	0	455,182	0	0
Fertilizer	2,377	0	2,377	0	0
Fish & Fish Prep.	100,226	0	96,487	608	3,131
Fruits & Vegetables	401,221	0	392,657	199	8,365
Live Animal	135,060	0	135,060	0	0
Logs	3,506	0	3,506	0	0
Lumber	60,706	0	60,688	18	0
Palay & Rice	20,882	0	20,882	0	0
Sugar	227,046	0	227,046	0	0
Transport Equipment	10,103	0	10,103	0	0
Wheat	48,016	0	48,016	0	0
SUM(Small Vol. Cargos)	4,394	0	4,394	-0	-0
Bottled Cargo	106,001	0	106,001	0	0
Dairy Products	7,283	0	7,283	0	0
Other Gen. Cargo	1,169,630	0	1,148,159	2,022	19,449
Mach. & Elect. Equipt.	10,031	0	9,982	49	0
Cement	21,618	0	21,618	0	0
Chemicals	86,240	0	85,338	574	328
Crude Minerals	46,141	0	43,679	202	2,260
Iron & Steel	23,692	0	23,692	0	0
Metaliferous Ores/Scrap	23,363	0	23,309	54	0
Mineral Fuel	7,343	0	7,343	0	0
Ref. Petroleum & Prod.	1,163	0	1,163	0	0
Furniture	60,518	0	53,829	1,200	5,489
Handicraft	5,481	0	0	0	5,481
Manufactured Metal	54,584	0	54,436	148	0
Paper & Pulp	16,279	0	16,279	0	0
Plywood & Veneer	19,641	0	16,304	36	3,301
Rattan	4,078	0	0	0	4,078
Textile Fiber	10,370	0	8,203	0	2,167
Textile & Garments Prod	1,773	0	1,710	63	0
Tobacco & Manufactures	3,749	0	3,749	0	0

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
DOMESTIC - TOTAL CARGO

COMMODITY	INWARD				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	6,481,846	562,159	5,859,802	5,792	54,093
Abaca	21,633	85	21,142	406	0
Animal Feeds	159,094	6,371	152,510	213	0
Copra	107,945	32,893	75,052	0	0
Corn	653,839	70,634	583,205	0	0
Fertilizer	124,790	233	124,557	0	0
Fish & Fish Prep.	180,886	13,295	163,852	608	3,131
Fruits & Vegetables	556,976	73,920	474,492	199	8,365
Live Animal	215,333	19,825	195,508	0	0
Logs	335,368	2,616	332,752	0	0
Lumber	127,330	3,758	123,554	18	0
Palay & Rice	131,977	92,814	39,163	0	0
Sugar	455,574	23	455,551	0	0
Transport Equipment	207,857	186,124	21,733	0	0
Wheat	72,968	69	72,899	0	0
SUM(Small Vol. Cargos)	119,908	20,152	119,793	-0	-0
Bottled Cargo	143,422	74	143,348	0	0
Dairy Products	7,971	80	7,891	0	0
Other Gen.Cargo	1,468,436	38,515	1,408,450	2,022	19,449
Mach. & Elect.Equipt.	22,899	409	22,397	49	44
Cement	96,469	2,569	93,900	0	0
Chemicals	190,969	102	189,965	574	328
Crude Minerals	86,883	14,169	70,252	202	2,260
Iron & Steel	495,563	390	495,173	0	0
Metaliferous Ores/Scrap	40,715	1,020	39,641	54	0
Mineral Fuel	45,157	448	44,709	0	0
Ref.Petroleum & Prod.	1,665	58	1,607	0	0
Furniture	65,674	188	58,797	1,200	5,489
Handicraft	5,481	0	0	0	5,481
Manufactured Metal	75,721	129	75,444	148	0
Paper & Pulp	34,594	34	34,560	0	0
Plywood & Veneer	189,670	1	186,332	36	3,301
Rattan	4,078	0	0	0	4,078
Textile Fiber	13,920	796	10,957	0	2,167
Textile & Garments Prod	13,465	32	13,370	63	0
Tobacco & Manufactures	7,616	370	7,246	0	0

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
FOREIGN - BREAKBULK

COMMODITY	IMPORT				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	1,218,440	51,055	0	1,161,401	5,984
Abaca	0	0	0	0	0
Animal Feeds	60	50	0	10	0
Copra	0	0	0	0	0
Corn	0	0	0	0	0
Fertilizer	46,619	46,600	0	19	11,111
Fish & Fish Prep.	121,501	0	0	121,501	0
Fruits & Vegetables	9,878	0	0	9,878	0
Live Animal	104,583	4,366	0	100,217	0
Logs	76,891	0	0	76,891	0
Lumber	171	0	0	171	0
Palay & Rice	5,383	0	0	5,383	0
Sugar	0	0	0	0	0
Wheat	1	0	0	1	0
SUM(Small Vol. Cargos)	228	0	0	228	0
Bottled Cargo	15	0	0	15	0
Dairy Products	769	0	0	769	0
Other Gen.Cargo	15,135	19	0	13,715	1,401
Mach. & Elect.EQUIPT.	71,200	0	0	68,916	2,284
Cement	51,563	0	0	51,563	0
Chemicals	26,004	0	0	26,004	0
Crude Minerals	5,565	0	0	5,565	0
Iron & Steel	560,935	0	0	560,935	0
Metaliferous Ores/Scrap	7,038	0	0	7,038	0
Mineral Fuel	7,456	0	0	7,456	0
Ref.Petroleum & Prod.	4,579	0	0	4,579	0
Furniture	0	0	0	0	0
Handicraft	0	0	0	0	0
Manufactured Metal	11,617	0	0	11,617	0
Paper & Pulp	7,837	0	0	7,837	0
Plywood & Veneer	102	0	0	102	0
Rattan	0	0	0	0	0
Textile Fiber	1,236	0	0	1,236	0
Textile & Garments Prod	11,347	0	0	11,347	0
Tobacco & Manufactures	75	18	0	57	0
Transport Equipment	70,652	2	0	68,351	2,299

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
FOREIGN - BULK

COMMODITY	IMPORT				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	403,323	0	0	403,323	0
Abaca	0	0	0	0	0
Animal Feeds	0	0	0	0	0
Copra	0	0	0	0	0
Corn	0	0	0	0	0
Fertilizer	0	0	0	0	0
Fish & Fish Prep.	0	0	0	0	0
Fruits & Vegetables	599	0	0	599	0
Live Animal	0	0	0	0	0
Logs	4,805	0	0	4,805	0
Lumber	0	0	0	0	0
Palay & Rice	0	0	0	0	0
Sugar	0	0	0	0	0
Wheat	0	0	0	0	0
SUM(Small Vol. Cargos)	5,028	0	0	5,028	0
Bottled Cargo	0	0	0	0	0
Dairy Products	0	0	0	0	0
Other Gen.Cargo	0	0	0	0	0
Mach. & Elect.EQUIPT.	0	0	0	0	0
Cement	40,776	0	0	40,776	0
Chemicals	0	0	0	0	0
Crude Minerals	221,423	0	0	221,423	0
Iron & Steel	0	0	0	0	0
Metaliferous Ores/Scrap	25,257	0	0	25,257	0
Mineral Fuel	94,616	0	0	94,616	0
Ref.Petroleum & Prod.	10,819	0	0	10,819	0
Furniture	0	0	0	0	0
Handicraft	0	0	0	0	0
Manufactured Metal	0	0	0	0	0
Paper & Pulp	0	0	0	0	0
Plywood & Veneer	0	0	0	0	0
Rattan	0	0	0	0	0
Textile Fiber	0	0	0	0	0
Textile & Garments Prod	0	0	0	0	0
Tobacco & Manufactures	0	0	0	0	0
Transport Equipment	0	0	0	0	0



CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
FOREIGN - CONTAINERIZED

COMMODITY	IMPORT				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	3,204,409	0	0	846,543	2,357,866
Abaca	15,844	0	0	0	15,844
Animal Feeds	23,270	0	0	6,430	16,840
Copra	36	0	0	0	36
Corn	21	0	0	0	21
Fertilizer	1,721	0	0	256	1,465
Fish & Fish Prep.	18,361	0	0	2,073	16,288
Fruits & Vegetables	109,631	0	0	22,027	87,604
Live Animal	539	0	0	539	0
Logs	0	0	0	0	0
Lumber	1,762	0	0	778	984
Palay & Rice	1,101	0	0	0	1,101
Sugar	13,502	0	0	0	13,502
Wheat	19,261	0	0	1,705	17,556
SUM(Small Vol. Cargos)	8,173	0	0	8,114	59
Bottled Cargo	11,002	0	0	7,110	3,892
Dairy Products	81,086	0	0	31,925	49,161
Other Gen.Cargo	489,159	0	0	205,564	283,595
Mach. & Elect.Equipt.	595,711	0	0	83,645	512,066
Cement	1,700	0	0	872	828
Chemicals	789,317	0	0	146,057	643,260
Crude Minerals	17,657	0	0	11,225	6,432
Iron & Steel	85,701	0	0	7,867	77,834
Metaliferous Ores/Scrap	48,861	0	0	6,781	42,080
Mineral Fuel	213	0	0	158	55
Ref.Petroleum & Prod.	6,284	0	0	2,454	3,830
Furniture	6,452	0	0	2,789	3,663
Handicraft	0	0	0	0	0
Manufactured Metal	151,780	0	0	21,162	130,618
Paper & Pulp	267,244	0	0	139,794	127,450
Plywood & Veneer	2,252	0	0	35	2,217
Rattan	0	0	0	0	0
Textile Fiber	32,064	0	0	14,756	17,308
Textile & Garments Prod	351,643	0	0	75,406	276,237
Tobacco & Manufactures	7,655	0	0	5,747	1,908
Transport Equipment	45,406	0	0	41,274	4,132

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
FOREIGN - TOTAL CARGO

COMMODITY	INWARD				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	4,826,172	51,055	0	2,411,267	2,363,850
Abaca	15,844	0	0	0	15,844
Animal Feeds	23,330	50	0	6,440	16,840
Copra	36	0	0	0	36
Corn	21	0	0	0	21
Fertilizer	48,340	46,600	0	275	1,465
Fish & Fish Prep.	139,862	0	0	123,574	16,288
Fruits & Vegetables	120,108	0	0	32,504	87,604
Live Animal	105,122	4,366	0	100,756	0
Logs	81,696	0	0	81,696	0
Lumber	1,933	0	0	949	984
Palay & Rice	6,484	0	0	5,383	1,101
Sugar	13,502	0	0	0	13,502
Wheat	19,262	0	0	1,706	17,556
SUM(Small Vol. Cargos)	13,429	0	0	13,370	59
Bottled Cargo	11,017	0	0	7,125	3,892
Dairy Products	81,855	0	0	32,694	49,161
Other Gen.Cargo	504,294	19	0	219,279	284,996
Mach. & Elect.Equipt.	666,911	0	0	152,561	514,350
Cement	94,039	0	0	93,211	828
Chemicals	815,321	0	0	172,061	643,260
Crude Minerals	244,645	0	0	238,213	6,432
Iron & Steel	646,636	0	0	568,802	77,834
Metaliferous Ores/Scrap	81,156	0	0	39,076	42,080
Mineral Fuel	102,285	0	0	102,230	55
Ref.Petroleum & Prod.	21,682	0	0	17,852	3,830
Furniture	6,452	0	0	2,789	3,663
Handicraft	0	0	0	0	0
Manufactured Metal	163,397	0	0	32,779	130,618
Paper & Pulp	275,081	0	0	147,631	127,450
Plywood & Veneer	2,354	0	0	137	2,217
Rattan	0	0	0	0	0
Textile Fiber	33,300	0	0	15,992	17,308
Textile & Garments Prod	362,990	0	0	86,753	276,237
Tobacco & Manufactures	7,730	18	0	5,804	1,908
Transport Equipment	116,058	2	0	109,625	6,431

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
DOMESTIC - BREAKBULK

COMMODITY	OUTWARD				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	1,288,543	381,416	907,127	0	0
Abaca	205	2	203	0	0
Animal Feeds	18,420	9,484	8,936	0	0
Copra	440	43	397	0	0
Corn	2,663	336	2,327	0	0
Fertilizer	22,637	19,509	3,128	0	0
Fish & Fish Prep.	1,944	357	1,587	0	0
Fruits & Vegetables	21,956	2,466	19,490	0	0
Live Animal	2,251	765	1,486	0	0
Logs	6,116	145	5,971	0	0
Lumber	1,600	542	1,058	0	0
Palay & Rice	69,977	4,991	64,986	0	0
Sugar	15,727	7,235	8,492	0	0
Transport Equipment	227,746	186,336	41,410	0	0
Wheat	14,984	8,252	6,732	0	0
SUM(Small Vol. Cargos)	5,174	1,586	3,588	0	0
Bottled Cargo	146,892	41,916	104,976	0	0
Dairy Products	4,985	1,481	3,504	0	0
Other Gen.Cargo	378,201	49,864	328,337	0	0
Mach. & Elect.EQUIPT.	24,109	1,317	22,792	0	0
Cement	40,695	32,015	8,680	0	0
Chemicals	44,273	1,059	43,214	0	0
Crude Minerals	7,288	648	6,640	0	0
Iron & Steel	123,607	2,223	121,384	0	0
Metaliferous Ores/Scrap	5,837	415	5,422	0	0
Mineral Fuel	2,780	2,122	658	0	0
Ref.Petroleum & Prod.	9,091	2,206	6,885	0	0
Furniture	5,641	895	4,746	0	0
Handicraft	0	0	0	0	0
Manufactured Metal	36,897	604	36,293	0	0
Paper & Pulp	19,122	41	19,081	0	0
Plywood & Veneer	5,827	1,144	4,683	0	0
Rattan	0	0	0	0	0
Textile Fiber	3,141	45	3,096	0	0
Textile & Garments Prod	5,119	223	4,896	0	0
Tobacco & Manufactures	13,200	1,149	12,051	0	0

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
DOMESTIC - BULK

COMMODITY	OUTWARD				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	250	0	250	0	0
Abaca	0	0	0	0	0
Animal Feeds	0	0	0	0	0
Copra	0	0	0	0	0
Corn	0	0	0	0	0
Fertilizer	0	0	0	0	0
Fish & Fish Prep.	0	0	0	0	0
Fruits & Vegetables	0	0	0	0	0
Live Animal	0	0	0	0	0
Logs	0	0	0	0	0
Lumber	0	0	0	0	0
Palay & Rice	0	0	0	0	0
Sugar	0	0	0	0	0
Transport Equipment	0	0	0	0	0
Wheat	0	0	0	0	0
SUM(Small Vol. Cargos)	0	0	0	0	0
Bottled Cargo	0	0	0	0	0
Dairy Products	0	0	0	0	0
Other Gen.Cargo	250	0	250	0	0
Mach. & Elect.Equipt.	0	0	0	0	0
Cement	0	0	0	0	0
Chemicals	0	0	0	0	0
Crude Minerals	0	0	0	0	0
Iron & Steel	0	0	0	0	0
Metaliferous Ores/Scrap	0	0	0	0	0
Mineral Fuel	0	0	0	0	0
Ref.Petroleum & Prod.	0	0	0	0	0
Furniture	0	0	0	0	0
Handicraft	0	0	0	0	0
Manufactured Metal	0	0	0	0	0
Paper & Pulp	0	0	0	0	0
Plywood & Veneer	0	0	0	0	0
Rattan	0	0	0	0	0
Textile Fiber	0	0	0	0	0
Textile & Garments Prod	0	0	0	0	0
Tobacco & Manufactures	0	0	0	0	0

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
DOMESTIC - CONTAINERIZED

COMMODITY	OUTWARD				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	3,692,912	0	3,692,266	0	646
Abaca	385	0	385	0	0
Animal Feeds	73,515	0	73,515	0	0
Copra	989	0	989	0	0
Corn	10,567	0	10,567	0	0
Fertilizer	1,293	0	1,293	0	0
Fish & Fish Prep.	4,318	0	4,318	0	0
Fruits & Vegetables	25,365	0	25,365	0	0
Live Animal	3,040	0	3,040	0	0
Logs	238	0	238	0	0
Lumber	2,102	0	2,102	0	0
Palay & Rice	22,757	0	22,757	0	0
Sugar	9,791	0	9,791	0	0
Transport Equipment	18,431	0	18,431	0	0
Wheat	43,250	0	43,250	0	0
SUM(Small Vol. Cargos)	13,388	0	13,388	0	0
Bottled Cargo	428,334	0	428,334	0	0
Dairy Products	134,914	0	134,914	0	0
Other Gen.Cargo	2,048,062	0	2,048,062	0	0
Mach. & Elect.Equipt.	67,037	0	66,391	0	646
Cement	15,944	0	15,944	0	0
Chemicals	159,605	0	159,605	0	0
Crude Minerals	19,237	0	19,237	0	0
Iron & Steel	27,961	0	27,961	0	0
Metaliferous Ores/Scrap	20,845	0	20,845	0	0
Mineral Fuel	4,795	0	4,795	0	0
Ref.Petroleum & Prod.	71,603	0	71,603	0	0
Furniture	16,215	0	16,215	0	0
Handicraft	0	0	0	0	0
Manufactured Metal	252,836	0	252,836	0	0
Paper & Pulp	81,016	0	81,016	0	0
Plywood & Veneer	4,710	0	4,710	0	0
Rattan	0	0	0	0	0
Textile Fiber	8,944	0	8,944	0	0
Textile & Garments Prod	12,673	0	12,673	0	0
Tobacco & Manufactures	88,752	0	88,752	0	0

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
DOMESTIC - TOTAL CARGO

COMMODITY	OUTWARD				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	4,981,705	381,416	4,599,643	0	646
Abaca	590	2	588	0	0
Animal Feeds	91,935	9,484	82,451	0	0
Copra	1,429	43	1,386	0	0
Corn	13,230	336	12,894	0	0
Fertilizer	23,930	19,509	4,421	0	0
Fish & Fish Prep.	6,262	357	5,905	0	0
Fruits & Vegetables	47,321	2,466	44,855	0	0
Live Animal	5,291	765	4,526	0	0
Logs	6,354	145	6,209	0	0
Lumber	3,702	542	3,160	0	0
Palay & Rice	92,734	4,991	87,743	0	0
Sugar	25,518	7,235	18,283	0	0
Transport Equipment	246,177	186,336	59,841	0	0
Wheat	58,234	8,252	49,982	0	0
SUM(Small Vol. Cargos)	18,562	1,586	16,976	0	0
Bottled Cargo	575,226	41,916	533,310	0	0
Dairy Products	139,899	1,481	138,418	0	0
Other Gen.Cargo	2,426,513	49,864	2,376,649	0	0
Mach. & Elect.Equipt.	91,146	1,317	89,183	0	646
Cement	56,639	32,015	24,624	0	0
Chemicals	203,878	1,059	202,819	0	0
Crude Minerals	26,525	648	25,877	0	0
Iron & Steel	151,568	2,223	149,345	0	0
Metaliferous Ores/Scrap	26,682	415	26,267	0	0
Mineral Fuel	7,575	2,122	5,453	0	0
Ref.Petroleum & Prod.	80,694	2,206	78,488	0	0
Furniture	21,856	895	20,961	0	0
Handicraft	0	0	0	0	0
Manufactured Metal	289,733	604	289,129	0	0
Paper & Pulp	100,138	41	100,097	0	0
Plywood & Veneer	10,537	1,144	9,393	0	0
Rattan	0	0	0	0	0
Textile Fiber	12,085	45	12,040	0	0
Textile & Garments Prod	17,792	223	17,569	0	0
Tobacco & Manufactures	101,952	1,149	100,803	0	0

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
FOREIGN - BREAKBULK

COMMODITY	EXPORT				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	81,726	4,972	0	76,754	0
Abaca	0	0	0	0	0
Animal Feeds	0	0	0	0	0
Copra	0	0	0	0	0
Corn	0	0	0	0	0
Fertilizer	0	0	0	0	0
Fish & Fish Prep.	0	0	0	0	0
Fruits & Vegetables	383	0	0	383	0
Live Animal	2	0	0	2	0
Logs	0	0	0	0	0
Lumber	0	0	0	0	0
Palay & Rice	10,000	0	0	10,000	0
Sugar	0	0	0	0	0
Wheat	0	0	0	0	0
SUM(Small Vol. Cargos)	316	6	0	310	0
Bottled Cargo	667	0	0	667	0
Dairy Products	0	0	0	0	0
Other Gen. Cargo	21,277	0	0	21,277	0
Mach. & Elect. Equipt.	74	0	0	74	0
Cement	2	0	0	2	0
Chemicals	282	0	0	282	0
Crude Minerals	3,475	0	0	3,475	0
Iron & Steel	34,904	0	0	34,904	0
Metaliferous Ores/Scrap	797	0	0	797	0
Mineral Fuel	0	0	0	0	0
Ref. Petroleum & Prod.	311	0	0	311	0
Furniture	0	0	0	0	0
Handicraft	0	0	0	0	0
Manufactured Metal	4,634	967	0	3,667	0
Paper & Pulp	9	0	0	9	0
Plywood & Veneer	0	0	0	0	0
Rattan	0	0	0	0	0
Textile Fiber	0	0	0	0	0
Textile & Garments Prod	3	0	0	3	0
Tobacco & Manufactures	4,590	3,999	0	591	0
Transport Equipment	0	0	0	0	0

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
FOREIGN - BULK

COMMODITY	EXPORT				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	4,416	0	0	4,416	0
Abaca	0	0	0	0	0
Animal Feeds	0	0	0	0	0
Copra	0	0	0	0	0
Corn	0	0	0	0	0
Fertilizer	0	0	0	0	0
Fish & Fish Prep.	0	0	0	0	0
Fruits & Vegetables	0	0	0	0	0
Live Animal	0	0	0	0	0
Logs	3,660	0	0	3,660	0
Lumber	0	0	0	0	0
Palay & Rice	0	0	0	0	0
Sugar	0	0	0	0	0
Wheat	0	0	0	0	0
SUM(Small Vol. Cargos)	0	0	0	0	0
Bottled Cargo	0	0	0	0	0
Dairy Products	0	0	0	0	0
Other Gen.Cargo	0	0	0	0	0
Mach. & Elect.EQUIPT.	0	0	0	0	0
Cement	0	0	0	0	0
Chemicals	0	0	0	0	0
Crude Minerals	756	0	0	756	0
Iron & Steel	0	0	0	0	0
Metaliferous Ores/Scrap	0	0	0	0	0
Mineral Fuel	0	0	0	0	0
Ref.Petroleum & Prod.	0	0	0	0	0
Furniture	0	0	0	0	0
Handicraft	0	0	0	0	0
Manufactured Metal	0	0	0	0	0
Paper & Pulp	0	0	0	0	0
Plywood & Veneer	0	0	0	0	0
Rattan	0	0	0	0	0
Textile Fiber	0	0	0	0	0
Textile & Garments Prod	0	0	0	0	0
Tobacco & Manufactures	0	0	0	0	0
Transport Equipment	0	0	0	0	0



CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
FOREIGN - CONTAINERIZED

COMMODITY	EXPORT				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	1,797,344	0	0	272,670	1,524,674
Abaca	29,875	0	0	8,071	21,804
Animal Feeds	3,885	0	0	3,782	103
Copra	37	0	0	37	0
Corn	0	0	0	0	0
Fertilizer	0	0	0	0	0
Fish & Fish Prep.	112,004	0	0	20,175	91,829
Fruits & Vegetables	167,098	0	0	17,370	149,728
Live Animal	0	0	0	0	0
Logs	295	0	0	0	295
Lumber	6,846	0	0	1,062	5,784
Palay & Rice	911	0	0	0	911
Sugar	20	0	0	0	20
Wheat	0	0	0	0	0
SUM(Small Vol. Cargos)	35,836	0	0	950	34,886
Bottled Cargo	11,298	0	0	6,164	5,134
Dairy Products	3,514	0	0	2,920	594
Other Gen.Cargo	272,973	0	0	113,108	159,865
Mach. & Elect.Equipt.	30,838	0	0	7,898	22,940
Cement	2,837	0	0	2,798	39
Chemicals	39,008	0	0	17,678	21,330
Crude Minerals	65,597	0	0	16,448	49,149
Iron & Steel	8,120	0	0	912	7,208
Metaliferous Ores/Scrap	13,124	0	0	3,308	9,816
Mineral Fuel	3,609	0	0	3,171	438
Ref.Petroleum & Prod.	1,539	0	0	1,400	139
Furniture	275,274	0	0	12,999	262,275
Handicraft	261,293	0	0	0	261,293
Manufactured Metal	26,943	0	0	1,775	25,168
Paper & Pulp	4,261	0	0	2,369	1,892
Plywood & Veneer	29,308	0	0	1,452	27,856
Rattan	1,972	0	0	0	1,972
Textile Fiber	2,013	0	0	1,517	496
Textile & Garments Prod	366,789	0	0	17,864	348,925
Tobacco & Manufactures	18,128	0	0	5,541	12,587
Transport Equipment	2,097	0	0	1,901	196

CARGO STATISTICS BY COMMODITY CLASSIFICATION-BASE PORT AT BERTH  
FOREIGN - TOTAL CARGO

COMMODITY	OUTWARD				
	TOTAL 4 HARBORS	BATANGAS	MANILA NORTH	MANILA SOUTH	MICT
Total	1,883,486	4,972	0	353,840	1,524,674
Abaca	29,875	0	0	8,071	21,804
Animal Feeds	3,885	0	0	3,782	103
Copra	37	0	0	37	0
Corn	0	0	0	0	0
Fertilizer	0	0	0	0	0
Fish & Fish Prep.	112,004	0	0	20,175	91,829
Fruits & Vegetables	167,481	0	0	17,753	149,728
Live Animal	2	0	0	2	0
Logs	3,955	0	0	3,660	295
Lumber	6,846	0	0	1,062	5,784
Palay & Rice	10,911	0	0	10,000	911
Sugar	20	0	0	0	20
Wheat	0	0	0	0	0
SUM(Small Vol. Cargos)	36,152	6	0	1,260	34,886
Bottled Cargo	11,965	0	0	6,831	5,134
Dairy Products	3,514	0	0	2,920	594
Other Gen.Cargo	294,250	0	0	134,385	159,865
Mach. & Elect.Equipt.	30,912	0	0	7,972	22,940
Cement	2,839	0	0	2,800	39
Chemicals	39,290	0	0	17,960	21,330
Crude Minerals	69,828	0	0	20,679	49,149
Iron & Steel	43,024	0	0	35,816	7,208
Metaliferous Ores/Scrap	13,921	0	0	4,105	9,816
Mineral Fuel	3,609	0	0	3,171	438
Ref.Petroleum & Prod.	1,850	0	0	1,711	139
Furniture	275,274	0	0	12,999	262,275
Handicraft	261,293	0	0	0	261,293
Manufactured Metal	31,577	967	0	5,442	25,168
Paper & Pulp	4,270	0	0	2,378	1,892
Plywood & Veneer	29,308	0	0	1,452	27,856
Rattan	1,972	0	0	0	1,972
Textile Fiber	2,013	0	0	1,517	496
Textile & Garments Prod	366,792	0	0	17,867	348,925
Tobacco & Manufactures	22,718	3,999	0	6,132	12,587
Transport Equipment	2,097	0	0	1,901	196





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